# ADOLESCENT AND REPRODUCTIVE HEALTH: KNOWLEDGE, ATTITUDE AND PRACTICE. A CASE STUDY OF ADO-EKITI LGA, EKITI STATE, NIGERIA.

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## CERTIFICATION

This is to certify that OKOLI-IKEDI EBUBE EXCELLENT of the department of sociology, Faculty of Humanities and Social Sciences, Federal University Oye-Ekiti, Ekiti State, carried out this research project under my supervision.

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## **DEDICATION**

This work is dedicated to God Almighty for His kindness, and for His gift of life. This work is also dedicated to my lovely parents MR and MRS JOSIAH IKEDI.

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#### **ABSTRACT**

With alarming issues relating to Adolescents Reproductive Health: knowledge, attitude and practice, understanding key tissues such as abortion, early/teenage pregnancy, prostitution/transactional sex, sexual molestation and masturbation which pose a threat to the adolescents reproductive health becomes essential. This studyexamined adolescents knowledge, attitude and practice of reproductive health in Ado-Ekiti. The study investigated the knowledge of adolescents toward ssexually transmitted infections, examined the attitude of adolescents towards sexually transmitted infections, evaluate the practices engaged by adolescents that that can expose them to reproductive health issues andevalute the Knowledge of reproductive health and the risk of teenage pregnance. Multi-stage random samplig was used for the study, cluster samplig was employed underit, Here secondary schools in Ado-Ekiti were constructed into clusters based on location, population and type (private and public), out of which six schools were and omly selected. In each of these schools thrity questionsaires were administered to senior secondaryschoolstudentsbased on availabilitymethod, the out- school adolescents was selected based on availabilty and are those whom are not students but adolescents who reside in Ado-Ekiti. The study shows that 25.33% of the respondents have had sexual intercourse, 14.00% had sexual intercourse at 11 years or younger, 14.67% enjoy sex with casual partners, 16.00% preferred unprotected sex. 6.00% preferred same sex intercourse, implementation of the following strategies will yield widespread positive results: Improvement in the knowledge of contraceptive use among adolescents. Religious/faith-based organizations should use their positions as a leverage to encourage adolescents to abstain from premarital sex. Advocacy and community mobilization to increasea wareness towards the need for inclusion of sex education in school curriculum.

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#### **CHAPTER ONE**

#### INTRODUCTION

## 1.1 Background to the study

In recent times, the youth who constitute over 30% of the Nigerian population and fall between ages 10-24, are highly vulnerable to antisocial behaviors such as violent crimes, unsafe sexual activities and drug abuse among others. The need to focus attention on various aspects of the development of adolescents and yo uth, particularly their sexual and reproductive health, is a global phenomenon. This has been highlighted by several international conventions (United Nations, 1994) and agreements to which many national governments, including the Nigerian government, have expressed strong commitment. Besides, one of the 2004 Nigerian National Population Policy objectives is increasing the integration of adolescents and young people into development efforts and effectively addressing their reproductive health and related needs. Young people all over the world are growing up in an increasingly complex environment that requires them to take tougher decisions, often without adequate preparation.

Although it is generally known that the period of adolescence is a phase in life when young people are particularly vulnerable to many risks, especially in relation to their sexuality, they often lack access to adequate information, counseling and services on issues crucial to their development needs (Isiugo-

Abanihe, 2005). A large proportion of young persons are in their most impressionist years when behavior and character traits have not been fully formed; they reach sexual maturity before they develop mental/emotional maturity and the social skills needed to appreciate the consequences of their sexual activity (Fee and Youssef, 1993). Evidence of unmet need is reflected in research that confirms that some young people have poor understanding of the reproductive process, others harbor misconceptions such as the belief that pregnancy cannot occur during first sexual episode and that use of contraceptives can cause infertility (Amazigo et al., 1998; ARFH, 2004; FMOH, 2003). One of the consequences of the involvement of young persons in risky sexual activities is that this group is disproportionately affected by reproductive morbidity including STI/HIV, unwanted pregnancies and their complications (Archibong, 1991; Brabin et al., 1995; Ekweozor et al., 1995; Bello et al., 1997; Arowojolu et al., 2003).

With the negative effects of modernization and a multiplicity of other factors which tend to reduce the ability of families to effectively educate and take care of their young ones, there is an urgent need for effective intervention strategies that will promote the well-being of young people, foster positive attitudes and healthy behaviors in adult life. There is need for stakeholders to provide relevant life skill education to address specific development problems being faced by young people, particularly those of sexuality and reproductive health.

Adolescence is a time of rapid physical and psychological growth and development, and one in which individuals develop new capacities. It is also a time of changing social relationships, expectations, roles and responsibilities.It is a transition stage, a difficult stage and a delicate stage that needs to be handled with caution by both adolescent and all those who have influence over him/her especially the parents (WHO, 2010). Adolescence begins with the onset of physiologically normal puberty, and ends when an adult identity and behaviour are accepted. This period of development corresponds roughly to the period between the ages of 10 and 19 years, which is consistent with the World Health Organization's definition of adolescence. Those responsible for providing healthcare to adolescents must allow sufficient flexibility in this age span to encompass special situations such as the emancipated minor or the young person with a chronic condition leading to delayed development or prolonged dependency. It is a phase when an individual is no longer a child, but not yet an adult (WHO, 2010).

Adolescents' reproductive health is an integrated approach to the health and development needs of adolescents (International Conference on Population and Development, 1994). It is defined as a state of complete physical, mental and social wellbeing and not merely absence of disease or infirmity in all matters relating to the reproductive systems, functions and process of the adolescents (International Conference on Population and Development, 1994). Reproductive health

components include all forms of reproductive health practices such as pregnancies, pre-natal and ante-natal care, safe child delivery, family planning, management of complications of abortion and promotion of healthy sexual maturation (Federal Ministry of Health, 2003). In fact, Orubuloye (1998) indicated that adolescents constitute a high risk group in terms of reproductive health problems and studies among them are relatively rare and tend to be restricted to certain regions of the world.

Reproductive health education of adolescents aid to prevent adolescent mothers and their babies from dying in pregnancy, Prevent unintended pregnancies and other sexual and reproductive health risks. Adolescents require:

- information including comprehensive sex education;
- access to a full range of sexual and reproductive health services, including condoms, other means of contraception as appropriate and other interventions for the prevention, treatment and care of sexually transmitted infections, including HIV; and
- Safe and supportive environments free from exploitation and abuse.

The risks of pregnancies and childbirth among adolescents are numerous. It includes damage to the reproductive health organ, maternal mortality, and infertility, complication during pregnancies and childbirth and obstetric fistula. In a

study in Ekiti, southwest Nigeria, Tinuola (2003) found that 80 percent of the adolescents interviewed in a rural community have engaged in premarital sex and that the mean age at first sexual intercourse has reduced to 17 years.

At pregnancies, adolescent are left to take decision on whether to abort the pregnancies or give birth to the child. The decision to do away with the pregnancies or keep it, is often influenced by social, economic and cultural factors which Tinuola (2001) found to include education, urbanization, socialization, family type and nature of the pregnancy, When the decision is in favour of abortion, adolescents face the risks of abortion most especially in settings where abortion is illegal and facilities are not adequate provided by the existing health care delivery systems.

Federal Ministry of Health (2003) found that about two-fifths of adolescent pregnancies in Nigeria are believed to end up in induced abortion and those adolescents constitute the majority of cases of abortion-related complications admitted in Nigeria hospitals. The complications are heightened in settings where adolescents visit inept medical personnel for services.

In view of the heightened risks of early pregnancies and childbirth among adolescents, more especially when the body is not mature enough to meeting bodily challenges of carrying the pregnancy and childbirth, concerted efforts should be made to conduct research on the reproductive health behavior of the adolescents. In line with the above background, this study will attempt to investigate adolescent

reproductive behavior, knowledge, attitude and practice in Ado-Ekiti LGA, Ekiti State, Nigeria.

#### 1.2 Statement of the Problem

Globally, over 100 million STIs occur each year in people under the age of 25 years old (UNAIDS, 2008), and an estimated 11.8 million people aged 15-24 were living with HIV by Mid-2002. Further, about half of all new HIV infections worldwide, or nearly 6,000 cases per-day, occur in young people (UNAIDS, 2008). Although adolescents are generally considered physically healthy, they are vulnerable to several unique health problems such as early childbearing and unwanted pregnancies with all its health consequences (Federal Ministry of Health, 2011). Others include higher maternal and child mortality, unsafe abortions, sexually transmitted infections including HIV/AIDS and sexual exploitation and abuse (FMH, 2011).

Each year, there are an estimated 2.7 million unintended pregnancies among adolescent women living in South Central and Southeast Asia, 2.2 million in Sub-Saharan Africa, and 1.2 million in Latin America and the Caribbean (Shah and Ahman, 2004). Adolescents account for an estimated 2.5 million of the approximately 19 million unsafe abortions that occur annually in the developing world (Shah and Ahman, 2004). Almost all unintended adolescent pregnancies is

increasing by the day among female adolescent leading to high rate of drop outs from school and causing serious poverty and unexpected burden for the girl as well as their parents or guardians as the case may be.

Young people form a significant population group in term of demographic parameter are a unique population in term of characteristics and their developmental processes. Sadly, though, these young people face unique challenges, some of which may compromise their health and developmental potentials if not well addressed (FMH, 2011). In every developing country, early marriage and early child bearing are most common among poor women and those with little education, the facts that are themselves intricately related (Lloyd, 2005). Whether they are single or married, most adolescent women are poor or without monetary resources of their own; some because they are still in school, others because they are married with little or no control over household income (Lloyd, 2005). Also, inadequate knowledge about contraception and how to obtain health services, high risk of sexual violence (Jejeebhoy, 2005). Little independence in deciding on the timing of birth or lack of the use of contraceptives are other reasons why many adolescent in developing countries are especially vulnerable (UNFPA, 2003).

### 1.3 Research Hypothesis

HYPOTHESIS ONE: There is no significant relationship between the knowledge of adolescents and sexually transmitted infections.

HYPOTHESIS TWO: There is a relationship between demographic variables and knowledge of sexually transmitted infections.

**HYPOTHESIS THREE**: There is no significant relationship between practice of adolescents and sexually transmitted infections.

**HYPOTHESIS FOUR:** There is no significant relationship between knowledge of reproductive health of adolescents and the risk of teenage pregnancy.

#### 1.4 Research Questions

In line with the problem stated above, this study will attempt to answer the following research questions:

- 1. How knowledgeable are adolescents towards some of the sexually transmitted infections?
- 2. What are the attitudes of adolescents towards these STIs?
- 3. What are the practices among adolescents in Ekiti that can pose a threat to their reproductive health behavior?
- 4. What is the level of Knowledge of reproductive Heath and the risk of teenagepregnance amongs adolescents?

#### 1.5 Research Objectives

The specific objectives of the study are:

- 1. Investigate the knowledge of adolescents towards sexually transmitted infections
- 2. Understand the attitude of adolescents towards sexually transmitted infections
- 3. Understand the practices engaged by adolescents that that can expose them to reproductive health issues
- 4. Evalute the Knowledge of reproductive health and the risk of teenagepregnance

## 1.6 Significance of the Study

The study will be significant for contributing to the existing literature on adolescent reproductive behaviour in Ado-Ekiti and also serve to bridge the gap in knowledge about this phenomenon by investigating knowledge, attitude and practice of adolescent in the area. Also, the study is justified on the ground that it will constitute a viable policy material upon which action can be taken by government or its agencies for securing the life and wellbeing of adolescents in the area. The study is also important for safeguarding the leaders of tomorrow from engaging in risky behaviour in the future that may truncate their lives and derail them from achieving their full potentials.

Ensuring that adolescents can protect their health during each phase of development is a critical global public health priority. Such investments may delay first pregnancy, reduce maternal mortality, improve health outcomes for women and their children, contribute to development goals and reduce poverty.

### 1.7 Definition of key terms

#### Adolescent

Adolescent refers to a young person between childhood and adulthood. WHO defines adolescents as individuals who are going through a very special phase in their lives (adolescence). Adolescent is a phase during which enormous physical and psychological changes occur, as do changes in social perceptions and expectations; a phase when an individual is no longer a child, but not yet an adult (WHO, 2010)Adolescence begins with the onset of physiologically normal puberty, and ends when an adult identity and behaviour are accepted. This period of development corresponds roughly to the period between the ages of 10 and 19 years, which is consistent with the World Health Organization's definition of adolescence.

## Reproductive Health

The definition of reproductive health adopted by the Federal Ministry of Health (2003) will be used for this study. Reproductive health entailsall forms of of reproductive health practices such as pregnancies, pre-natal and ante-natal care,

safe childdelivery, family planning, management of complications of abortion and promotion of healthy sexual maturation.

#### Knowledge

This is the understanding of or the information about a subject which has been obtained by experience or by study, and which is either in a person's mind or possess by people generally. That is, informations relating to reproductive health.

#### Attitude

For this study, attitude will refer to the feeling or opinion about reproductive health or a way of behaving that follows from this.

#### Practice

This refers to something that is usually regularly done, often as a habit, tradition or custom. This is the habitual way of behaving that follows the knowledge and attitude held by adolescent towards reproductive health.

## Sexually transmitted infections (STIs)

Sexually transmitted infections (STIs) are infections that are spread primarily through person-to-person sexual contact. There are more than 30 different sexually transmissible bacteria, viruses and parasites. The most common conditions they cause are gonorrhoea, chlamydial infection, syphilis, trichomoniasis, chancroid, genital herpes, genital warts, human immunodeficiency virus (HIV) infection and hepatitis B infection.

Several, in particular HIV and syphilis, can also be transmitted from mother to child during pregnancy and childbirth, and through blood products and tissue transfer.

#### **Genital** warts

Genital warts are small fleshy growths, bumps or skin changes that appear on or around your genital or anal area. They are the result of a viral skin infection caused by the human papillomavirus (HPV). The warts are usually painless, but you may notice some itching or redness. Occasionally, they can cause bleeding. You don't need to have penetrative sex to pass the infection on because HPV is spread by skin-to-skin contact. Several treatments are available, such as creams and cryotherapy (freezing the warts).

#### Genital herpes

Genital herpes is a common infection caused by the herpes simplex virus (HSV), which is the same virus that causes cold sores. Some people develop symptoms of HSV a few days after coming into contact with the virus. Small, painful blisters or sores usually develop, which may cause itching or tingling or make it painful to urinate. After you've been infected, the virus remains dormant (inactive) for most of the time. However, certain triggers can re-activate the virus, causing the blisters to develop again, although they're usually smaller and less painful. It easier to test for HSV if you have symptoms. Although there's no cure for genital herpes, the symptoms can usually be controlled using antiviral medicines.

#### Gonorrhoea

Gonorrheais a bacterial STI easily passed on during sex. About 50% of women and 10% of men don't experience any symptoms and are unaware they're infected. In women, gonorrheacan cause pain or a burning sensation when urinating, a vaginal discharge (often watery, yellow or green), pain in the lower abdomen during or after sex, and bleeding during or after sex or between periods, sometimes causing heavy periods. In men, gonorrheacan cause pain or a burning sensation when urinating, a white, yellow or green discharge from the tip of the penis, and pain or tenderness in the testicles. It's also possible to have a gonorrheainfection in your rectum, throat or eyes. Gonorrheacan be easily diagnosed using a urine test, or by taking a swab of the affected area. The infection is easily treated with antibiotics, but can lead to serious long-term health problems if left untreated, including infertility.

## **Syphilis**

Syphilis is a bacterial infection that in the early stages causes a painless but highly infectious sore on your genitals or sometimes around the mouth. The sore lasts two to six weeks before disappearing. Secondary symptoms, such as a skin rash, a flu like illness or patchy hair loss, then develop. These may disappear within a few weeks, after which you have a symptom-free phase. The late or tertiary stage of syphilis usually occurs after many years and can cause serious conditions, such

as heart problems, paralysis and blindness. The symptoms of syphilis can be difficult to recognise. A simple blood test can usually be used to diagnose syphilis at any stage. It can be treated with antibiotics, usually penicillin injections. When syphilis is treated properly, the later stages can be prevented.

#### HIV

HIV is a virus most commonly caught by having unprotected sex or sharing infected needles to inject drugs. The HIV virus attacks and weakens the immune system, making it less able to fight infections and disease. There's no cure for HIV but there are treatments that allow most people to live a long and otherwise healthy life. AIDS is the final stage of HIV infection, when your body can no longer fight life-threatening infections.

Most people with HIV will look and feel healthy and have no symptoms. When you first develop HIV you may experience a flu-like illness with a fever, sore throat or rash. This is called a seroconversion illness. A simple blood test is usually used to test for an HIV infection. Some clinics may also offer a rapid test using a finger prick blood test or saliva sample.

#### Scabies

Scabies is caused by tiny mites that burrow into the skin. It can be passed on through close body or sexual contact, or from infected clothing, bedding or towels. If you develop scabies you may have intense itching that is worse at night.

The itching can be in your genital area, but it also often occurs between your fingers, on wrists and ankles, under your arms, or on your body and breasts. You may have a rash or tiny spots. In some people, scabies can be confused with eczema. It's usually very difficult to see the mites. Scabies can usually be successfully treated using special creams or shampoos available over the counter in most pharmacies or from a GP or GUM clinic. The itching can sometimes continue for a short period even after effective treatment.

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## CHAPTER TWO

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

#### 2.1 INTRODUCTION

The review of relevant literature is for the purpose of ascertaining the level of knowledge on reproductive health as carried out by other scholars and to see where this work stand in relation to the work of others. The review will be done in relation to the specific objectives of the study. The review will be broken down into the knowledge, attitudes and practices of adolescents' reproductive health.

Adolescence (10-19 years of age) is one of life's most fascinating and complex life stages (IAWG, 2010). It is a continuum of physical, cognitive, behavioral and psychosocial change that is characterized by increasing levels of individual autonomy, a growing sense of identity, self-esteem and progressive independence from adults (Sawyer et al, 2012). At one end of the continuum is early adolescence, from 10 to 14 years of age, characterized by initial physical changes and rapid brain development. During this phase, some adolescents may be physically, cognitively, emotionally and behaviorally closer to children than adults. Middle adolescence, 15-16 years, is a time when sexual orientation progressively develops, and peers become an important source of influence. In older adolescence, aged 17-19 years, adolescents may look and act like adults, but may not have reached cognitive, behavioral and emotional maturity (Sawyer et al, 2012).

Globally, adolescent girls aged 15-19 account for roughly one-fifth of all girls and women of reproductive age. An estimated 16 million girls aged 15-19 and two million girls underage 15 give birth every year. In the poorest regions of the world, this translates to roughly one in three girls bearing children by the age of 18 (UN Millennium Development Goal Report, 2011). These adolescents are at higher risk of maternal death than any other sub-population. The risk of pregnancy-related death is twice as high for girls aged 15-19 and five times higher for girls aged 10-14 compared to women aged 20-29 (WHO, 2007). In low- and middle-income countries, complications from pregnancy and childbirth are the leading cause of death among girls 15-19 (WHO, 2012). Pregnant adolescents are more likely than adults to pursue unsafe abortions; an estimated three million unsafe abortions occur every year among girls 15-19 (WHO Fact Sheet, 2012). Adolescents and youth aged 15-24 account for just under half (40 percent) of all unsafe abortions worldwide (UNFPA, 2012). The adverse effects of adolescent childbearing extend to their infants. Stillbirths and newborn deaths are 50 percent higher among infants of adolescent mothers than among infants of women aged 20-29 years (UNFPA, 2012) Newborns of adolescent mothers are more likely to have low birth weight, with the risk of long-term effects.

## 2.2 Reproductive Health

## A Brief Historical Perspective

The concept of reproductive health as noted by Kelly Macdonald arose in the 1980s with a growing movement away from population control and demographic targets that is geared towards a more holistic approach to women's health. It was not until the ICPD in 1994 and the Fourth World Conference on Women (FWCW) in 1995 that the concept gained international acceptance and was heralded as a turning point for women's health.

The ICPD conference was therefore seen as highly instrumental in formalizing the paradigmatic shift in how women's health was conceptualized and how services were delivered. The way in which reproductive health was viewed began to change: the focus became the promotion of healthy reproductive lives, rather than the prevention of sexual morbidity. Not only were there changes in the kinds of programmes that were delivered, but also in the intended recipients and manner of delivery of programmes. For example, men were recognized as having an important role to play; child survival was emphasized; the integration of reproductive and sexual health (RSH) services into primary health care rather than their being offered as a separate service in separate facilities was advocated; and the need for reproductive health services specifically designed for refugees and internally displaced persons (IDPs) was recognized. Overall, it called for a

fundamental rethink of health service provision (Sen, 1994; Bongaarts, 1994; Hartmann, 1987).

As reported by Pearce (2001), the international population establishment became more interested in Africa's population growth rates after the 1960s, and significantly increased pressure for fertility control in the 1970s, Nigeria and other countries resisted advice on policy development until the mid-1980s. As further pointed out by Pearce, changes in population policies came after the economic recession, which began in the 1970s. In spite of the fact that Nigerian physicians had for a long time been privately concerned about mortality rates and the health of mothers and children, the push from the West to link fertility to national development in Third World nations only made headway as each African nation sank into an economic crisis.

## 2.3 Adolescents' Reproductive Health

## Conceptualizing Adolescence

Etymologically, the term adolescence has been said to be derived from the Latin word "adolescere" meaning "to grow up". So, literally, adolescence could mean the state of growing up from childhood to adulthood. It has also been noted that the formal study of adolescence began sometime in the 1940s. There has been a lack of consensus among scholars on the actual definition of adolescence and the major argument is that the concept can be viewed from different standpoint.

A thorough understanding of adolescence in today's society depends largely on information from various perspectives, most importantly from the areas of psychology, biology, history, sociology, education, and anthropology. Within all of these perspectives, it can be generalized that adolescence is viewed as a transitional period whose chief purpose is the preparation of children for adult roles (Carlson, 2010). According to the Webster online dictionary, adolescence connote the period of life beginning with the appearance of secondary sex characteristics and terminating with the cessation of somatic growth.

The years usually referred to as adolescence lie between 13 and 18 years of age. Adolescence according to Adebusoye (1991) has no universal definition. Biologically, it is defined as the period of progressive transition between childhood and adult life which begins, among females, with the onset of menstruation. Socially, however, adolescence is the period between the onset of menstruation and marriage. Thus, the adolescent period may be short if marriage follows soon after menarche, or long if for some reasons such as education, a long period elapse before marriage, (Adebusoye, 1991).

As further documented in literature, adolescence emerged as a concept in the 1890s, when psychologists began investigating the abilities, behaviors, problems, and attitudes of young people between the onset of puberty and marriage. G. Stanley Hall, a pioneer in the study of children and their learning processes, has

been credited with giving adolescence its first full definition in his text Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion and Education, published in 1904. Hall thought that the stresses and misbehavior of young people were normal to their particular time of life, because he believed human development recapitulated that of human society. For Hall, just as the human race had evolved from "savagery" to "civilization," so too did each individual develop from a primitive to an advanced condition. Adolescence corresponded to, or recapitulated, the period of prehistory when upheaval characterized society and logical thinking began to replace instinct.

As further indicated in the Gale encyclopedia of US history, a year after Hall's book appeared, the psychoanalyst Sigmund Freud published an essay in which he identified adolescence as a period of emotional upheaval, inconsistent behavior, and vulnerability to deviant and criminal activity caused by psychosexual conflicts. For the past century, the qualities of anxiety and awkwardness resulting from physiological development and sexual awareness that Hall and Freud emphasized have pervaded popular as well as scientific definitions of adolescence. In the United States, as well as in Europe, researchers and writers in various fields began using the term "adolescence" to apply to the particular era of life when a new order of events and behavior occurred, thereby making it a formal biological, psychological, and even legal category.

Terms such as "youth" and, later, "teenager" were used synonymously but less precisely to describe the status of individuals in adolescence. Because adolescence occurred when personswere presumably preparing to enter adult roles in family, work, and community, their needs and guidance assumed increasing importance. Consequently, educators, social workers, and psychologists constructed theories and institutions geared toward influencing the process of growing up (Gale encyclopedia of US history).

Psychologists have associated adolescence with notable changes in mood sometimes known as mood swings. Cognitive, emotional and attitudinal changes which are characteristic of adolescence, often take place during this period, and this can be a cause of conflict on one hand and positive personality development on the other. Because the adolescents are experiencing various strong cognitive and physical changes, for the first time in their lives they may start to view their friends, their peer group, as more important and influential than their parents/guardians. Because of peer pressure, they may sometimes indulge in activities not deemed socially acceptable, although this may be more of a social phenomenon than a psychological one.

Studies have shown that the ages of adolescence may vary by culture depending on the norms and values of that society. The Human Development Initiative (2001) has also opined that there is usually unsettlement among

adolescents and these unsettlements may vary in intensity from country to country, depending on policies in place and facilities available for solving such problems. The problem is made complex for youths in developing countries for instance because of rapid changes in socio-cultural norms and the economic environment in which the youths are nurtured. Changing gender roles in all aspects of development further compound this (HDI, 2001). As a result of these confusing changes which are prominent among adolescents, many psychologists have described the period as a period of "storm and stress (Bolarin, 1995).

According to the World Health Organization, adolescents are persons between the ages of 10 to 19 years and the broader term youth encompasses individuals within the age range of 15 to 24 years, while a combination of individuals aged 10 to 24 are referred to as "young persons".

Many a times, people tend to use the terms "adolescents", "teenagers", "youths" and "young people" interchangeably, but for the purpose of clarification the "Guidelines for Comprehensive Sexuality Education in Nigeria" (1996) has identified four developmental levels namely:

Level 1: Childhood ages 6 through 8

Level 2: Pre-adolescence ages 9 through 12

Level 3: Adolescence ages 13 through 17

Level 4: Young adult ages 18 through 24

Other scholars further attempted to sub-divide adolescence into the following categories:

Pre-puberty (before age 10)

Early adolescence (ages 10-14)

Middle adolescence (ages 15-19), and

Late adolescence or young adulthood (ages 20-24) [James Traore, 2001].

In the place of these subcategories, three groups are sometimes used to describe adolescence such as Lower teens (10-12), middle teens (13-15), and, upper teens (15-19). For the purpose of this study however, adolescents in their middle and upper teens (13-19) will be considered appropriate for this study.

# Adolescents' Sexual and Reproductive Health

The recognition and focus on the health needs of adolescents and young people has been viewed as a relatively recent phenomenon (WHO, 1999). The need to pay particular attention to the sexual and reproductive health needs of adolescents arose around the 1980s. This came not as a surprise because over 1.7 billion people make up the adolescent population accounting for over one quarter of the world's total population (Population Reference Bureau, 2000). About 86% of this total estimation of the world's adolescent population reside in developing countries and it suffice to say that the sexual and reproductive behaviour of this age

cohort will decisively impact on the global population growth pattern (Ranl and Lule, 2004).

Sexuality is a life-long process, natural and an integral part of every human being (HDI, 2001). Sexuality encompasses all parts of life that are related to or associated with sexual behaviour or with one's sex and it has been viewed as having five overlapping aspects namely:

Human development

Emotions and relationships

Sexual health

Sexual behaviour, and

Sexual violence

According to the World Health Organization (1975), sexual health is "the integration of the physical, emotional, intellectual and social aspects of sexual being in ways that are positively enriching and that enhance personality, communication and love... Every person has the right to receive sexual information and to consider accepting sexual relationship for pleasure as well as for procreation".

Adolescent sexuality therefore may refer to sexual feelings, behavior and development in adolescents and is a stage of human sexuality. It is also a very vital aspect of every teenager's life. Sexuality and sexual desire usually begins to appear along with the onset of puberty. The expression of sexual desire among adolescents

might be influenced by family values and influences, the culture and religion they have grown up in, social engineering, socialcontrol, taboos, and other kinds of social mores. As indicated by Lynn (2000), "the sexual behavior of adolescents is, in most cases, influenced by their culture's norms and mores, their sexual orientation, and the issues of social control such as age of consent laws". The risks of adolescent sexual activity are sometimes associated with emotional distress (fear of abuse or exploitation), sexually transmitted diseases (including HIV/AIDS) and pregnancy through failure or non-use of contraceptives.

Reproductive health outcomes applicable to adolescents may therefore include the timing of sexual initiation; frequency of sexual activity; number of sexual partners; non-voluntary sex; use of contraception, including condoms; acquisition of STIs; and the experience of becoming pregnant or causing pregnancy, giving birth, or fathering a child (O'Toole et al, 2008).

Adolescents learn about sex and issues around sexuality through various mediums. The Human Development Initiatives has pointed out that, learning about sexuality is a lifelong process and an essential part of every person's socialization. It further stated that, the messages about sexuality are usually circulated and communicated directly or indirectly through everyday interactions, experiences and exposure to a wide variety of influences. The sources and places of sexual learning may therefore include parents and other relations, close friends and peer groups,

school, mass media, religious institutions, workplaces and other gathering places, healthcare service providers, social institutions and the arts. Learning about sex and sexuality is thus seen assomething that happens whether or not we undertake it consciously and formally (HDI, 2001).

This goes to show that there is an urgent need for accurate education and information as regards issues of sexuality amongst adolescents. It has been suggested that information about sexuality must be open and frank because whether we communicate sexuality with adolescents or not, they will one way or the other get the information in its raw form which in most cases are usually wrong and inaccurate. Studies have shown that young people adopt safer sexual behaviour provided they have the information and skills to do so. It has also been noted that safer sexual behaviour is fast becoming the norm among young people in most of the economically advanced countries. For instance, in Western Europe, it was reported that about 60% of young people are now using condom the very first time they would be having sex thanks to their exposure to timely and accurate sexuality education. This is however not the case in less developed countries most especially Nigeria where a number of socio-cultural factors impinge on sexuality education dissemination.

## 2.4 Sexual and Reproductive Health Knowledge among Adolescents (STIs)

Knowledge they say empowers, transforms and reforms. It has been observed from the literature that there has been a dearth of accurate information as regard issues of sexuality and reproductive health among adolescents generally. This is particularly the case in most economically poor countries where the educational system is defective. Information regarding sexual and reproductive health is poorly disseminated most especially in Nigeria despite the efforts of several non for profit making organizations and numerous civil society organizations. A lack of sexual health information and services has been seen as increasing the vulnerability of young people and putting many of them at risk of unplanned pregnancy, unsafe induced abortions exually transmitted diseases, and HIV/AIDS. Similarly, early marriage, a practice which is very common in the Northern parts of Nigeria and childbearing can put the educational and employment opportunities of these young people in jeopardy. Effective and innovative programs have thus been seen as a tool that can provide youths with the sexual health information and services they need (World Population Prospect, 1999).

In a study "Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe" (Florence N Samkange-Zeeb et al, Sept 2011) discovered that: Sexually transmitted diseases (STDs) are a major health problem affecting mostly young people, not only in developing, but also in

developed countries. Over the period 1985-1996, a general decrease of gonorrhea, syphilis and chlamydia infections was noted in developed countries, both in the general population and among adolescents. From the mid-1990s however, increases in the diagnoses of sexually transmitted diseases, in particular syphilis, gonorrheaand chlamydia have been reported in several European countries, especially among teenagers 16-19 years old.

Although knowledge and awareness have been reported to have a limited effect on changing attitudes and behaviour, they are important components of sex education which help promote informed, healthy choices. As schooling in Europe is generally compulsory at least up to the age of 15 years and sex education is part of the school curriculum in almost all European countries, school-going adolescents should be well informed on the health risks associated with sexual activity and on how to protect themselves and others. In view of the decreasing age of sexual debut and the reported increasing numbers of diagnosed STDs among young people, results of our review can help point out areas where STD risk communication for school-attending adolescents needs to be improved. The highest awareness and knowledge were reported for HIV/AIDS. This is certainly linked to the fact that since the mid-1980s, extensive awareness campaigns on this topic have been conducted globally. The lowest proportions were reported for HPV, with awareness as low as 5.4% in one study. With only about 1 in 8 respondents knowing that HPV

is an STD, awareness was still very low in one of the two studies conducted after the introduction of the HPV vaccine. A higher awareness (66.6% of respondents aware), measured in a different population, was observed in the second recent study on HPV.

Two factors appeared to have influenced awareness. The first was of a methodological nature and related to the fact whether an open or closed question was posed. Of the studies included in the review which assessed awareness, all but one used closed-form questions only. The adolescents either had to identify sexually transmitted diseases from a given list of diseases, or the question was in a yes/no format. Initially, Höglund et al. asked participating adolescents to list all STDs known to them and then later on, if they had ever heard of HPV. Only one participant (0.2%) mentioned HPV as one of the STDs known to them, but later, 24 (5.4%) reported to have heard of HPV. In comparison to open-form questions, closed questions are not only more practical and easier to respond to, but also easier to code and analyse. One of the arguments raised against closed questions, especially where a list of possible answers is given, is the risk of guesswork. It can not be ruled out that some participants, unable to answer the question, will select answers at random. In the study by Garside et al. for example, among year 9 pupils, 14.5% incorrectly identified plasmodium, and 20.6% filariasis from a given list as STDs. Open questions have been recommended for surveying participants with

unknown or varying knowledge/awareness as these questions provide a more valid picture of the state of knowledge.

To a lesser extent, gender also appears to have influenced knowledge and awareness, especially for HPV. Significant gender differences were observed, with females having better awareness and knowledge than males. Although the data are limited as not all studies reported results separately for males and females, these findings, could be reflective of the way awareness campaigns, for example on HPV, have been targeted more at females than at males (Florence N Samkange-Zeeb et al, Sept 2011).

A study based in Northern Thailand by Paz-Bailey et al. (2003) showed that Thai adolescents' knowledge on HIV was high. Among the sample, which consisted of students' aged 15-21, 99.5% had heard of HIV. More than 90 % could identify three main routes of contracting the infection. The same study also showed that knowledge of other STDs was lower than the knowledge on HIV, and that some of the students did not know that STDs could cause infertility. The study showed no significant difference in gender concerning knowledge of HIV or STDs. A similar study in Rio de Janeiro (Trajman et al., 2003) showed that all participants had heard of HIV, but far less knew of other STDs such as gonorrhea, syphilis and genital herpes. Sixteen percent of the adolescents thought that AIDS was curable, which shows great lack of knowledge in the seriousness of STDs. Many adolescents (90%)

stated that they felt that their knowledge on STDs was too low and wanted to know more. Seventy-eight percent wanted to get this information through school.

Concerning sexual education, a study carried out in Thailand by Sridawruang, Pfeil & Crozier (2010) investigated the parental role in this subject. The study showed that most Thai parents had not discussed sex education issues with their adolescent children. Sex is, in Thailand as well as globally, considered a sensitive and controversial issue, which complicates the discussion and education of it. Barriers were found that prevent parents providing information on this issue, for example the parents stated that they believed sex is a delicate issue, which brings awkwardness and embarrassment and therefore did not speak of it at home. The adolescents stated that if they contracted an STD they would find it difficult to talk to their parents about it. The parents also stated that it is against Thai culture to educate ones children on sex, and believed that sexual education should be given at schools. When the adolescents were asked they also said that they preferred to receive sexual education from schools, but stated that the education they received was not adequate. The authors conclude that sociocultural norms and the core values of Thai society discourage the discussion of sex. Sexual education must be improved to avoid unwanted pregnancies and unnecessary STDs in Thailand. However it is difficult to provide satisfactory sexual education in Thailand since it

is considered a social taboo. It is not always a part of the school curricula and the teachers are often reluctant to teach it (Liu et al 2006).

A study from Malaysia by Awang, Wong, Jani and Low (2013) investigated the knowledge of sexually transmitted diseases and sexual behaviors among Malaysian male youths. The results showed that 92% of the respondents had heard of at least one of the listed STDs, which included syphilis, gonorrhea, chlamydia, yeast infection, herpes, genital warts, trichomoniasis and HIV/AIDS. The disease that most people knew of was HIV/AIDS (90%) and syphilis (59%). The least known diseases were chlamydia and trichomoniasis, only 13 % of the respondents were aware of those diseases. When it came to STD transmission, 95 % of the respondents knew at least one method.

A study carried in the United States by Clark, Jackson and Allen-Taylor (2002) showed that despite having received relevant education from school, home and/or friends, a high percentage of adolescents were lacking in knowledge regarding various STDs. The adolescents who had been educated by parents, school, other relatives and friends performed better than those educated by other sources. Nearly all adolescents had good knowledge of HIV, but they knew far less about other serious STDs.

## 2.5 Knowledge of Contraception and Its Usage among Adolescents

It has been observed that contraceptive knowledge and usage among the Nigerian young population is low. Despite the wide array of studies and reports on adolescent reproductive health and inspite of all the publicity and awareness creation that pervaded the social media in the late 90s, coupled with the free distribution of condoms, findings have shown that a huge proportion of Nigerian youths still lack adequate knowledge about contraceptives. The awareness creation and condom distribution is fast dwindling these days and these could be attributed to the limited funding and sponsorship by international organizations. In the past, many non-governmental organizations (NGOs) enjoy adequate sponsorship and funding to run their programmes but this is changing due to lack of accountability and corruption on the part of most of these non-governmental organizations.

A report has revealed that adolescents lack knowledge about contraception and use it inconsistently. An issue that can be said to influence the lack of, or poor reproductive health knowledge among adolescents is the culture of silence that still surrounds most reproductive health issues. Many adults, particularly parents find it difficult to communicate sexuality with their wards. This is not surprising however because, a lot of them lack the accurate sexual health knowledge (Obono, 2008). Africans generally have also been observed to feel unable to discuss sexuality across barriers of gender, age difference and religion.

Young people have been perceived to have the ability to obtain their knowledge about reproductive health haphazardly from a variety of sources (Barker, 2001) of which most times are the wrong source. This results in the circulation of incorrect and incomplete information among adolescents and the perpetration of widespread ignorance. Reports have shown that as many as 80% of patients at Nigerian hospitals with abortion related complications are adolescent girls. The Young Women Population Report (YWPR) have suggested that, the reasons why young girls often opt for abortion include lack of accurate and comprehensive information about sexual and reproductive health, lack of appropriate reproductive health counseling and clinical services, non-use or ineffective use of contraceptives by sexually active young people, fear of partner, parents, peer group, community leaders and religious rejection, and, financial and emotional inability to take care of the baby (Young Women, Population Reports 2003).

Contraceptives usage among adolescents is low at 30% and considerably lower than the rates reported for developed countries (Mohammed and Obono, 2010). This goes on to show that contraceptive knowledge and access is inadequate along with spontaneity of adolescent sexual activities (Orji and Esimai, 2005; Aziken et. al., 2003). This has also been seen as reflecting the notion among youths that it is easier and more logical to obtain an abortion than to use contraceptives.

Some studies on the attitude of adolescents towards contraceptive usage have revealed that many of them have one or two reasons for not adopting some contraception methods. As reported by Otoide, Oransanye and Okonofua in the International Family Planning Perspectives (2001) "Fear of future infertility was an overriding factor in adolescents' decisions to rely on induced abortion rather than contraception. Many focus-group participants perceived the adverse effects of modern contraceptives on fertility to be continuous and prolonged, while they saw abortion as an immediate solution to an unplanned pregnancy and, therefore, one thatwould have a limited negative impact on future fertility. This appears to be the major reason why adolescents prefer to seek induced abortion rather than practice effective contraception".

Arowojolu et al. (2004) reported that the poor contraceptive usage among Nigerian youths is a function of the perceived fear of the side effects as well as the negative cultural attitudes of parents and guardian to contraceptive use. Smith (2004) however seem to have a differing view claiming that the few adolescents who make use of contraceptive do so principally to prevent unplanned pregnancy and not for disease prevention. Smith's revelation goes to show that while there is a high probability of achieving success at preventing unwanted pregnancies among adolescents, the risk of contracting sexually transmitted infections is still very high (Obono and Mohammed, 2003). Many young female adolescents have limited

information about effective contraceptives and those who do find it difficult to access the services and the supplies they need.

As mentioned earlier, there have been some notable attempts by a number of non-governmental organizations (NGOs) at ensuring that some marginalized groups within the Nigerian population have access to sexuality education. This effort has been observed to be increasing as data from studies continue to show that five out of ten girls and seven out of ten boys have had sexual intercourse at least once by the time they leave secondary school (Esiet and Oyebola, no date).

Sometime in March, 1999, the Nigerian government took a historic step when a resolution to integrate comprehensive sexuality education into the Nigerian school curricula sponsored by the Federal Ministry of Education was unanimously ratified. As a result of this, the federal Ministry of Education made a remarkable commitment to implementing sexuality education throughout Nigerian schools. [(National Guidelines Task Force 1996; SIECUS 2000); U. Esiet]. However, inspite of this effort, it has been observed that counseling and access to sexual and reproductive health information and services among adolescents still remains inadequate or lacking completely (United Nations 1995: para 95), this is rather not surprising given the large proportion of Nigeria's young population vis a vis available counseling and service centers. Sexual and reproductive health information is particularly limited among poor adolescent girls in several

disadvantaged communities in Nigeria where a lot of services are yet to reach. This therefore calls for urgent attention, hence the need for further studies in this regardunfortunately, the high level of sexual activity has not been matched with a corresponding level of contraceptive use. In Anambra State, 64.2% of 120 adolescents used no form of contraceptive device at first sexual intercourse. This is similar with a Rivers State study. The picture is worse in Abia State; only 12.4% out of 180 adolescents used condom during their first intercourse.

In Niger State, about 35% of 294 sexually active adolescents stated they or their partner used a particular family planning method to prevent pregnancy – the remaining 65% did not use any family planning device because they were ignorant of any method. In Ikenne, Ogun State, knowledge on contraception among adolescents was also low; 36.9% and 22.1% for male and female students respectively. Use of contraception was quite low (10.9% for males and 6.0% for females). Reasons given for non-use included non-availability (22.3%); cost (11.8%); negative attitude towards contraception due to societal disapproval (33.2%) and lack of knowledge of how to 28use them (21.3%). In contrast, there was high use of a contraceptive method in the last sexual intercourse engaged by adolescents in Anambra State (up to 290%).

#### 2.6 Attitudeof Adolescents towards Sexually Transmitted Infections

Many adolescents and young adults engage in sexual intercourse, often with multiple (sequential) sex partners and without using condom. In aUS research, 47.8% of high school students reported having had sexual intercourse (Eaton etal., 2008), with 7.1% reporting having had sexual intercourse for the first time before age 13.Early initiation of sexual activity has been pinpointed as an important indicator in terms of sexual health (Centers for Disease Control and Prevention, 2010; UNAIDS, 2010; WHO,2010). Some studies even report that early sexual activity is associated with other riskbehaviour, such as substance use (Madkour et al., 2010).

Although most adolescents do not have concurrent sex partners at any given point in time, thenumber of sex partners cumulates over time. Moreover, among sexually active young adults 61.5% (U.S. survey) reported using a condom the last time they had sexual intercourse (Reis et al., 2011; Eaton et al., 2008). In spite of the fact that manyhave used condoms at some time during an episode of sexual intercourse, comparatively few report using them every time they have sex (Reis et al., 2011; Eaton et al., 2008). Thus, youngadults engage in sexual behaviour that place them at risk for acquiring STIs, including HIV.

According to literature, if young people possess knowledge, information and motivation onsafe sexual behaviour, they may change their attitudes and their

behaviour (Synovitz et al., 2002; Thompson et al., 1999). Improving knowledge related to HIV prevention and attitudes about people living with HIV are other important aims of sexual and reproductive health. Some theories claim that being well informed about transmission/preventive behaviour regarding HIV and other STIs and developing a positive attitude towards people infected with HIV are crucial to change people's behaviour.

## Some of Key health problems in adolescence are:

Sexual & reproductive health, early pregnancyRisks to mother and risks to baby, Health problems during pregnancy & child birth (including unsafe abortion), Sexually Transmitted Infections including HIV, Harmful traditional practices e.g. female genital mutilation, Sexual coercionOther issues include; Injuries from accidents & intentional violence, Mental health problems, Substance use problems, Endemic diseases: malaria, schistosomiasis, tuberculosis, Under/over-nutrition (United Nation, World Youth Report, 2005).

According to Fatuma A Ahmed (feb 2012) Each year there are about 250 Million pregnancies globally and one third of these are unintended and 20% of these undergo induced abortion. In Low income countries, more that one third of the 182 million pregnancies is unintended; the fate of 19% will be induced abortion and 11% of this is unsafe. In low income countries, the women who do not use any contraceptive contribute to two third of unintended pregnancies, where more than

100 million married women have unmet need for contraception. Unsafe abortion has much ill effects in women's health, each year about 68,000 women die because of unsafe abortion, and millions of women end up with many complications of unsafe abortion, which could include severe infection and bleeding; this could have been immensely reduced by using EC. Each year about 500,000 women die due to cases related with child birth, and majority are in sub Saharan Africa where there is also high fertility rate that is more than five. Globally, it's estimated that 11% births are given by adolescent girls of age 15-19 annually, and 95% of these births are in low income countries, Ethiopia is one of the countries with high adolescent birth rate. Most adolescent pregnancies seem to be intended; just because they happen within marriage but in reality most of them are unintended rather the marriage itself is arranged by the girls' family due to some cultural influences. Adolescent pregnancy affect the health of mother and child, it has a devastating impact in social and psychological life of the girls.

Given highly conservative attitudes about sex in South Asia, few studies have successfully elicited information on sexual behaviour. Most explore premarital rather than marital sex, men's behaviour rather than women's, and young people's current experiences or retrospective experiences of adults. Samples tend to be small and drawn from urban areas rather than rural communities or slums. Results, therefore, tend to be unrepresentative of the general population. While

generalization is difficult, findings of the few available studies (Jejeebhoy, 2000 generally suggest that between 20% and 30% of young men and between 0% and 10% of young women report premarital sexual experience. Sexual initiation occurs earlier than many assume, and is often unplanned and unprotected. Moreover, as noted in many papers in this volume, substantial proportions of young men report having sex with sex workers usually without condoms.

In light of evidence that substantial proportions of South Asian adolescents are sexually active, many papers in this collection explored the extent to which adolescents take measures to protect themselves from unwanted pregnancy and STIs. At the global level, adolescents are far less likely than adults to use contraception, either in or out of marriage. Not all contraceptive methods are suitable for adolescents, and those that are appropriate may be inaccessible or simply unavailable. Not surprisingly therefore, a substantial proportion of sexually active adolescents both married and unmarried have an unmet need for contraception and are at risk of STIs, including HIV/AIDS. While an array of contraceptive methods exists, evidence of their suitability, safety and efficacy among adolescents is incomplete. Questions remain about their clinical performance and their effects on adolescents who have not reached physical maturity. Meirik reviews the existing literature on these issues, which suggests that certain methods, such as Depotmedroxy progestroneacetate (DMPA) and the intrauterine device (IUD), are not advisable for adolescents. While evidence is still inconclusive, some data suggest that DMPA may reduce adolescents' bone mass, thereby increasing the risk of fracture later in life. Concerns about the IUD arise from its possible link with increased risk of pelvic inflammatory disease (PID), to which young women are at higher risk than adult women. In contrast, recent evidence demonstrates that combined oral contraceptives do not adversely affect either the maturation of the hypothalamic pituitary- ovarian system or the risk of breast cancer later in life, as was previously feared. The author argues that combined oral contraceptives and male condoms are clearly safe for adolescents. However, he notes that only condoms offer dual protection against unwanted pregnancy and STIs, including HIV.

Sales et al. (2007) did a study on 194 female adolescents and found that STD-related shame and stigma is a barrier for adolescents seeking treatment and help with STD-diagnosis. Especially those who presented higher STD-related stigma were less likely to seek help. Yet they found that a person presenting a high level of shame would initiate health-promoting behaviour changes, such as using condom during intercourse, to prevent getting an STD. Even though STD-related shame is an unpleasant feeling, it might be an important motivation to prevent the spreading of STDs.

A study set in Bangkok, Thailand in 2003 (Thato, Charron-Prochownik, Dorn, Albrecht & Stone) investigated condom use amongst Thai vocational students. Condom use amongst the students was low, only 6.3 % reported using condoms every time having intercourse. Seven percent of the students had contracted sexually transmitted diseases. One third of the participants stated that they never used condoms claimed there was no risk of them contracting an STD. The authors claimed that the low rate of condom use was explained by the students' attitudes, which is dependent on the knowledge on STDs and HIV. Amongst the students that did use condoms during intercourse, less than half of them used it to prevent contracting STDs and HIV.

A study carried out in the USA by Kershaw, Ickovics, Lewis, Niccolai, Milan & Ethier (2004) studied if previous sexual risk taking would prevent risk taking in the future. Women who had been diagnosed with an STD and women who had not been diagnosed with an STD were questioned twice with a six-month interval. Results showed that the women who had been diagnosed the first time were as likely to have contracted a new STD as the women without a previous STD diagnosis. Having previously contracted a disease did not change these women's attitudes and did not decrease their sexual risk taking. The authors mean that this contradicts the behavior model Health Belief Model that says that if you are

diagnosed withan STD it should affect one's health risk behavior and therefore you will be less likely to contract a new STD.

A study carried out in secondary schools in Ghana by Rondini and Krugu (2009) showed that 70.9 % of the males and 75 % of the female students were worried about and thought about HIV/AIDS. The students could mention gonorrhea and syphilis as common STDs besides HIV/AIDS, but showed very little knowledge of STDs and their symptoms when being asked more detailed questions about symptoms of the diseases. Regarding the students' attitudes towards protecting themselves from STDs, they showed a significant barrier towards condom- use. The female students would not purchase condoms out of fear of being judged as "bad girls" and the male students claimed that they wouldn't accept a condom from a girl, because "the girls is not to be trusted".

De Coninck and Marrone (2012) have studied usage of condoms in Uganda during 2001-2006 and saw that the number of females using condoms was lower than during 1995-2000. The authors believe that this might be because of the influx of antiretrovirals (starting 2004), which might have lowered the anxiety associated with HIV/AIDS. Therefore the authors state that it is again important to intensify condom use campaigns in order to stop the spreading of HIV and other STDs.

Self-awareness is also an important factor for the likelihood to engage in sexual risk taking activities. Adolescents who perceive being at AIDS risk are more

likely to report having used a condom at the last sexual intercourse, which indicates that these individuals practice less risk taking behavior (Mnyika, Masatu & Klepp, 2012).

## 2.7 Knowledgeof Reproductive Health andtheRisk ofTeenage Pregnancy

Adolescent childbearing poses health risks for both mother and child. Some of the risks include toxemia, he-morrhage, anemia, infection especially HIV, malnutrition, cephalo-pelvic-disproportion, obstructed labour, ve- sico-vaginal fistula, low birth weight and perinatal and maternal mortality. Thirty-sixty percent end up in abor- tion with its sequelae. The social and economic consequences of adolescent pregnancy and childbearing depend on the adolescent's particular cultural, family and community settings. In many African countries like Nigeria, adolescents' pregnancy is associated with poor educational achievement, poverty, limited employment opportunities, dependency on social welfare and rejection by family members' discrimination, psycho-social stress, forced marriage and violence. Most studies conducted amongst adolescents reported that termination of schooling is associated with unintended pregnancy among students. A recent study in Nigeria reported that 43% discontinued schooling and in Congo, up to 82.4% of adolescents gave up schooling. Adolescent mothers may pass on to their children, a legacy of poor health, substandard education and subsistence living, creating a cycle of poverty that is hard to break. Several studies have shown that some victims school education and history of unintended teenage pregnancies. Most adolescents are aware that promiscuous sexual activity puts them at risk of getting pregnant or contacting HIV, though their knowledge, often laced with myths, is devoid of scientific depth. For example, many adolescents think that a young woman cannot get pregnant at the first time she has sexual contact or if she has sex standing up. Teenage pregnancy is a risk factor for disruption of education, future unemployment, STI, HIV, preterm birth and poor mental health and is a reflection of inconsistent use of contraception.

"Tannage pregnancy" (Norad 2013), About 16 million adolescent girls give birth every year most in low and middle income countries. 95 per cent of the world's births to adolescents occur in developing countries. The risk of dying from pregnancy-related causes for mothers under 15 in low- and middle income countries is double that of older females. Adolescent and teenagers who become pregnant often drop out of school, About 19 per cent of young woman in developing countries become pregnant before the age of 18. 95 per cent of the world's births to adolescents occur in developing countries. Nine in ten of these births occur within marriage or a union. Girls under the age of 15 account for 2 million of the 7.3 million births to girls under 18 each year in developing countries. Globally, about 16 million adolescent girls give birth each year — mostly in low- and middle-

income countries, and an estimated 3.2 million girls aged 15-19 undergo unsafe abortions every year (Norad 2013).

In low- and middle-income countries, complications from pregnancy, childbirth and abortions are a leading cause of death among girls aged 15-19. About 70.000 adolescent girls in developing die annually of causes related to pregnancy and childbirth, The risk of dying from pregnancy-related causes for mothers under 15 in low- and middle income countries is double that of older females. One in nine girls in developing countries is forced into marriage before the age of 15. Stillbirths and newborn deaths are 50 per cent more common among infants of adolescent mothers than among infants of women aged 20-29 years. Infants of adolescent mothers are more likely to have low birth weight (Norad 2013).

Adolescents have a higher risk of fistula and other obstetric complications, and their abortions are often riskier than the ones of adult women. Between 2 million and 3.5 million women and girls in developing countries are believed to be living with fistula. Adolescent and teenagers who become pregnant often drop out of school. Studies of unmarried girls (15-17) who attend school show that they are considerably less likely to have had sex or have experienced unintended pregnancy (Norad 2013).

Pregnancy poses many challenges for young girls. Because pregnancy suppresses the immune system, pregnant girls are at increased risk of acquiring

diseases like malaria. Malaria kills >1 million people each year, 90% of them in Africa. Approximately 25 million pregnant women are exposed to malaria per year, and pregnant women are among the most severely affected by malaria. About 10.5 million become infected during their second or third trimester, and among these, the mortality rate is ≈50%. Not only are pregnant women most susceptible to malaria during their first pregnancy, but they also have higher rates of malaria-related complications (predominantly pulmonary edema and hypoglycemia) and death than do non-pregnant women. Malaria parasite density is significantly higher in pregnant girls <19 years than in pregnant women >19 years. However, a woman who has had malaria during pregnancy is less susceptible to malaria during subsequent pregnancies, unless the woman is also HIV infected (Nawal M. Nour, 2006).

The interaction between HIV and malaria in young married girls is devastating. Rates of co-infection are highest in Central African Republic, Malawi, Mozambique, Zambia, and Zimbabwe, where >90% of the population are exposed to malaria and >10% are HIV positive. HIV-infected patients are much more susceptible to infection with Plasmodium falciparum. Pregnant women have high malaria parasitemia in the placenta and more severe clinical disease, which affects not just the first pregnancy but all subsequent pregnancies. HIV-infected patients also do not respond as well to standard antimalaria treatment. Finally, malaria increases HIV viral load and raises the risk for mother-to-child HIV transmission.

The biologic interaction between these diseases not only complicates treatment in an already challenging setting but also presents a serious risk for death to pregnant girls <19 years of age (Nawal M. Nour, 2006).

Unintended pregnancy among adolescents is a common public health problem worldwide. About 16 million women 15 - 19 years old give birth each year, contributing to 11% of all births worldwide. Seventy percent of all adolescents' birth takes place in Sub-Saharan Africa. In Nigeria, by the age of 19 years, 23% of adolescents must have given birth to a child. The prevalence is higher in most studies carried out in Nigeria; as depicted by studies carried out among female adolescents in Port Harcourt which reported 78.8% prevalence, Owerri which gave a prevalence of 31.6% with 78.9% pregnancy recurrence. Conversely, a study in the North- central part of Nigeria reported a much lower adolescent pregnancy prevalence of only 5.1%. The variation in prevalence could be due to different cultures and industrialization in different parts of the country. For instance, people in the North-central part of Nigeria believe in early marriage for their teens and therefore the incidence of teenage pregnancy is expectedly low in such places (Prosper Adogu 2014).

Adolescent girls have both intended and unintended pregnancies. Through planned pregnancies, they often fulfill a wish to be able to love, nurture and raise a child. Girls who marry young may begin childbearing soon after marriage because

of familial and societal expectations; globally, most adolescent pregnancies occur within marriage (UNICEF, 2002; Greene et al., 2002). Unmarried adolescents may see motherhood as a way to achieve adult status or as a strategy to get a sexual partner to care for or marry them. While some adolescent pregnancies are planned, the rates of unplanned pregnancies among adolescents can be very high; for example, in the Latin America and Caribbean region, 35-52% of adolescent pregnancies are unplanned (Schutt-Aine & Maddaleno, 2003).

The United Nations Children's Fund (UNICEF) has stated that deaths during childbirth are twice as likely for teens aged 15-19 years than among women aged 20-24 years (UNICEF, 2000). In Mali, the maternal mortality ratio is 178 per 100,000 births in women aged 15-19 years compared to 32 for women aged 20-34 years. In Togo, the respective rates are 286 and 39, and in Guatemala the rate is 35 for women aged 15-19 years compared to 5 for those 20-24 years old (Mathur et al., 2003). Girls aged 10-14 years may be five times more likely to die during childbirth than women 20-24 years old (Holschneider, 1998).

According to studies in industrialized countries, younger adolescents tend to have a higher prevalence of adverse pregnancy outcomes such as premature births and low birth weight babies than older women (Satin et al., 1994; Fraser et al., 1995; Jolly et al., 2000). The babies of young mothers may also suffer high mortality rates (UNICEF, 2002). A US study on women aged 12-29 years having

their first child found that the risk of death was greater for babies born to mothers 15 years or younger than for mothers aged 23-29 years; the rates of postnatal deathspotentially due to neglect or abuse were highest among the younger age group (Phipps et al., 2002).

"Girls in developing countries may frequently be expelled from school if they become pregnant following which they will have to earn money from available sources, which may be limited to commercial sex, drug peddling or other occupations hazardous to their health. Too often, their only recourse is to unsafe abortion. Health professionals should try to help girls to avoid these adverse consequences to their health by providing them with family planning, counseling and services whenever necessary, and with safe termination of pregnancy whenever it is appropriate and permitted by law" (The Commonwealth Medical Trust, 2010). Unwanted pregnancy in adolescents is an issue that must not be ignored. Many pregnant adolescents will want or need to end a pregnancy to avoid risks to their lives and health, psychological trauma, and socioeconomic turmoil. Because adolescents face certain risks in pregnancy and abortion not experienced by older women, special care should be taken to address their needs.

In Rivers State, 27% of the sexually active girls claimed to have been pregnant at 23, at least once. In Abia State, 4.9% of the sexually active girls admitted to have been pregnant, while 2.5% of their male counterparts admitted

getting a girl pregnant. Pregnant adolescent girls who do not succeed in procuring an abortion go on to have a delivery and are exposed to the risks associated with teenage pregnancy, labour and delivery.

- (a) Unsafe Abortion. In Nigeria, the law restricts abortion thus, most abortions are done illegally under septic conditions. In Rivers State, 24.8% (34) of sexually active girls have had at least one abortion, out of which 7.3% (10) had had more than three.
- (b) High Maternal Mortality. Pregnant women aged less than 15 years were 4-8 times more likely to die during pregnancy and childbirth than pregnant women aged more than 19 years. In Nigeria, abortion complications are responsible for 72% of all deaths among teenagers aged less than 19 years.
- (c) Infant Mortality. Anochie & Ikpeme noted infant mortality to be 30% higher for infants born to women aged 15-19 years than for those born to women 20 years and above.

# 2.8 Practices Engaged By Adolescents That Endenger their Reproductive Health

African Journal of Reproductive Health (2007) Data from some states in the region indicate that adolescents in the region engage in unhealthy sexual behavior characterized by early age at sexual initiation, unsafe sex and multiple sexual partners. Very little is known about the frequency of sexual intercourse among

sexually-active adolescents, the number of sexual partners they have had or their sexual practices, including whether they have sex protected by condom use. Sexual activity patterns seem to vary greatly according to religion, social class, schooling, ethnic group, family situation and individual circumstances. Thus, adolescents must not be seen to form a discrete subpopulation with uniform risk factors (Brabin, 1999).

Never-married adolescents are considerably less likely to be currently sexually active than to have had sex atsome time in the past (Singh et al, 2000). Many have had intercourse only once or have not had sex for more than a year prior to being surveyed. Hence, their experience may not appear in standard surveys that use a year as an indicator (Gvelber and Biro, 1999). In Zambia, Kambou (1998) found a considerable time lag (1–2 years) between age at first and second sexual experience. In Ghana, 49% of never-married adolescent girls had had intercourse, but only 23% had done so within the previous month. Similarly large differences between those who had ever had sex and those who were currently having sex were reported from a number of other countries as well (Singh et al, 2000).

A detailed study of the sexual experience of adolescent girls in England found diverse patterns in terms of age at first intercourse, number of sexual partners and attitudes to the timing of sexual intercourse within a relationship (Ford, 1992). In diaries of sexual activity of adolescents in the USA, intercourse was most

common on Fridays and Saturdays and least likely on Sundays (Fortenberry et al, 1997).

A few qualitative and quantitative studies seem to suggest that out-of-school girls may be sexually more active, have sex more frequently and with a higher number of partners than school-going girls. In studies in Zambia (Feldman, 1997) and Guinea (Görgen et al, 1998), for instance, school-going girls were less sexually active than others. The same was not true for boys in Guinea, however. More affluent adolescent girls in Zimbabwe and in Papua New Guinea reported that they were consciously avoiding sexual intercourse so as not to affect their schooling, or that they would do so if more schooling were available (UNAIDS, 1999).

In Costa Rica and Chile, notions of sexual rights, monogamy and sexual initiative significantly differed more between social classes rather than along an urban- rural divide (UNAIDS, 1999). From Chile, qualitative surveys report that young people in different settings are engaging in sex with a larger number of partners than previous generations did (UNAIDS, 1999). In Kenya, adolescents living at truck stops were found to have had a very high number of lifetime partners, 15 for boys and 12 for girls (Nzyuko et al, 1997), though these numbers are unlikely to be typical.

As regards adolescent sexual practice, there are reports from Cost Rica and Cambodia that adolescents have experienced a wider range of sexual practices, e.g.

oral and anal sex, than those of previous generations (UNAIDS, 1999). Further, according to a study among young people in the community and university students in Sri Lanka, boys may also have experienced a wider repertoire of sexual practices than girls (Basnayake, 1996). On the other hand, because the term "sex" may be understood to mean only "vaginal intercourse" some adolescents may report that they have not had sex, even though they have had oral and anal sex (Schuster et al, 1996) or had other non-intercourse sexual activity including mutual masturbation.

On account of fear, ignorance and lack of experience, adolescent girls involved in prostitution are more vulnerable to pressure and abuse and may be easily enticed into dangerous sexual practices (Markos et al, 1992; McMullen, 1987). While the need for money is usually the main factor that draws adolescents into prostitution, childhood experiences and domestic abuse are also predisposing factors (Schaffer and De Blassie, 1984). Parents may also play an important role in sending their own children into prostitution either due to economic pressure or child abuse. For instance, the Nepalese government estimates that 7,000 Nepalese children are trafficked into child prostitution in India each year (Kabir, 1997). There are also an increasing number of adolescent sex workers in the large commercial sex sectors in other Asian countries, including Thailand and the Philippines (IPPF, 1994). Due to the rapid socioeconomic changes in eastern Europe, the numbers of

adolescent girls engaging in sex work in that region have also risen dramatically (UNICEF, 1999).

In Africa, the difference between commercial sex and sex exchanged for favours, material goods or cash, without the women necessarily being considered as sex workers, is often fluid, and the latter is possibly more extensive, especially among adolescents. For instance, in a large national survey in Zambia, 38% of sexually-active unmarried girls aged 15 to 19 and an equal proportion of boys of that age had been involved in exchanging sex for money, gifts or favours during the previous year (ZDHS, 1996). In eastern Europe, and perhaps other regions too, many adolescent girls reported engaging in sex in exchange for favours, but did not consider themselves to be selling sex full-time (PSI, 2000).

Unequal but consensual sexual relationships between girls (more often from poor families) and older men (so-called sugar daddies) for gifts, spending money and access to resources such as school fees are rife in many sub-Saharan African countries. A study by Amazigo et al. (1997) reported female students having relationships with older male partners who buy them make-up and other gifts. In one East African survey of adolescent girls who had had abortions, 80% reported that their partners were older men (Heise et al, 1995). Since HIV became a major threat, there have been many anecdotal stories of older men seeking young girls as "clean" partners. A study in the USA among black and Hispanic teenagers found

that first sex with older male partners was associated with a particularly high risk of STIs in girls, including HIV (Miller et al, 1997).

Some reports also note the frequentation of adult sex workers by adolescent boys who are encouraged to gain sexual experience with them. In one Zimbabwean study, 16% of young men reported such contacts (Wilson et al, 1989). In Thailand, where more than half of boys reported having had sex by the age of 18, many had done so with a prostitute (Xenos et al, 1992). There is also anecdotal evidence of sexual initiation of young men by prostitutes in Latin America.

Other studies have stressed how street life is a specific culture and context for sexual risk-taking where sex is exchanged for safety and security, favours, goods and money, in countries as diverse as Colombia, Brazil, and the Philippines (Ruiz, 1994; Raffaeli, 1993; Domingo, 1995). In a shelter for homeless young people in the USA, 67% of the girls had had more than 4 partners, 19% had engaged in prostitution and 16% had had anal intercourse (Sugerman, 1991).

Sex between same-sex partners had hardly been documented in developing countries until the AIDS epidemic drew attention to the extent to which men have sex with men, including young men all over the world (UNAIDS, 1999). Anal intercourse has been documented between boys, among street children and adolescents in remand homes in Tanzania (Rajani and Kudrati, 1996; Lubanga, 1997). Among Thai men younger than 21 years of age, 6.5% admitted ever having

had sex with another man (Beyrer et al, 1995). Male sex workers, many of them adolescents, are thought to comprise at least 5% of all sex workers in countries such as Colombia, Czech Republic, Egypt, Nigeria, Senegal and Thailand (Parker, 1996).

Some of the first studies of sexual coercion in countries as diverse as India, Kenya and Peru all showed that the prevalence of non-consensual sex, and sex associated with violence experienced by adolescent girls was high (Heise et al, 1995). Since then, further evidence has been collected. For instance, in Ghana, 21% of girls reported that being raped constituted their first sexual encounter (Population Council, 1999). Several South African studies have also drawn attention to physical and sexual abuse of girls (Konya et al 1998; Larsen et al, 1998). Most of the abuse was associated with a serious breakdown in family structure, rapid urbanization and the effects of the migratory labour system (Larsen, et al, 1998).

Sexual coercion may also be more common when adolescent girls are approached by men older than themselves. In a recent South African study, adolescent girls were asked if they had had sex willingly, or through persuasion, trickery, force or rape. Among a group of almost 800 adolescent girls, some 66% said sex had been undertaken willingly, 20% said they were persuaded, 4% tricked and 10% forced or raped. Those aged 10-12 at first sex were forced or raped by men some 9-11 years older than themselves, while those who had first sex at age 13 were forced by men 3-5 years older than themselves. Although forced first sex was

also common for girls aged 15-19 only one girl who first had sex over the age of 16 reported being raped; she was aged 19 and was raped by a 35-year-old man (Manzini, 2001). Studies from Zambia (Shah et al, 1996) and Sri Lanka (De Silva, 1998) report that forced sex on the part of a male relative, including fathers when mothers are not at home, is also not uncommon for adolescent girls.

Young Nigerians, boys and girls, when asked in focus group discussions about their perceptions of sexual coercion, reported behaviour that included rape, incest, assault, verbal abuse, threats and use of drugs for sedation, among others, and described situations in which young men were typically the perpetrators including acquaintances, boyfriends, neighbours, parents and relatives – and young women the victims (Ajuwon et al, 2001).

Girls are not the only victims of sexual violence, however. In one study comprising several hundred young men, 20% reported that they had been invited or forced to participate in sex, and 8% reported adult- child sexual activity that involved force, abuse or rape. Boys had been induced into sexual relations by much older cousins, aunts, neighbours and house servants (Haworth, 1996). In Fiji, a number of cases of male- male rape among high school students were reported, leading to the establishment of specialized counselling services (Dehne, 1994). In the UK, 5-10% of victims of rape and up to 10% of victims reporting to centres are male (King, 1995; Beck-Sagué and Solomon, 1999).

Sexual abuse during childhood or adolescence is often associated with the adoption of high-risk sexual behaviour including sex with multiple partners and prostitution, later in life (Heise et al, 1995). In Barbados, for instance, sexual abuse during childhood was the single most important determinant of high-risk activity in young adults (Handwerker, 1993).

Abortion continues to be a very controversial and complex issue given its political, religious, ethical and health dimensions which often lead to heated debates in public forums. According to a WHO press release in 1999, out of nearly 50 million abortions performed in the world each year (30 million of them in developing countries), 20 million are unsafe. The report went further to say that close to 90% of all unsafe abortions take place in developing countries. In 94% of these countries, induced abortion is restricted by law. The risk of dying from an unsafe abortion in a developing country is 1 in 250 procedures, while in developed countries, it is 1 in 3,700 procedures.

Every year, an estimated 2.0–4.4 million adolescents resort to abortion (Olukoya et al, 2001). In comparison with adults, adolescents are more likely to delay the abortion, resort to unskilled persons to perform it, use dangerous methods and present late when complications arise. Adolescents are also more likely to experience complications. Consequently, adolescents seeking abortion or presenting with complications of abortion should be considered as a medical emergency.

Induced abortions, especially in countries where the practice is restricted by law, continue to be a major reproductive health problem. Some 70,000 women die each year as a result of unsafe abortion. Many more women survive the experience only to suffer throughout the rest of their lives from infertility, chronic morbidity and permanent physical impairment.

#### 2.9 THEORETICAL FRAMEWORK

Social Action Theory of Weber and Health Belief Model will be adopted as theoretical frameworks for explaining adolescent knowledge, attitude and practice towards reproductive health. Social action will be based on how people make sense of different actions during the process of interaction. This will be relevant for understanding the meanings that reproductive health has for adolescent in Ekiti and how these meanings are created and recreated during their interaction with fellow adolescents within the study area.

## 2.9.1 The Health Belief Model

The health belief model is a health behavioral and psychological model developed by Irwin M. Rosenstock in 1966 for studying and promoting the uptake of healthcare services. The model was further developed by Becker and colleagues in the 1970s and 1980s. Subsequent amendments to the model were made as late as 1988, to accommodate evolving evidence generated within the health community about the role that knowledge and perceptions play in personal responsibility. The

key to understanding the model and the reason for its documented success lies in a thorough examination of its interlocking components.

## **Core Assumptions and Statements**

The HBM is based on the understanding that a person will take a healthrelated action (for example, visit the family planning center) if that person:

- 1. Feels that a negative health condition (i.e., STIs, unwanted pregnancy,) can be avoided,
- 2. Has a positive expectation that by taking a recommended action, she/he will avoid a negativehealth condition (i.e., good knowledge, attitude, practice of reproductive health will be effective at preventing unwanted pregnancy and sexually transmitted infections), and
- 3. Believes that she can successfully take a recommended health action (i.e., she can use contraception comfortably and with confidence).

The HBM was spelled out in terms of four constructs representing the perceived threat and net benefits: perceived susceptibility, perceived severity, perceived benefits, and perceived barriers. These concepts were proposed as accounting for people's "readiness to act." An added concept, cues to action, would activate that readiness and stimulate overt behavior. A recent addition to the HBM is the concept of self-efficacy, or one's confidence in the ability to successfully perform an action.

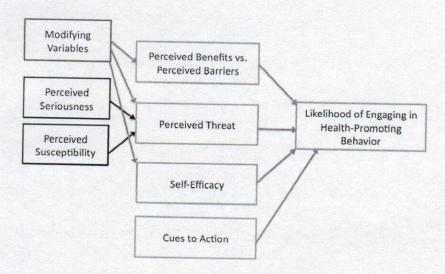
## Scope and Application

The Health Belief Model has been applied to a broad range of health behaviors and subject populations. Three broad areas can be identified (Conner & Norman, 1996):

- 1) Preventive health behaviors, which include health-promoting (e.g. diet, exercise) and health-risk (e.g. smoking) behaviors as well as vaccination and contraceptive practices.
- 2) Sick role behaviors, which refer to compliance with recommended medical regimens, usually following professional diagnosis of illness.
- 3) Clinic use, which includes physician visits for a variety of reasons.

## **Theoretical Conceptual Framwork**

## The Health Belief Model



The table below gives a clear graphical explanation of the concepts of the HBM:

Table 1 Graphical explanation of the concepts of the HBM

CONCEPTS	DEFINITIONS	APPLICATIONS
Perceived Susceptibility	One's opinion of chances of getting a condition or illness.	Define population(s) at risk risk levels; personalize risk based on a person's features or behavior; heighten perceived susceptibility if too low.
Perceived Benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness of impact	Define action to take; how, where, when; clarify the positive effects to be expected
Perceived Barriers	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through reassurance, incentives, assistance.
Cues to Action	Strategies to activate "readiness"	Provide how-to information, promote awareness, reminders
Self-Efficacy	Confidence in one's ability to take action	Provide training, guidance in performing action
Perceived Severity	One's opinion of how serious a condition and its consequences are	Specify consequences of the risk and the condition

(Evan Burke 2013) The Health Belief Model (HBM) is an intrapersonal (within the individual, knowledge and beliefs) theory used in health promotion to design intervention and prevention programs. It was designed in the 1950's and continues to be one of the most popular and widely used theories in intervention science. The model was created in reaction to a failed, free tuberculosis screening

program. The focus of the HBM is to assess health behavior of individuals through examination of perceptions and attitudes someone may have towards disease and negative outcomes of certain actions. The HBM assumes that behavior change occurs with the existence of three ideas at the same time:

- 1. An individual recognizes that there is enough reason to make a health concern relevant (perceived susceptibility and severity)
- 2. That person understands he or she may be vulnerable to a disease or negative health outcome. (Perceived threat)
- 3. Lastly the individual must realize that behavior change can be beneficial and the benefits of that change will outweigh any costs of doing so. (Perceived benefits and barriers)

## INDIVIDUAL PERCEPTIONS

Individual perceptions speak directly to the knowledge and beliefs that a person has about his behaviors and the outcomes they could have. This section of the paper includes two main sections; Perceived Susceptibility and Perceived Severity.

## A. Perceived Susceptibility

Within the health field susceptibility refers to the risk a person has to a particular disease or health outcome. Within the context of the HBM, perceived susceptibility examines the individual's opinions about how likely the behaviors

they partake in are going to lead to a negative health outcome. For example, look at an individual who engages in unprotected sex. Unprotected sex is known to have many complications such as vulnerability to sexually transmitted infections, etc. If the individual does not feel that he is at risk of developing any of these diseases, he has no reason in his mind to make a behavior change. One of the Goals of the HBM is to change perceptions of susceptibility in order to move towards behavior change.

#### **B.** Perceived Severity

Most people are familiar with the word severity as how serious a situation or action can be. In the HBM perceived severity addresses how serious the diseases that a person is susceptible to can be. In the case of the individual who engages in unprotected sex, HIV/AIDs is one of the leading causes of death among the American population. The individual may not understand how difficult HIV/AIDs can be to maintain and how expensive it can be to treat. They also may not know how painful and long lasting a disease it can be later in life. The HBM seeks to increase awareness of how serious the outcomes of behaviors can be in order increase the quality of one's life. Now that there is an understanding of Individual Perceptions it is important to understand how Modifying Factors can affect some ones decision to change.

#### **MODIFYING FACTORS**

While Individual Perceptions were internalized, In the Health Belief Model Modifying Factors step outside the body to examine and use outside influences to affect the how threatened a person feels by the outcomes of continuing the same behaviors that put him at risk

#### A. Perceived Threat

Susceptibility as stated before displayed how someone acknowledged that their behavior could lead to a specific disease. Threat takes the idea one step further by examining just how likely it is that the disease could be developed. To use STIs (HIV/AIDs), someone who has been having unprotected sex for a year may not feel threatened by potential disease because they have not been doing it very long and if they quit their body can recover. On the other hand, an individual who has been doing so for 25 years may feel very threatened by STIs if he/she has develops some of the symptoms like sores or blisters on the genitals on or around the anus, or mouth, Irregular growth (warts) in genital areas, Genital itching, Pain with urination or having a bowel movement, Pain with intercourse, Lower abdominal pain. Rash. These could be symptoms that will increase his level of threat and triggers his decision to quit.

#### **B.** Environmental Factors

Environmental factors can add to the threat of disease. Demographic background can cause one to be more at risk such as race, ethnicity, and socioeconomic status. Someone living in poverty

#### C. Cues to Action

Lastly cues to action are reasons why an individual realizes he could be threatened by serious disease. These could be media or concerned loved ones. Cues to action are anything that triggers a decision to change behavior. The previous two categories have built on each other and lead to Likelihood of Action.

## Likelihood of Action

After becoming aware of the potential for developing a disease if behavior does not change, it is important to weigh out the benefits and the barriers to taking action and determine if it is worth it.

## A. Perceived Benefits

What are the benefits to change? In the HBM the goal is greater quality of life for an individual both mentally and physically. Clearly a benefit to change would be increased health but there could be other factors that exist on an individual level.

#### **B. Perceived Barriers**

What are the reasons that I cannot change my behavior? Barriers could be anything from losing friends to not having enough money or even self-efficacy problems such as not believing in one's self. For change to take place the benefits must be stronger than the barriers.

#### **CHAPTER THREE**

#### **METHODOLOGY**

#### 3.1 Introduction

The dynamic importance of methodology in any research endeavor cannot be underestimated. Methodology is concerned with the detailed method through which respondents are reached and the needed data are collected and analysed for the purpose of drawing valid and reliable conclusions.

## 3.2 Research Design

The study adopted a cross-sectional quantitative and qualitative research design because data will be collected from the respondents at just one point in time using quantitative research instrument. The questionnaire was used for collecting the needed primary data. The design included the collection of the needed primary data from the targeted respondents gotten through the selection of a sample from a present population (availability), the data collected was used to provide answers to the research questions asked earlier and the data collected was synergized and analyzed for the purpose of drawing conclusion.

## 3.3 Study Area

Ado Ekiti is a city in southwest Nigeria, the state capital and headquarters of Ekiti. It is also known as Ado. The population in 2004 was put at 446, 749. The people of Ado are mainly of Ekiti sub-ethnic group of the Yoruba. Ado Ekiti City

has a state-owned University- the University of Ado Ekiti, now known as Ekiti State University, A federal university amongst other tertiary institutions, also having good number of colleges, secondary, primary and nursery schools.

Ado-Ekiti is currently situated in a land that has been inhabited by human communities since time immemorial. Available research shows that human societies of unknown antiquity occupied this neighbourhood about (11,000) years ago. These ancient inhabitants were probably the same or progenitor of Igbon near Ogotun, Eriiyan, Ijero, Ulesun and Asin (Ikole) who were probably autochthones because available traditions show that they had lived in and near that abode since time immemorial (Wikipedia accessed 2015).

According to Jadesola Babatola (2013), the characteristics of average human settlement across the Yoruba nation up to the 19<sup>th</sup> century has been identified as a formation of two basic settlement patterns, the main town and the subordinate town. According to P.C Lloyd (1962:54-57) stated the metropolitan main town is sometimes larger than the subordinate towns while its rulership and kinship are based on patrilineal succession with the agnatic lineage. The traditional layout was usually based on geographic location, population size, need for expansion, trade opportunities, settlers' vocation and military vulnerability of major towns over subordinate towns in addressing their strategic trade and military advantage (Jadesola Babatola, 2013). According to Weir (1933), a general framework of

township organization existed in Ado Ekiti in the early British colonial rule, which was similar to what existed during the pre-colonial period. N.A.C Weir noted that the family (*Ebi*) and the smallest unit which is grouped into village (*Ileto*) or sub-Quarter (*Ogbon*) or Quarter (*Adugbo*) existed in a town (*Ilu*). Llyod (1962) noted that the traditional layout existing across settlements in Yorubaland in the pre-colonial era formed part of the physical feature of Ado-Ekiti.

## 3.4 Study population

The state covers a land are of 5,435 square kilometers, with a population of 2,264,212 inhabitants according to the 2006 National Population Census in the state (NPC, 2007). The study population consisted of all individuals who fall under the ages of 10-19 that reside in Ado-Ekiti. Most of these adolescents are students (inschool adolescents), so therefore secondary school in Ado-Ekiti was also included in the study as part of the polulation.

## 3.5 Sampling Techniques

For the quantitative collection of data, multi stage sampling technique was adopted, this refers to sampling plans where the sampling is carried out in stages using smaller and smaller sampling units at each stage. Multistage sampling can be a complex form of cluster sampling, Cluster sampling is a type of sampling which involves dividing the population into groups (or clusters). Then, one or more clusters are chosen at random and everyone within the chosen cluster is sampled.

Using all the sample elements in all the selected clusters may be prohibitively expensive or unnecessary. Under these circumstances, multistage cluster sampling becomes useful. Instead of using all the elements contained in the selected clusters, elements will be randomly selected from each clusters. Constructing the clusters is the first stage. Deciding what elements within the cluster to use is the second stage.

Here secondary schools in Ado-Ekiti were constructed into clusters based on location and type (private and public), out of which six schools were randomly selected finally; Christ School, Secondary School (Public), Iye-Abiye Secondary School (Public), Ado Community High school (Public), Shepherd International Secondary School (Private), Fountain Secondary school (Private), Greenland Secondary schools (private). In each of these schools thrity questionsaires were administered to senior secondary school students based on availability method, the out-school adolescents was selected based on availability and are those whom are not students but adolescents who reside in Ado-Ekiti.

The questionnaire will be administered to adolescent students in the selected schools who will have been selected through a multi-stage sampling process. The questionnaire will be administered to 30 adolescents selected through a multi-stage sampling process from each school respectively.

#### 3.6 Research Instruments

Questionnaire will be used for collecting the needed primary data from the respondents. The questionnaire will yield quantitative data that will be pre-coded for easy analysis and explore the various objectives in-depthly for the purpose of discovering the reasons that respondents hold for the purpose of understanding the world from theresearchers' point of view.

## 3.7 Method of Data Collection

Data will be collected from the sampled population and the respondents will be required to give his or her consent before taking part in the study. This will be geared towards preventing the beaching of ethical procedures in social research.

## Questionnaire

The questionnaire will be divided into different sections. The first section of the questionnaire will address the socio-demographic characteristics of the respondents, the second section will focus on questions intended to gather data about the knowledge of adolescent towards reproductive health. The third section will focus on collecting data about the attitudes of adolescent about STIs, section four of the questionnaire will elicit information on the practices among adolescent that can expose them to reproductive health issues and the last section in the questionnaire will be geared to collect information on the measure through which adolescent reproductive behaviour can be improved.

## 3.8 Method of Data Analysis

Quantitative data collected through the questionnaire will be cleaned to avoid inconsistent response and analysed using the Statistical Packages for the Social Sciences (SPSS) software. Quantitative method of data analysis such as the use of questionnaire will be ordered, coded, edited and will be entered into the computer and analyze using statistical package for social sciences (SPSS).

#### 3.9 ETHICAL CONSIDERATION

The ethical issues that apply to human subjects shall be adhered to. The process of data collection for the research study shall be guided by ethical principles.

Confidentiality-All the responses that will be given by respondents will be handled confidentially.

**Non-malficence**- There is no risk of harm involved. The research will not cause any harm to the patients.

Voluntariness- Participation of in-patients in the study shall be voluntary. Written informed consent will be obtained for voluntary participation in the study. This is necessary because they serve as evidence that the process actually took place and respondents gave authorization to be involved in the study. The respondent is free to refuse to participate in the study and is also free to withdraw from the study without penalty of any type.

Beneficence-The research outcome will contribute to the development of the health sector. Interview will be conducted in English language and translated to ethnic languages where need be.

#### **CHAPTER FOUR**

#### DATA ANALYSIS AND PRESENTATION

#### 4.1 Introduction

This chapter focuses on data analyses and presentation of findings. This chapter reveals analysis of selected variables such as socio-demographic characteristics of respondents - age, religion, level of education, wealth index and occupation. Out of the total sample of 170 adolescent from Ado-Ekiti, Nigeria, 130 from in-school and 40 from out-school. Analysis was done in line with the research questions and hypothesis raised for this project work

## 4.2 Socio-Demographic Profile of Respondents

The table presents the socio-demographic profile of adolescent respondents in Ado-Ekiti. A sample 150 adolescents were enumerated, 130 from in-school and 40 from out-school. 51.33% (77) of the respondents were male and female are 48.67% (73). Majority (72%) of the respondent fell under the ages 14-16,followed by respondents in the ages 17-19 (14.67%)while the remaining percentage(13.33%) constituted respondents in the ages 10-13 . 89% of the respondents were Christians ,10% Muslims while the remaining percentage (0.67%) constituted other religion. 16.22% of the respondents are currently in SS1, 32.43% are in SS2 and 51.35% are in SS3.

As evident in the table below, 82% of the respondents live with both parents, 8.67% live with their mother alone, 2.00% live with their father only, 2.67% live with their uncles, 1.33% live with their Aunts, while 3.33% live with other relatives other than those mentioned earlier. 31.33% admmitted to having boyfriends/girlfriends that is being in a relationship, while 68.67% do not have boyfriend /girlfriend. All the respondent live in Ado-Ekiti.

Table 1. Percentage Distribution of Respondents by their Socio-Demographic Characteristics

Characteristics	Frequency	Percentage (%)
Sex of respondent		
Male	73	48.67
Female	77	51.33
Age of respondents		
10-13	20	13.33
14-16	108	72.00
17-19	22	14.67
Religion of respondents		
Christian	134	89.33
Muslim	15	10.00
Others	1	0.67
Current class of reading		
SS1	24	16.22
SS2	48	32.43
SS3	76	51.35
Who do you currently live with?		
Father and mother	123	82.00
Only mother	13	8.67
Only father	3	2.00
Uncle	4	2.67
Aunty	2	1.33
Other relatives	2 5	3.33
Do you have a boyfriend/girlfriend		
Yes	47	31.33
No	103	68.67
Where do you live?		
Ado	150	100.00
Total	1050	100.00

## 4.3 Respondent's Knowledge And Level Of Contraceptive Use.

The table below shows the respondents of knowledge and level of contraceptive use. From the table, 57.33% of respondents have heard of condom while 42.67% have little or no knowledge. Majority (83.33%) of the respondent do not use condom while 16.67% uses condom. Also, 70% of the respondents have not heard about combined pills while 30.00% of the respondents have heard, as 4.67% of the respondents have used combined pills while 9.33% of the respondets have not. More so, 34% of the respondent have heard of withdrawal method, 66.00% have not heard. A large percentage (90%) of adolescent at Ado-Ekiti do not use withdrawal method, as only 10% of the respondent uses withdrawal method. Majority of the respondents (78%) have not heard of IUD, as only 22.00% of the respondents have heard of IUD. Futhermore, it is only 2.00% of the respondents that uses IUD and 98.00% do not used.

26.00% of the respondents have heard of injectable contraceptives, 74.00% of the respondents have not. 28.67% of the respondents have heard of safe period method, 71.33% of the respondents have not, 2.67% have used the safe period method while 97.33 have not used it. 23.33% have heard of diaphragm, 76.67% have not heard of it, as 4.67% have used diaphragm while 95.33% have not used it. 16.00% have heard of spermicide while 84.00% have not, 100% of the respondants have not used it, thus none of the participant have used it. 23.33% of the

respondents have heard of surgical method,76.67% have not heard of it, 2.00% have used it and 98.00% have not used it. 49.33% have heard of abstainance, 50.67% of the respondents have not heard, 57.33% is practicing the act while 42.67% is not practicing it.

Table 2 Percentage Distribution of Respondents by their Knowledge and Level of Contraceptive Use

Characteristics	Frequency	Percentage (%)	
Condoms			
Yes	86	57.33	
No	64	42.67	
Heard of Pills?			
Yes	45	30.00	
No	105	70.00	
Heard of withdrawal method?			
Yes	51	34.00	
No	99	66.00	
Heard of IUD?			
Yes	33	22.00	
No	117	78.00	
Heard of Injectables?			
Yes	9	26.00	
No	111	74.00	
Heard of Use of safe period?			
Yes	43	28.67	
No	107	71.33	
Heard of Diaphragm?			
Yes	35	23.33	
No	115	76.67	
Heard of Spermicide?			
Yes	24	16.00	
No	126	84.00	
Heard of Surgical method?			
Yes	35	23.33	
No	115	76.67	
Heard of Abstinence?			
Yes	74	49.33	
No	76	50.67	
Heard of none of the above n			
Yes	38	25.33	
No	112	74.67	
Ever used condom?			
Yes	25	16.67	
No	125	83.33	
Ever used Pills?			

Yes	7	4.67	
No	143	95.33	
Ever used Withdrawal met	hod?		
Yes	15	10.00	
No	135	90.00	
Ever used IUD?			
Yes	3	2.00	
No	147	98.00	
Ever used Injectables?			
Yes	1	0.67	
No	149	99.33	
Ever used Safe period metho	od?		
Yes	4	2.67	
No	146	97.33	
Ever used Diaphragm?			
Yes	7	4.67	
No	143	95.33	
Ever used Spermicide?			
No	150	100.00	
Ever used Surgical method?			
Yes	3	2.00	
No	147	98.00	
Ever used Abstinence?			
Yes	86	57.33	
No	64	42.67	
TOTAL	3150	100.00	

## 4.4 Respondent's Attitude Towards Sexually Transmitted Infection

The table below shows that 77.33% of the respondents opine that adolescents should have information about sex while 22.67% of the respondents do not agree, 44% of the respondents agree that adolescents should have access to family planning services and 56% disagree on this. while 82.67% have heard about infections or diseases other than 10% disagree with the position and 7.33% don't know, 14% of the respondents are of the position that Bacteria, 38.00% of the respondent ticked virus as the cause of STI, 11.33% opined Fungi as the cause of STI, 18.67% sees it as caused by bad hygiene in men, 18.00% opined bad hygiene

in women, 24.00% opined sex during menstruation, 14.67% opined having sex soon after giving birth while 44.67% opined blood transfusion, 10.67% opined infected swim pool water and 15.33% don't know.

Table 3: Respondents Attitude Towards Sexually Transmitted Infections and Possible Causes of Stis

Characteristics	Frequency	Percentage (%)	
Adolescent should have info		All and the second seco	
Yes	116	77.33	
No	34	22.67	
Adolescent should have acce			
Yes	66	44.00	
No	84	56.00	
Have you heard about infec	tions or diseases other tha	nn HIV?	
Yes	124	82.67	
No	15	10.00	
Don't know	11	7.33	
BACTERIA?			
Yes	21	14.00	
No	129	86.00	
VIRUS?			
Yes	57	38.00	
No	93	62.00	
FUNGUS?			
Yes	17	11.33	
No	133	88.67	
BAD HYGIENE OF WOM	EN?		
Yes	28	18.67	
No	122	81.33	
BAD HYGIENE OF MAN			
Yes	27	18.00	
No	123	82.00	
SEX DURING MENSTRAT	TION?		
Yes	36	24.00	
No	114	76.00	
HAVING SEX SOON AFT	ER GIVING BIRTH		
Yes	22	14.67	
No	128	85.33	
BLOOD TRANSFUSION			
Yes	67	44.67	
No	83	55.33	
INFECTED SWIMMING H			
Yes	16	10.67	
No	134	89.33	
DONT KNOW			
Yes	23	15.33	
		84.67	
No	127		
TOTAL	1950	100.00	

# 4.5 The Distributive Percentage Of Respondents Knowledge On Which Disease Are Sexualy Transmitted Infections

The table below shows 87.33% of the respondents opine that Tuberculosis is not a transmitted STI, while 12.67% agree that it is a transmitted STI, 62.67% of respondent agree that Gonorrhea is a transmitted STI while 37.33% did not agree. Half of the sample population agreed that Syphilis (50.00%) is a transmitted STI while the other half disagree with this position, there is high knowledge of HIV/AIDS as 78.67% of the respondents agree that it is a transmitted disease while 21.33% disagree with that position. 4.67% of the respondents agree that Hepatitis B is a transmitted STI, while 95.33% do not agree and thus same percentage for Hepatitis C and Chlamydia as there is an equal response on them. 9.33% are of the position that Herpes is transmitted STI while 90.67% do not agree. 2.67% of the population does not know which is transmitted or not.

Table 4 The Distributive Parentage of Respondents Knowledge on which Disease are Sexualy Transmitted Infections

Characteristics	Frequency	Percentage (%)	
TUBERCULOSIS			
Yes	19	12.67	
No	131	87.33	
GONORRHEA			
Yes	94	62.67	
No	56	37.33	
SYPHILIS			
Yes	75	50.00	
No	75	50.00	
HIV/AIDS			
Yes	118	78.67	
No	32	21.33	
HEPATITIS B			

Yes	7	4.67	
No	143	95.33	
HEPATITIS C			
Yes	7	4.67	
No	143	95.33	
CHLAMYDIA			
Yes	7	4.67	
No	143	95.33	
HERPES			
Yes	14	9.33	
No	136	90.67	
DONT KNOW			
Yes	4	2.67	
No	146	97.33	
OTHERS			
Yes	2	1.33	
No	148	98.67	
TOTAL	1500	100.00	

## 4.5.1 SOURCES OF STI's

The table 5, below shows percentage and frequency distribution of knowledge of the routes of STIs, 70.00% were of the position that sexual intercourse is factor,45.33% opined that blood transfusion is a route of STIs, 38.00% opined that sharing cloths and things are also routes, 1.33% opined sharing food, 30.00% opined mother to child and 8.67% don't know.

**Table 5 Routes of STI** 

Characteristics	Frequency	Percentage (%)	10 mg
SEXUAL INTERCOURSE			
Yes	105	70.00	
No	45	30.00	
BLOOD TRANSFUSION			
Yes	68	45.33	
No	82	54.67	
SHARING NEEDLE			
Yes	57	38.00	
No	93	62.00	
SHARING CLOTHES/THINGS			
Yes	10	6.67	
No	140	93.33	

SHARING FOODS			
Yes	2	1.33	
No	148	98.67	
MOTHER TO CHILD			
Yes	45	30.00	
No	105	70.00	
DONT KNOW			
Yes	13	8.67	
No	137	91.33	
OTHERS			
Yes	9	6.00	
No	141	94.00	
TOTAL	1350	100.00	

## 4.5.2 Knowledge of Signs and Symptoms of STI

The table below shows the knowledge of signs and synptoms of STI. 38.67% of the respondents opined that abdominal pain is a sign and symptom of STI, 34% opined discharge from penis/vulva for the ladies, 36.67% opined itching in genital area, 30.67% opined Burning Pain On Urination, 22.33% opined Pain during intercourse, 23.33% opined Genital Ulcers Or Open Sores, 22.67% opined Swelling in Genital areas, 24.00% opined blood in urine, 13.33% opined failure to urinate, 30.67% opined loss of weight,32.67% opined weakness and 16.00% of the respondent don't know.

Table 6 The knowledge of signs and symptom of STI

Characteristics	Frequency	Percentage (%)	
ABDOMINAL PAIN			
Yes	58	38.67	
No	92	61.33	
DISCHARGE FROM PI	ENIS/VULVA		
Yes	51	34.00	
No	99	66.00	
ICTCHING IN GENITA	L AREA		
Yes	55	36.67	

	95	63.33	ME A SELECTION OF SELECTION
BURNING PAIN ON UN	VIRATION	03.33	
Yes	46	30.67	
No	104	69.33	
PAIN DURING INTERC	OURSE	07.53	
Yes	34	22.67	
No	116	77.33	
GENITAL ULCER OF C	PEN SORES	77.33	
Yes	35	23.33	
No	115	6.67	
SWELLING IN GENTAL	LAREA		
Yes	34	22.67	
No	116	77.33	
BLOOD IN URINE		77.33	
Yes	36	24.00	
No	114	76.00	
FAILURE TO URINATE		70.00	
l'es .	20	13.33	
No	130	86.67	
LOSS OF WEIGHT		00.07	
l'es .	46	30.67	
No.	104	69.33	
VEAKNESS		07.55	
'es 🔘	49	32.67	
10	101	67.33	
OONT KNOW		07.33	
'es	24	16.00	
lo	126	84.00	
TI OTHERS		00.00	
'es	5	3.33	
lo	145	96.67	
OTAL	1950	100.00	

## 4.5.3 Possibilities and Complications of STI if untreated

Table 7 below presents the repondents view on the possiblities and compleations of untreated STI's.51.33% of the respondents reported that its possible for men to have STIs, 36% reported that its not possible and 12.67% reported that they don't know.45.33% reported that untreated STI's causes infertility while 54.67% reported that infertility is not caused by untreated STI's.Majority (80%) of the respondents disagreed that untreated STI's could result

to premature death while 20% agreed. Futhermore, 78% of the respondents reported that STI cannot result to still, with only 22% reporting yes, that untreated STI could result to still birth.

In the distribution of the possibilities and complications of untreated STI's, 82.677% disagrees that its possible for untreated STI to lead to etopic pregnancy, while 17.37%, agrees that its possible for untreated STI's to lead to etopic pregnancy. More so, 32.67% reported yes that untreated STI's could result to miscarriage while 67.37% reported no. 32% of the respondents reported that untreated STI's could result to cervical cancer while 68% disagrees by reporting no. A total of 31 respondents (30.67%) reported they don't know what untreated STI's could result to. Distribution of people who have told respondents they have STI; 14% reported friends, another 14% reported parents, 3.33% reported brother/sister, 5.33% reported other family members, 2,67% reported spouse/live-in-partner, 4.67% reported sexual partner/lover and 56% reported others.

Table 7 The Possibilities and Complications of STIs if Untreated

Characteristics	Frequency	Percentage (%)	
Possible for a man to ha	ave other STI?		
Yes	77	51.33	
No	54	36.00	
Don't know	19	12.67	
It possible for a woman	to have other STI?		
1	66	44.00	
2	57	38.00	
3	26	17.33	
4	1	0.67	
INFERTILITY			

Yes	68	45.33	
No	82	54.67	
PREMATURE DEATH			
Yes	30	20.00	
No	120	80.00	
STILL BIRTH			
Yes	33	22.00	
No	117	78.00	
ECTOPIC PREGNANCY			
Yes	26	17.33	
No	124	82.67	
MISCARRIAGE			
Yes	49	32.67	
No	101	67.33	
CERVIX CANCER			
Yes	48	32.00	
No	102	68.00	
DONT KNOW			
Yes	31	20.67	
No	119	79.33	
Have any of these people told	you they have had		
Friend	21	14.00	
Parent	21	14.00	
Brother/Sister	5	3.33	
Other family member	8	5.33	
Spouse/live-in-partner	4	2.67	
Sexual partner/lover	7	4.67	
Other	84	56.00	
TOTAL	1500	100.00	

# 4.6 Assessment of practices engage by respondents that can endanger their reproductive health.

Table 9. shows that 25.33% of the respondents have had sexual intercourse, 14% had sexual intercourse at 11years or younger, 3.33% at 12years, 2.67% at 13years, 0.67% at 14years, 2% 15years, 2.67%, 4.67% at 16 and 17years respectively and 75.33 have not had sexual intercourse before, 14.00% have had sex with one person, 3.33% with two persons, 3.33% with three persons, 0.67% with four persons, 0.67% with five persons, 2.67% with six or more persons. 14.67% enjoy sex with casual partners, 16% preferred unprotected sex. 6% preferred same

sex intercourse.it is observed that 78.3% of the respondents have been pregnant, 8.05% have had abotion, 3.33% have engaged in transactional sex and 5.33% have been sexually molested or raped.

Table 8 The Assessment of Practices Engaged by Adolescents that Endanger their Reproductive Health

Characteristics	Frequency	Percentage (%)	
Ever had sexual intercourse			
Yes	38	25.33	
No	112	74.67	
How old were you when you had sexu	al intercourse f	or the first time	
i have never had sexual intercourse	105	70.00	
11 years or younger	21	14.00	
12 years old	5	3.33	
13 years old	4	2.67	
14 years old	1	0.67	
15 years old	3	2.00	
16 years old	4	2.67	
17 years or older	7	4.67	
How many people			
i have never had any sexual intercourse	113	75.33	
1 person	21	14.00	
2 people	5	3.33	
3 people	5	3.33	
4 people	1	0.67	
5 people	1 98	0.67	
6 or more	4	2.67	
During the last 3 months, how many p	eople have you		
I have never had sex	112	76.71	
i have had sex, but not in the last 3 m	19	13.01	
1 person	7	4.79	
2 people	2	1.37	
3 people	2	1.37	
4 people	2	1.37	
6 or more	2	1.37	
Do you enjoy sex with casual partners			
Yes	22	14.67	
No	128	85.33	
Do you prefer unprotected sex?	120	03.33	
Yes	18	12.00	
No	132	88.00	
When was the last time you had unpro		00.00	
Within the last week	6	4.00	
Within last month	23	15.33	
Within last 6 months	3	2.00	
Within the last year	4	2.67	
More than one year	4	2.67	

Dont know	10	6.67
I never had unprotected sexual intercou	100	66.67
Do you prefer same sex intercourse?		
Yes	9	6.00
No	141	94.00
Have you ever been pregnant?		
Yes	110	73.33
No	25	16.67
Don't know	15	10.00
How many times have you been pregna	ant?	
1 time	2	1.33
2 times	28	18.67
3 times	4	2.67
4 or more	3	2.00
Don't know	17	1.33
N/A	96	64.00
Have you had an abortion?		
Yes	12	8.05
No	137	91.95
How many times have you had abortion	n?	
1	5	3.33
2	139	92.67
4 or more	6	4.00
Have you engaged in transactional sex	before?	
Yes	5	3.33
No	145	96.67
Have you been sexually molested or rap		
Yes	8	5.33
No	142	94.67
TOTAL	2100	100.00

## 4.7 Testing of Hypothesis

Hypotheses are the ideas, beliefs or assumtions put forward by anyone for the purpose of assisting and guiding in order to arrive at a reasonable conclusions.

In testing the hypothesis put forwar in chapter one, the researcher has employed the use of Chi-Square statistical technique of  $(X^2)$ .

#### **DECISION RULE**

Basis for rejection and acceptance of null hypothesis.

H<sub>0</sub>- Null hypothesis

H<sub>1</sub>. Alternate Hypothesis

If  $X^2$  cal>  $X^2$  tab = Accept  $H_1$ , Reject  $H_0$ 

If  $X^2$  cal  $< X^2$  tab = Accept  $H_0$ , Reject  $H_1$ 

Degree of freedom- (R-1) (C-1)

Where r = number of row

c = number of column

 $X^2$ cal = chi-square calculated

 $X^2$  tab = chi-square

#### **HYPOTHESIS 1:**

 $H_0$ :There is no significant relationship between the knowledge of ado lescents and sexually transmitted infections.

 $H_0$ :There is a significant relationship between the knowledge of ado lescents and sexually transmitted infections.

**CRITICAL REGION:** At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pearson chi2(2) =0.9404	Pr = 0.625	
-------------------------	------------	--

**DECISION:** Since P-value (0.625) >0.05, therefore we accept the Null hypothesis and conclude that there is no significant relationship between knowledge of adolescent and sexually transmitted diseases.

## HYPOTHESIS TWO:

 $H_0$ : There is no relationship between demographic variables and knowledge of sexually transmitted infections.

H<sub>1</sub>:There is a relationship between demographic variables and knowledge of sexually transmitted infections.

## Sex of respondents

CRITICAL REGION: At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pearson chi2(1) = 2.8484	Pr = 0.091
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**DECISION:** Since P-value (0.091) >0.05, therefore we accept the Null hypothesis and conclude that there is no significant relationship between sex of adolescent and sexually transmitted diseases.

## Age of respondents

**CRITICAL REGION:** At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pr = 0.000

**DECISION:** Since P-value (0.000) <0.05, therefore we reject the Null hypothesis and conclude that there is a significant relationship between sex of adolescent and sexually transmitted diseases.

## Religion of respondents

**CRITICAL REGION:** At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pearson chi2(2) = $0.8822$	Pr = 0.643
	93

**DECISION:** Since P-value (0.643) >0.05, therefore we accept the Null hypothesis and conclude that there is no significant relationship between sex of adolescent and sexually transmitted diseases.

#### HYPOTHESIS THREE:

**H**<sub>0</sub>:There is no significant relationship between practice of adolescents and sexually transmitted infections.

 $\mathbf{H_{I}}$ : There is no significant relationship between practice of adolescents and sexually transmitted infections.

**CRITICAL REGION:** At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pearson chi2(3) = 12.8210	Pr = 0.005

**DECISION:** Since P-value (0.005) <0.05, therefore we reject the Null hypothesis and conclude that there is a significant relationship between practic of adolescent and sexually transmitted diseases.

## **HYPOTHESIS FOUR:**

 $H_0$ : There is no significant relationship between knowledge of reproductive health of adolescents and the risk of teenage pregnancy.

 $\mathbf{H_{I}}$ : There is no significant relationship between knowledge of reproductive health of adolescents and the risk of teenage pregnancy.

**CRITICAL REGION:** At 0.05 level of significant, Reject H<sub>0</sub> if P-value <0.05. Hence if orherwise, accept.

Pearson chi2(2) = 2.8386	Pr = 0.242	d conclude

that there is no significant relationship between knowledge reproductive health of adolescent and the risk of teenage pregnancy.

#### CHAPTER FIVE

## SUMMARY, CONCLUSION AND RECOMMENDATION

#### 5.1 SUMMARY

The study examined the knowledge of adolescents towards sexually transmitted infections. The major aims of this study is to understand the attitude of adolescents towards sexually transmitted infections, the practices engaged by adolescents that that can expose them to reproductive health issues and to evalute the knowledge of reproductive health and the risk of teenage pregnance to assess reproductive health; knowledge, practice and attitude of adolescents in Ado-Ekiti.

From the Univariate level of analyses, findings rvealed that more than half (51.33%) of the respondents were males while females were 48.61%. Majority(72%) of the respondents fell under the ages 14-16. 89% were Christians with the remaining percentage constituting the other form of religion. More than half (51.35%) of the respondents are currently in SS3 with 32% in SS2 and 16.22% in SS1. A large proportion (82%) of the respondents, live with their parents.

The results indicate that, more than half of the total population sampled (both in-school and out-of-school) reported below average knowledge about basic reproductive health issues. Opinions generated about the knowledge of various contraceptive methods also revealed adequate knowledge particularly of condom and abstinence as modern and traditional methods of contraception. On the sources

of this knowledge, it was generally observed that school had a major influence on the knowledge and perception level of adolescents. Other sources such as friends, family, youth club and the media are also strong influences but are not as significant as the school.

It was noted however that knowledge about family planning services is low among both categories of respondents sampled. On the question of the usage of these services, a low percentage was also recorded for both category of respondent sampled. The age of sexual debut was also noted to be fast increasing: 70.00% of the respondents have not engaged in sexual intercourse, Respondents who are 11yrs and yonger rate 14.00%, while others are lesser. Abortion practices were however at very low level for both in-school and out-of school population even though both categories had their reservations about divulging relevant information about their engagement in this act.

In all, it was revealed that 82.67% of the respondents have heard about STIs or infections/disease other than HIV, that major population have knowledge of STIs. The practice of abortion was low. It is important however to mention at this point that only a few adolescent esponded to issues raised concerning abortion, perhaps because of the fear of being sanctioned or stigmatized because of the general attitude of people towards abortion particularly the negative attitude towards adolescents that have ever gotten pregnant and had also engaged in the

practice of abortion. 48.67% of the respondents see It is necessary to avoid persons that have contracted STI while 47.33% feel its not necessary. There is a positive attitude towards traetment of sexually trasmitted infections (STIs). 39.33% of respondents are concerned about getting HIV, 32.67% are concered about getting other STIs and 29.33% are concered about getting pregnant.

The problem however could be a lack of enabling and supportive environment for the application of this knowledge. Knowing about something is one thing and being able to utilize that knowledge to achieve a desired end is another. As revealed in this study, adolescent girls have sufficient knowledge about the reproductive processes and contraception but they might not be able to make use of this knowledge as they ought to because of certain social and cultural issues which may pose as hindrances and barriers

This study has shown a high level of contraceptive knowledge particularly of condoms and abstinence as modern and traditional contraceptive methods among female adolescents sampled. Furthermore, the revelation that awareness of family planning services is a predictor of usage has also revealed a new trend that is contrary to the findings of some scholars in the field of adolescent reproductive health.

. In this regard, the study revealed an urgent need for programme implementers to augment and support the sex education strategy with more

encouragement of the sexually active female adolescent to use family planning services.

#### 5.2 CONCLUSION

Adolescence is a time of rapid physical and psychological growth and development, and one in which individuals develop new capacities. As it is lalso a time of changing social relationships, expectations, roles and responsibilities. It is a transition stage, a difficult stage and a delicate stage that needs to be handled with caution by both adolescent and all those who have influence over him/her especially the parents. Adolescence begins with the onset of physiologically normal puberty, and ends when an adult identity and behaviour are accepted. This period of development corresponds roughly to the period between the ages of 10 and 19 years, which is consistent with the World Health Organization's definition of adolescence.

The thrust of this study is to investigate the knowledge of adolescents towards sexually transmitted infections, to understand the attitude of adolescents towards sexually transmitted infections, to understand the practices engaged by adolescents that that can expose them to reproductive health issues and to evalute the Knowledge of reproductive health and the risk of teenage pregnance to assess reproductive health; knowledge, practice and attitude of adolescents in Ado-Ekiti, In recent times, the youth who constitute over 30% of the Nigerian population and

fall between ages 10-24, are highly vulnerable to antisocial behaviors such as violent crimes, unsafe sexual activities and drug abuse among others. The need to focus attention on various aspects of the development of adolescents and youth, particularly their sexual and reproductive health, is a global phenomenon. The risks of pregnancies and childbirth among female adolescents are numerous. It includes damage to the reproductive health organ, maternal mortality, and infertility, complication during pregnancies and childbirth and obstetric fistula.

Young people form a significant population group in term of demographic parameter are a unique population in term of characteristics and their developmental processes. Sadly, though, these young people face unique challenges, some of which may compromise their health and developmental potentials if not well addressed. Whether they are single or married, most adolescent women are poor or without monetary resources of their own; some because they are still in school, others because they are married with little or no control over household income. Also, inadequate knowledge about contraception and how to obtain health services, high risk of sexual violence. Little independence in deciding on the timing of birth or lack of the use of contraceptives are other reasons why many adolescent in developing countries are especially vulnerable

### 5.3 RECOMMENDATION

While the majority of secondary students had heard about HIV/STDs, their knowledge was inadequate. Thus, schools have a role to play in facilitating the access of young people to necessary reproductive health services and to link education and services so that students may bridge knowledge and attitudes with action. The school can achieve this by establishing school-based health centers where such services can be rendered or by referring them to local health and counselling services requiring little financial expenditure. It is also discovered that parents play a crucial role in the education of the adolescence about sexual matters.

Parents can therefore contribute to improve reproductive health among adolescents by increasing their knowledge and attitude to regular healthcare, as way of improving the testing and treatment of HIV/STDs. This can be achieved when parents talk with their teens about their sexual health, their dating, sexual behavior, abstinence and contraception, STDs, HIV and having healthy relationship. Government needs to tackle the problem of the health sector holistically through law and administrative reforms, proper funding, staffing, equipping, welfare and implementation of health laws and regulations.

It is high time we also place premium on preventive medicine by embarking on civic education of the adolescence on how to live healthy lifestyle. This can be done by providing education, treatment and effective cure to adolescents that are at increased risks of infection and transmitting infection.

In view of the evidence of widespread sexual activity among adolescents in Ado-Ekiti, implementation of the following strategies will yield widespread positive results:

- Religious/faith-based organizations should use their positions as a leverage to encourage adolescents to abstain from premarital sex.
- Advocacy and community mobilization to increase awareness towards the need for inclusion of sex education in school curriculum.
- Effective health education programmes targeted at adolescents to improve knowledge on sexual issues, promote abstinence and motivate behaviours that reduce sexual risk.
- Where abstinence may not suffice, improve contraceptive counselling so as to increase consumption.
- In view of the overwhelming influence of peers, training of peer educators to transfer correct information to their peers – especially as to regards misconceptions about abstinence.
- Improvement in the knowledge of contraceptive use among adolescents.

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#### **APPENDIX**

### RESEARCH QUESTIONNAIRE

# ADOLESCENT AND REPRODUCTIVE HEALTH; KNOWLEDGE, ATTITUDE AND PRACTICE. A CASE STUDY OF ADO-EKITI LGA, EKITI STATE, NIGERIA

•••

Dear respondent,

I am an Undergraduate student of Federal University Oye-Ekiti and I am working on my project with the above title. I will like to crave your indulgence in taking a little of your time to fill this questionnaire on your knowledge, attitude and practice of reproductive health. I assure you that the information provided will be used solely for academic purposes without any record of your identity.

Thank you for your anticipated cooperation.

### Section A: Socio-demographic Characteristics

- 1. How old are you? (a) 10-13 (b) 14-16 (c) 17-19
- 2. Sex of respondents? (a) Male (b) Female
- 3. Religious belief (a) Christian (b) Muslim (c) Traditionalist (d) Other ......
- 4. Current class of reading (a) SS1 (b) SS2 (c) SS3 \
- 5. Who do you currently live with? (a) My father and mother (b) Only My Mother (c) Only my father (d) My Uncle (e) My aunt (f) Other relatives (Please specify)......
- 6. Do you have a boyfriend/girlfriend? (a) Yes (b) No
- 7. Where do you live?

### Section B: Contraceptives Knowledge and Usage

- 8. Please tick as appropriate those contraceptive methods that you have ever heard of.
- (a). Condom (b). Pills (c). Withdrawal method (d). IUD (Intra-uterine device) e. Injectables(f). Use of Safe period (g). Diaphragm h. spermicide (i). Surgical method (j). Abstinence (staying away from sex) (k) none of the above.
- 9. Which of these methods have you ever used? (a) Condom (b) Pills (c) Withdrawal method (d) IUD (e) Injectables (f) Safe Period method (g) Diaphragm (h) Spermicide (i) Surgical method (j) Abstinence (staying away from sex)
- 10. Choose appropriately the degree your think these methods are more effective? (Please tick as appropriate the degree to which you agree or disagree to the effectiveness of the contraceptive methods)

No Contraceptives	Strongly	Agree	Indifferent	Disagree	Strongly
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		Agree	Disagree
A	Condom		
В	Combined Pills		
C	Withdrawal method		
D	IUD(Intra-Uterine		
	Device)		
E	Injectable		
F	Safe Period Method		
G	Diaphragm		
Н	Spermicide		C
I	Abstinence		

11. Do you think adolescents should have access to information about sex? (a) Yes (b) No

12. Do you think adolescents should have access to family planning services? (a) Yes No

Section C: Knowledge Of Adolescents Towards Sexually Transmitted Infections

No	Questions	Strongly agree	Agree	Indifferent	disagree	Strongly disagree
13	Have you heard about infections or diseases other than HIV that one can get through sex?					
14	17. Do you think it is possible for a man to have a sexual transmitted infection other than HIV without having symptoms?					
15	18. Do you think it is possible for a woman to have a sexual transmitted infection other than HIV without having symptoms?					

16. What do you think are possible "causes" of sexually transmitted infections (You can mark more than one alternative)

(a) Bacteria (b)Virus (c) Fungus (d) Bad hygiene of women (e) Bad hygiene of man (f) Sex during menstruation (g) Having sex soon after giving birth (h) Blood transfusion (i) Infected swimming pool water (j) Don't know.

17. Please choose which diseases are sexually transmitted diseases (You can mark more than or alternative)
(a) Tuberculosis (b) Gonorrhea (c) Syphilis (d) HIV/AIDS (e) Hepatitis B (f) Hepatitis C (s
Chlamydia (h) Herpes (i) Don't know (j) Others (please specify):
18. What are routes of sexually transmitted diseases? (You can mark more than one alternative)
(a) Sexual intercourse (b) Blood transfusions (c) Sharing needle (d) Sharing clothes/things (e)
Sharing food (f) Mother to child (g) Don't know (h) Others (please specify
10 N/J
19. What are signs and symptoms of sexually transmitted infections?
(a) Abnominal pain (b) Discharge from penis/vulva (c) Itching in genital area (d) Burning pair
on uniration (e) Pain during intercourse (f) Genital ulcers or open sores (g) Swelling in genit
area (h) Blood in urine (i) Failure to urinate (j) Loss of weight (k) Weakness (l) Don't know (n
Others (please specify):
20. What are complications of STDs if untreated? (You can mark more than one alternative)
(a) Infertility (b) Premature birth (c) Still birth (d) Ectopic pregnancy (e) Miscarriage (f) Cervi
cancer (g) Don't know (h) Others (please specify):
21. From where have you received information on sexually transmitted diseases? (You can man
more than one alternative)
(a) Friends (b) Family (c) Youth club (d) School/College   Television (e) Radio (f) Magazir
(g) Internet (h) Hospital/Clinic (i) Others (please specify):
22. Have any of the following people told you that they have/have had a sexually transmitted
disease other that HIV? (You can mark more than one alternative)
(a) Friend (b) Parent (c) Brother/sister (d) Other family member (e) Spouse/live-in partner (s
Sexual partner/lover (h) Other

Section D: Attitude Of Adolescents Towards Sexually Transmitted Infections

No	Questions	Strongly agree	Agree	Indifferent	Disagree	Strongly disagree
23	Sexually transmitted diseases are not dangerous because they can be cured					
24	It is necessary to avoid a person who has contracted a sexually transmitted infection because they can transmit it to other people					
25	People who are infected with an STD must get treatment					
26	If a person believes that he or she had gotten a sexually transmitted infection and is unsure					

	about the symptoms he/she should directly contact health personal	u .
27	Young people should get information/knowledge about STDs in order to prevent these diseases	
28	Young people should be educated on knowledge of STDs at school to prevent these diseases	O
29	A person who does not want to become infected with a sexually transmitted infection should use condom when having sexual intercourse.	
30	A person who does not want to become infected with a sexually transmitted infection should use emergency contraception pills.	
31	How worried are you that you might catch a sexually transmitted infection?	

32. When having unprotected sexual intercourse, what are you most concerned about?

(a) Getting HIV (b)	Getting another	sexually	transmitted	infection	(c) Becoming pregnant	(d)
Other(Please						
specify)						

## Section E: Practices Engaged By Adolescents That That Can Expose Them To Reproductive Health Issues

- 33. Have you ever had sexual intercourse? (a). Yes (b). No
- 34. How old were you when you had sexual intercourse for the first time? (a). I have never had sexual intercourse (b). 11 years old or younger (c). 12 years old (d). 13 years old (e). 14 years old (f). 15 years old (g). 16 years old (h). 17 years old or older
- 35. With how many people have you had sexual intercourse? (a). I have never had sexual intercourse (b). 1 person (c). 2 people (d). 3 people (e). 4 people (f). 5 people (g). 6 or more people

- 36. During the past 3 months, with how many people did you have sexual intercourse? (a). I have never had sexual intercourse (b). I have had sexual intercourse, but not during the past 3 months
- (c). 1 person (d). 2 people (e). 3 people (f). 4 people (g). 5 people (h). 6 or more people
- 37. Do you enjoy sex with casual partners? (a)Yes (b) No
- 38. Do you prefer unprotected sex? (a) Yes (b) No
- 39. When was the last time you had unprotected sex? (a). Within the last week (b). Within the last month (c). Within the last six months (d). Within the last year (e). More than one year (f). Don't know (g). I have never had unprotected sexual intercourse
- 40. Do you prefer same sex intercourse? (a)Yes (b)No
- 41. Have you ever been pregnant? Be sure to include if you are currently pregnant and any past pregnancy that ended in an abortion, stillbirth, miscarriage, or a live birth after which the baby died. (a). No (b). Yes (c). Don't know
- 42. How many times have you been pregnant? (a). 1 time (b). 2 times (c). 3 times (d). 4 or more times (e). Don't know (f). Not applicable
- 43. Have ever had an abortion? (a) Yes (b) No
- 44. how many times have you had abortion (a) 1 (b) 2 (c) 3 (d) 4 or more
- 45. Have you engaged in transactional sex before? (a) Yes (b) No
- 46. Have been sexually molested or raped? (a) Yes (b) No

Thanks For Your Cooperation