SEXUAL ACTIVITY AND CONTRACEPTIVE USE AMONG ADOLESCENT WOMEN IN KENYA

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DECLARATION

This project is my original work and has not been presented for a degree in any university.

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SUPERVISORS

This research project is submitted for the award of a Masters of Arts Degree in Population Studies, under our approval as University supervisors.

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DEDICATION

This work is lovingly dedicated to my beloved daughter, Tamara, for filling my life with joy and for giving me so much to live and to pray for, and to my husband Charles, for his support, love and caring, a gifted and valuable helper, encourager, companion and friend. God Bless you.

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My utmost gratitude goes to God Almighty for his mercies are a new everyday.

ABSTRACT

The objective of this study was to examine how various socio-economic, socio-cultural and demographic variables interact to affect adolescent sexual behaviour and how these interactions further affect contraception behaviour. The data used was drawn from the Kenya Demographic and Health Survey (KDHS, 1998).

The study used logistic regression, cross-tabulation and chi-square methods of analysis. Chi-square statistics were used to determine the significance of the association between selected demographic, socio-economic and cultural variables and sexual activity and contraceptive use.

The findings of the study have underscored the importance of socio-economic, demographic and cultural factors as far as adolescents' sexual behaviour and contraceptive use are concerned. The results provide further evidence of these characteristics, in shaping the lives of adolescents particularly their knowledge about adverse consequences of early sexual intercourse, pregnancy, and other reproductive health issues such as fertile days and sexually transmitted infections.

Findings of the study revealed that female adolescents, especially those in the rural areas, engage in sexual intercourse at a very early age. The mean age for female adolescents aged 15 – 19 years was approximately 9 years. Concerning the sexual partners, majority professed that they had regular partners but contraceptive use was found to be low. However, contraceptive use generally increased with an increase in age.

- Acknowledge that adolescent girls' lives are often governed by harmful, culturally sanctioned gender rules imposed by males, parents, and other elders and perpetuated at times by girls themselves.
- Expand girls' social participation, schooling, and economic opportunities, understanding that these are basic entitlements and that they frame girls, reproductive behaviour.
- Recognize that a large proportion of adolescent girls are already wives and mothers, who need support and investment at least as much as do their unmarried female peers.

The study has come up with findings that have various policy implications. These include the following,

- A significant proportion of adolescents are sexually active, some with multiple partners, but contraception is low.
- It is also apparent that many factors influence sexual and reproductive adolescent behaviour.
- When age at first sexual intercourse was examined, there was a generally increasing proportion of ever use of contraceptive with increase in age at first sexual intercourse.

While efforts encouraging sexual abstinence until marriage should be lauded, the policy regarding unavailability of sexual and reproductive health services for adolescents' needs to be thoroughly reconsidered. Many service providers are apprehensive about serving young people, in part because of perceived prohibitions against it. Consequently, many young people secure it from friends, the media, and peers, a precarious and unreliable alternative. Adolescents' needs for reproductive health services are often misunderstood, unrecognized or underestimated. The social and economic lives of adolescents have been blacked out.

The following are some of the policy recommendations that should be undertaken:

- Create a safe, supported passage for girls from ages 10 to 19, recognizing that

recognizing second decade of their lives is a period of critical capability-building and heightened vulnerability, which does not end with marriage and childbearing.

- Acknowledge that adolescent girls' lives are often governed by harmful, culturally sanctioned gender rules imposed by males, parents, and other elders and perpetuated at times by girls themselves.
- Expand girls' social participation, schooling, and economic opportunities, understanding that these are basic entitlements and that they frame girls, reproductive behaviour.
- Recognize that a large proportion of adolescent girls are already wives and mothers, who need support and investment at least as much as do their unmarried female peers.

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CHAPTER ONE

1. INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 GENERAL INTRODUCTION

Currently over 25% of the world's population is made up of young people between the ages of 10-24. Eighty six percent of these live in less developed countries. According to the latest Demographic and Health Survey data, 34% of the Kenyan population consists of young people aged 10-24 years while those between the ages of 10-19 make up 25%.

The period of adolescence encompasses the transition from childhood to adulthood during the second decade of life. It is one of the most crucial periods in an individual's life, because during adolescence many key social, economic, biological, and demographic events occur that set the stage for adult life. Research throughout much of Africa indicates that the first sexual experiences of today's young people are taking place in a different social context from those of previous generations.

Increasing urbanization, modernization and education, together with exposure to Western media, appear to have led to a decline in traditional values and in particular, to the reduction of the importance of virginity at marriage. Previously, in African societies, sexual health information concerning, for example, the giving and receiving of sexual pleasure, sexual taboos, rites and cleansing procedures was transmitted in conjunction with formal rituals such as circumcision or initiation. Now, however, the influence of such traditional structures have weakened, thus reducing the sources of

social support and resource for adolescents with sexual health questions and leading to increasing sexual health problems. Sexual activity thus appears to be increasingly occurring before marriage, leading to increase in unwanted pregnancies and their associated risks. In most countries in Sub-Saharan Africa, current contraceptive use is higher among sexually active unmarried adolescents than it is among married adolescents. Studies also show that adolescents are likely to use contraceptives the first time they have sex and are more likely than older women to experience a contraceptive failure. Furthermore, information on interactions of adolescents with service providers, barriers to use of contraception and reasons for discontinuing the use of contraception is lacking.

1.2 STATEMENT OF THE PROBLEM

Premarital sexual activity is common in many regions of the world. A variety of studies in Kenya suggest that significant proportions of adolescents are sexually active by their teens. Despite high sexual activity, not many young people are taking precautions that would enable them prevent the consequences of their sexual activity. This poses serious health risks for young girls involved, by exposing them to sexually transmitted diseases (STDs), unwanted pregnancy and unsafe abortion, economic hardships and school dropouts (Njau and Redney 1995, Furgusion).

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Not all adolescents' sexual activity has been of equal interest to demographers. Researchers have devoted the bulk of their attention to premarital sex, based on the assumption that sexual activity is increasing among unmarried adolescents. Thus there is a dearth of information about the sexual and reproductive knowledge of soon-to-be married partners, the transition to marriage, and the experience of young married

couples and their negotiations regarding the intervals between marriage and sexual intercourse and between marriage and first birth. Data on trends in sexual activity prior to marriage are not reliable enough to support firm conclusions about changes over time. Nonetheless, in a review of the literature in this area, McCauley and Salter (1995), states that 'sexual activity among unmarried youth is increasing in many regions. Indeed, research comparing age at first sexual intercourse and age at first marriage across age cohorts reveals an increase in the gap between sexual initiation and marriage consistent with a rise in premarital sexual activity (Blanc and Way 1998). Moreover, other societal changes have been shown to predict a transformation in adolescent sexual behaviour (Furstenberg, 1998;Mcneil et al 1980).

Unfortunately, very few comprehensive studies on how adolescents in developing countries make decisions about reproductive behaviour have been undertaken. Much of the existing literature has concentrated on levels and patterns of sexual activity, premarital childbearing in relation to some selected background characteristics. (Backer G, and Rich D. 1992, Blanc and Way 1998, Ajayi et al 1991). Most of these studies lack critical information on the background and context of sexual and reproductive behaviour. The focus of research has been largely on unmarried adolescents, whereas the situation of married adolescents has been relatively neglected. In Sub-Saharan Africa in particular, the married adolescents are likely not to use modern methods of family planning as they may be under pressure to have children quickly and may also experience provider's bias especially against methods that are thought to impair future fertility (Njau and Radney, 1995, Magnani et al, 2000, Singh and Deirdre, 1990, and Ferguson, 1988, Lema, 1985).

In Kenya, most of the studies carried out so far on adolescent sexuality have focused in-school adolescents (Ferguson, 1988, Lema, 1985). Furthermore there have been few studies to show what type of contraceptive methods are used by various segments of adolescents population to address issues such as what type of contraceptive method is used by the girl who is sexuality active in her early teen?. Most studies lump the adolescents into one group, say 'females aged 15-49', without paying attention to whether they are married or unmarried, in their teens or above 20years. These considerations are important because of the earlier onset of adolescence and the rapidity of change during each phase of adolescence (Ilinigumugabo, A, Rogo,K O and Njau, PW 1995).

Until recently the subject of adolescent sexual activity was considered so sensitive that it was rarely discussed openly by educators, researchers, policymakers, or the media. Kenya, for instance does not have a comprehensive policy on the adolescents and the youth in general yet it is well acknowledged that they are engaging in premarital sexual activities and that, over and above the health and social predicament of adolescent sexual activity is contributing to Kenya's unfavorable demographic picture in terms of maternal and child mortality. The Kenyan law is generally silent on many aspects of the adolescents. The circumstances surrounding sexual initiation and decision to practice contraception by adolescents thus merits further investigation which is the focus of this study.

This study will thus attempt to examine how the various segments of adolescent females engage in sexual activities and the extent to which their sexual behaviour determines whether they use contraceptives or not. To achieve this, the study will attempt to address such questions as: How often do the adolescents engage in sexual intercourse? How many sexual partners do they have? Are the partners regular or casual? Do the adolescent practice safe sex? How often do they use contraception? If yes, what type of contraceptives do they use?

1.3 OBJECTIVES OF THE STUDY

1.3.1 General objective

The general objective of the study is to examine how adolescent sexual activity affects their contraceptive use. The study also considers how the various socio-economic, socio-cultural and demographic variables affect behaviour and contraceptive use among female adolescents, aged 15 to 19 years in Kenya.

1.3.2 Specific objectives

- To determine the frequency of sexual activity among female adolescent in Kenya in general.
- To establish the relationship between age at first sexual intercourse and contraceptive use among female adolescents.
- To establish the association between the frequency of sexual intercourse and contraceptive use among female adolescents.
- To establish the relationship between the type of sexual partners and contraceptive use among female adolescents.

- To determine the relationship between adolescent sexuality and various social, cultural, economic and demographic factors.

1.4 JUSTIFICATION OF THE STUDY

Adolescence is a time when great physical, educational and social changes take place in a person. In the case for girls, it is also the time when most of them are given out for marriage even before their menarche (Senderowitz and Paxman 1985).

Kenya, like most countries in Africa, has a highly vulnerable adolescent population greatly in need of reproductive health education and services. The 7.2 million adolescents aged 10-19 account for 25 percent of the population. Four out of every ten single young women and two out of every three young men, aged 15 to 19, are sexually active (Kenya Youth Initiatives Project 1991, CBS, 1998, KDHS 1998).

Two-fifths of young women are mothers by the time they are 20. Births to these young women account for 12% of the total births in Kenya in any single year. Eighteen percent of all births in Kenya are to women 15 to19 years old, and 52 percent of these births are unintended (KDHS, 1993). Many young women are anemic and malnourished and, if pregnant, do not receive adequate prenatal care or have access to appropriate and safe facilities for delivery of their child. Furthermore, more than fifty percent of Kenyan adolescents are sexually active but are not using appropriate methods to protect themselves from contracting sexually transmitted diseases, including HIV. Thirty seven percent of those newly infected with HIV are among the15 to 24 years (Ayayo 2001, Ministry of Health, 2000).

Concerns about the adverse consequences of early child bearing, particularly for unmarried women, and the risks of contracting sexually transmitted diseases have led to renewed interest in contraceptive and sexual behaviour of adolescents. These concerns, as well as the fact that young people aged 10 to 19 constitute almost 20 percent of the world's population and will, therefore, have an enormous impact on future population growth. In Kenya, according to the latest Demographic and Health survey data 34% of the population consists of young people aged 10-24 years while those between the ages of 10 to 19 make up 25 percent (CBS 1998).

Kenya's adolescents and youth population continues to grow with serious demographic and socio-economic implications. The reproductive health problems of adolescents are caused by early initiation of sexual activities, low levels of understanding about contraception, mistrust of condom efficacy, misinformation about HIV/AIDS transmission and a tendency to have multiple sex partners. Kenyan youth lack the information and motivation they need to make responsible decisions about sexual behaviour and use of contraceptives. Many have poor access to convenient, confidential, low-cost sexual and reproductive health services, including contraceptive services and treatment facilities for sexually transmitted infections.

Clinical and behavioral research has found strong associations between age at first intercourse and subsequent sexual health. An earlier age at first intercourse is likely to lead to an increased lifetime number of multiple and concurrent partners, a lower probability of using modern contraceptive methods and an increased chance of infection with HIV or other sexually transmitted infections. Given these implications

it is therefore important to know the age at first sexual initiation among adolescents so as to be able to put in place programs that target the 'uninitiated' adolescents and also develop policy that delay age at first sexual intercourse. The policy challenge is to develop a series of supports tailored to specific ages and so that adolescence can be a period of growth and achievement for all, regardless of their sexual and reproductive status situations (Hughes and McCauley 1998).

There is no National Policy on adolescents and youth in Kenya and issues of contraceptive service delivery to young people is highly controversial and sensitive. In addition, no IEC materials specifically targeting the adolescents have been developed. Interventions can also be put in place that will aim at strengthening outreach projects to provide hard-to-reach and risk-taking adolescents, and expand and adapt family planning for the younger, unmarried population.

Adolescents' needs for reproductive health services are often misunderstood, unrecognized or underestimated. The social and economic lives of adolescents have been blacked out and need to be illuminated. Curiously adolescent fertility research has neglected what one would have thought would be a key subject; married adolescents, the vast majority of whom are females, who may constitute the largest pool of sexually active adolescents. Little is known of their passage into marriage, age and power differentials and communication patterns between married adolescents and their spouses, the feelings and information brought to adolescent marriage, first sexual relations, pregnancy, and birth, and newly married couples' social affiliations, livelihood strategies, and educational needs. There is lack of significant body of

research in developing countries on the social and economic consequences of early sexual debut.

Thus given these various social, demographic and health implications of adolescents sexuality, this study is justified on the grounds that it will investigate the various aspects of adolescent sexuality in relation to various socioeconomic, socio cultural and demographic variables and how these influence their utilization of available contraceptives. Clearly, there is need for more serious look into the decisions adolescents' make so as to engage in certain behaviour and to identify factors that may predispose adolescents to early coitus and non-use of contraception. This study thus has the potential of providing some insightful information on adolescent sexuality and contraceptive use given that it will investigate specific segments of female adolescents. It is hoped that the study findings can be used in designing appropriate interventions for adolescents and that they will be of meaningful use to policy makers, educators, donor agencies and the community at large.

1.5 SCOPE AND LIMITATION

The study uses data from the Kenya Demographic and Health Survey (KDHS, 1998), the details of which are given elsewhere. The sample size consists of 1852 adolescents aged 15 to 19 years. This study takes into consideration adolescents aged 15 to 19 years. This in itself is a limitation as it excludes adolescents in other sub age groups, for example, those within 10 to 14 and 20 years. Given the sample size and the fact that the study is based on secondary data, the analysis cannot be exhaustive. Secondary data may have certain biases based on sample size, incompleteness of and

sampling errors. The analysis will thus, be affected by those biases or errors that were noted during data collection of KDHS of which the author has no control over.

Furthermore, in general, the topic of human sexuality has been difficult to study. It has been traditionally shrouded in secrecy and surrounded with prohibitions and resultant anxiety. Only in the past 30 years or so, since Kinsey's tradition-shattering research, has it been possible to study adult sex behaviour and attitudes in any extensive way. The whole subject of childhood sexuality, from which adolescent sexuality springs, has hardly been touched, other than through clinical observations. Thus, adequate understanding of this subject continue to be limited until more systematic research can be undertaken. Specific difficulties in studies of adolescent sexual development, behaviour and attitudes include problems in reaching adequate probability samples. It is generally felt that one cannot ask adolescents questions about their sexuality without gaining the permission of their parents, as well as of young people themselves. Because conservative, sexually anxious parents tend to hesitate in giving their permission and some adolescents are also hesitant to participate in these studies, sample biases tend to result. There is also concern that asking adolescents about their sexuality may prove to be upsetting to them or they may shy away and not provide accurate response for fear of being seen to be promiscuous.

Data from the KDHS are indispensable for many reasons, but they are limited in ways that hamper research on adolescents. They lack critical information on the background and context of sexual and reproductive behavior among adolescents.

There is insufficient time in the standard DHS interview to include probing questions about the behaviour and circumstances of restricted age groups, despite the fact that the adolescent years can have profound implications for later life.

Another limitation is that the KDHS data is limited on adolescents' perceptions on sexuality and family planning issues. Also information regarding contraception can only be derived from those adolescents who responded that they were sexually active at the time of survey. This exclusion of unmarried females provides an incomplete picture of adolescence sexuality and contraceptive use.

CHAPTER TWO

2.1 LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1.1 Introduction

This chapter focuses on the phenomenon of adolescent sexual and reproductive behaviour and how these impact on use and non-use of contraception. The review touches on a wide range of discipline that includes literature on the nature of adolescents, determinants of adolescent sexual activity and their contraceptive behaviour, adolescent childbearing and also examines the adolescent situation globally and Kenya in particular, the conceptual framework, conceptual model and hypothesis are presented.

2.1.2 The Nature of Adolescence

In order to understand adolescent's sexuality and how it affects their sexual and reproductive behavior it is important to understand how adolescents behave and why. Adolescence is a unique stage of development marking the crucial transition from childhood to adulthood not only biologically but also socially and psychologically.

At the biological level, bodily changes begin to take place when the hypothalamus part of the brain signals the pituitary gland to release hormones called gonadotrophine into the bloodstream. These hormones stimulate increased production of oestrogen in girls and androgens in boys, which in turn stimulate physical changes such as growth of facial hair in boys and breasts in girls. The changes are usually so marked that the adolescent inevitably compares herself or himself with others and worries about his or her adequacy (Bloss, 1962). Hormonal changes also lead to sudden changes in mood

among adolescents. At puberty teenagers begin to be viewed not as children and certainly not as adults, but it is their aspiration to advance into adulthood and gain independence. Profound psychological changes occur during adolescence, the main ones being sudden interest in the opposite sex and desire for affection and acceptance. Many theories have been proposed to explain adolescent behaviour. Sigmund Frued,(1953) a psychosexual theorist, viewed adolescents as a stage characterized by a reawakening of sexual energies of earlier stages (oral, anal, and phallic stages).

Hormonal changes lead to the emergence of irrational behaviour and the adolescent must learn the social skills necessary to initiate peer relationships essential for developing a fully functioning adult sexuality. Anna Freud (1969) argued that the course of maturation influences all behaviour. To her, adolescence cannot be emotionally painless. Bloss (1962), another theorist of the same school posits that formation of the individual self at adolescence involves learning to sever emotional ties with parents. The individual recognizes that gratification of emotional and sexual needs must be sought from outside the family.

Other theorists have taken into account the influence of social cultural environment in shaping adolescent sexuality. Learner and Spanier's (1980) on sexual socialization theory postulates that sexual roles are developed through the socialization process which encourages and rewards some behaviour while discouraging and punishing others. Sex roles development entails learning how to be psychologically masculine or feminine. Sexual behaviour has also been regarded as one of the key way through which adolescents begin to emotionally leave the family and move towards

independence. Successful steps to this end heighten independence of self-esteem and confidence.

A biosocial model by Smith (1989) blends biological and psychosocial influences in explaining sexual behaviour. The strength of these postulates lies in the recognition of social processes, which encourage or discourage sexual involvement, modify the form in which sexual behaviour is expressed, and define appropriate sexual partner. Physical changes signal sexual maturity and attractiveness, which may expose the individual to more social pressure to act in sexual ways as he or she may be rewarded through praise and popularity. On the other hand parents may be wary of sexual maturation especially if it comes early. All the theories above offer useful insights into the study of adolescent's sexuality.

Horrock (1962) gives five major points of reference from which to view adolescent growth and development. First, adolescence seems to be a time of seeking status, emancipation from childish submission to parental authority, and a struggle against relationship with adults when the adolescent is subordinated on the basis of inferiority in age, experience and skill. Second, adolescence tends to be a time when heterosexual relations are very important.

Thirdly, it is also a time of physical growth and development, and fourthly, it is a time of intellectual expansion and development and academic experience. And finally, it is a time of development and evaluation of values. The quest for controlling values

around which the individual may integrate his or her life is accompanied by an increasing awareness of 'self', development of self-ideals, and acceptance of self in harmony with those ideas. It is also a time of conflict between youthful idealism and reality.

In conclusion, it is important to view adolescents as products of their time, their culture, and their past and present psychological environment. Adolescence is the sum total of all the attempts at adjustment at the stage of puberty to the set of inner and outer conditions which confront the individual Bloss (1962).

2.1.3 Determinants of Adolescent Sexual and Contraceptive behaviour

Studies in both developed and developing countries have consistently showed that adolescents are poor contraceptors or non-contraceptor (Mensch, et al, 1998, Moore and Rosenthal, 1993). A study in Canada found that only 34 per cent of high school students used contraception every time they had sex while 27 per cent never did so (cf. Moore and Rosenthal, 1993). Data from developing countries show that there are much lower levels of contraception among the adolescents (Magnani, et al 2000, Nicholas D et al, 2000). In Kenya, for example, it has been shown that among women age 15-19 only eight per cent of them were using contraception in 1998 (NCPD,CBS and MI, 1998).

It has been argued that for contraception to take place, knowledge, information, motivation, personal and interpersonal skills, and a positive self-concept must be present (Gage, 1998, Jorgensen, 1993, Omwanda, 1996). These qualities are often

abscent in adolescents due to their lack of social, emotional and psychological immaturity. Uberg (cf. Moore and Rosenthal, 1993) identifies five major steps in contraception adoption.

1. The individual must recognize that pregnancy (or divorce) is a likely outcome of unprotected sex.
2. He or she must be motivated to do something about it-this step involves the belief that one needs to do something effective as well as the belief that the possible outcome is undesireable.
3. The individual must generate solutions to the problem.
4. These solutions must be evaluated and chosen.
5. The chosen solution must be implemented. These steps occur in the socio-cultural and psychological environment of individual.

Empirical evidence indicates that effective contraception is less likely to occur when the individual desires a pregnancy, lacks cognitive development required in making complex decisions, has low educational and occupational aspirations, lacks accurate knowledge about human sexuality and facts relating to contraception, is unable or unwilling to plan for sexual encounters that may be sporadic and unexpected, and finally, if the male adolescent believes that contraception is the females responsibility, and the female bclieves that it is the male's responsibilty (Jorgensen, 1993). In addition, adolescent's obvious bias in risk perception, which results from cognitive distortion of lack of knowledge (Irwin, 1993, Kiragu and Zabin, 1995, Millistein, 1993) may be responsible for contraceptive non-use.

Adolescents are affected by biological, psychological as well as socio-cultural factors. Biological and psychological change, as earlier noted, create new powerful emotional conflicts in the individual but how he or she integrates all those feelings is determined by forces outside of the individual. Peter Bloss (1962) argued that reality resides in the mental representations of the environment, which contains meaningful objects, values and ideas with which the individual becomes familiar. These mental representations become the basis for judgement, motivation and conflict. Biological forces influencing adolescents are in all likelihood, universal and so variations in adolescent sexual activity and contraceptive behaviour between different groups of adolescents can be explained more meaningfully through an analysis of the social, cultural and economic environments of these adolescents. Similarly, variations within each group are explicable in terms of differences in individual traits, including cognitive and affective factors. Some of the more important proximate influences include parents, peers, schooling, and religion.

The psychological literature assures us of the profound influences that parents have on the lives of their children. Parents are regarded as the primary socialisers of their children, with influence over a variety of beliefs and behaviours. When we turn to the domain of sexuality, we are dealing with an area of human functioning that has been long surrounded by guilt, mystery, and controversy. While peer influence has little impact, relative to that of parents, on young children, there is a shift at adolescence, with peers becoming more important in forming teenagers' beliefs and regulating their behaviour. Peer influence and pressure is often cited as one of the most influential

factors affecting adolescent sexual decisions although there is little research on the extent of influence and how it is exerted (Hofferth and Hayes, 1987).

Religion, has generally been found to be negatively related to premarital sexual behaviour and contraceptive use. Religious persons regardless of denomination are less likely to be sexually active (Devaney and Hubley, 1981, Spanier, 1976). This is not surprising, as sexual values encourage conservatism and restraint as are promulgated by most religions.

The widely recognized social, economic, and demographic benefits for individuals and society have led to a rise in parental demand for children 's schooling and to a large new investments in education by many governments. A key implication of these trends is that the proportions of the period of adolescence are spent in school which is means delayed age at marriage and first pregnancy.

2.1.4 Adolescent Childbearing

Adolescent sexual behaviour is an area of special interest to both medical and social scientists because its consequences are many and varied. On the medical front, problems associated with adolescent reproduction can be seen from two broad perspectives namely; risks to the mother and risks to the child. Adolescent childbearing has been linked with anemia, toxoemia, relatively high incidence of childbirth complications and maternal mortality (Jorgensen, 1993, Lowe, 1976, Mensch et al, 1998, NCPD, CBS and MI, 1998). Ravenholt (1976) for example

points out that an adolescent childbirth affects the lives of three generations, the infants, its mother and its grandmother.

The rate of childbearing has declined in the last few decades, in Sub-Saharan Africa, but substantial numbers of females still give birth in their teenage years (Mensch, 1998). In the late 1980s majority of adolescent mothers in America, Canada and Britain were single when they gave birth. Data from Sub-Saharan Africa for about the same period show that in 10 out of 11 countries, at least one in every five teenagers had one or more births or was currently pregnant with first child (DHS IRD/Macro International, 1992). Moreover, sexual experience is not restricted to married women. For example in Botswana, Ghana, Kenya and Liberia; majority of adolescents with some sexual experience were not married. The situation has not changed much. In Kenya, for example, although only 16 per cent of adolescents are married, 43.6 per cent of them are sexually active (NCPD, CBS and MI, 1998). This has serious implications for adolescents especially in this era of HIV/AIDS.

Only one country (Burundi) from the DHS data in Sub-Saharan Africa has teenage births accounting for less than 10 per cent of total births (DHS IRD/Macro International, 1992). In Kenya, like in other developing countries, adolescent fertility has great implications for population growth because the youthful population ensures that the number of adolescents will keep on growing, which in turn implies that adolescent fertility is a major contributor to the overall population growth rate despite the fact that the rate of adolescent childbearing is declining.

Teenage mothers are more likely to drop out of school than teenagers who are not mothers hence they are more likely to settle for less skilled and poorly paying occupations (Jorgensen, 1993). Adolescent mothers are likely to be faced with many psychological problems arising from rejection by the family especially the parents and the brothers and the father of the child as well as the conflicting roles as mother and student (Gorgen et al, 1993)

Although it has been argued that the identified 'consequences' are not directly a consequence of pregnancy and parenting per se- for instance, higher infant and child mortality may be a result of lack of proper prenatal care,-there is ample evidence to link teenage childbearing to the consequences. Research is yet to determine the relative impact of pre-existing conditions but in all likelihood, adolescent childbearing and parenting place additional limitations and burdens upon the current well being and future life chances of adolescent parents and their offspring beyond what they might have otherwise experienced.

2.1.5 Current Adolescent Situation Globally

At the International Conference on Population and Development (ICPD), held in Cairo in 1994, governments from around the world endorsed of the need to promote and protect the rights of adolescents to reproductive health information and care. They also recognized that young people should be involved in the planning, implementation and evaluation of adolescent reproductive health programs.

Adolescents and young people in general can be defined differently. In terms of age, WHO distinguishes among adolescents (ages 10 to 19), youth (ages 15 to 24) and young people (ages 10 to 24). However, who is considered to be an adolescent will also depend upon the socio-cultural-economic context in which people live. Roles and responsibilities may be determined by gender and associated marital expectations. Adolescence is also characterized by an exceptionally rapid rate of growth and development. The peak rates of growth and development during adolescence is only exceeded by those of foetal life and early infancy. Additionally, adolescence is a time of rapid social change, characterized by a shift from family to peer group orientation.

The definition of "youth" in national law and policy varies. In law a person becomes an adult at the age of majority, which may differ from country to country. Until recently, many countries have applied, as a law or policy, that "minors" must have the consent of their parents or some other adult before they can obtain health care and related advice. Some countries addressed the issue by lowering the age of the majority for medical treatment, some have passed a "health services for minors act" that permits people who are under age to seek consent for health care in specific areas and others have moved towards the use of the "emancipated minor" rule, which recognises that adolescents who are financially independent should be capable of giving their own consent.

The law sometimes prohibits access to reproductive health services for young people, especially if they are unmarried. There are also serious obstacles to the diagnosis, treatment and control of sexually transmitted infections among adolescents due to

requirements of parental consent and disclosure of sexual contacts. This is likely to deter adolescents from using screening and treatment centers for STI's, due to the fear of being asked probing questions about their sex lives.

The reproductive health situation of adolescents varies by gender and age. By the age of 19, 86% of males and 75% of females have initiated intercourse, and about a quarter of them have four or more sexual partners. At the time of first sexual contact, adolescents often lack knowledge about sexuality and reproduction. Indeed, the first sexual encounter is often experimental and those involved usually do not prepare for it by obtaining contraceptives or protection against STI's. Unwanted pregnancies can lead to unsafe abortions, which in turn can result in lifelong disability, infertility or death (Rowley, 1987, Ngoka , and Mati, 1980).

2.1.6 Adolescent situation in Kenya

Several studies have shown that age at first intercourse is declining, suggesting that today's young adults are becoming sexually active at younger ages (Population Reports, 1992, Kane et al, 1993, Kiragu, 1995). Other studies (McCauley and Salter, 1995, Kiragu and Zabin, 1995) have shown that few of them use contraceptives, which results in situations such as dropping out of school, early marriage and contracting sexually transmitted diseases. Still other studies (DHS Chartbook, 1992, Lema, 1990, Kane et al, 1993, Njau and Radeny, 1994, Sullivan, 1995) indicate that most girls start sexual intercourse just after they start their menses-on average at the age of 15. This means that before girls are 19 years old they will have engaged in sexual relationships and will be at risk of getting pregnant.

The erosion of traditional means of regulating adolescent's sexuality has resulted in lack of appropriate guidance(Lema and Wangui, 1991, Oladosu, 1993, Yeboah, 1993, Suda, 1993). Increasing "westernization" of society has led to the break up extended families and the abandoning of many traditional cultural norms and practices which have led to an increase in sexual activity among adolescents. Previously, uncles, aunts, and grandparents were responsible for sex education and supervision of young people's transitional period between childhood and adulthood. Life cycle changes were marked by celebrations and ceremonies with corresponding rewards as well as punishment for people who did not conform to the social norms (Bledsoe and Cohen, 1993, Yaa, 1993, World Bank, 1995). Increasing rural to urban migration and the deteriorating economic situation have compounded their sexual problems because it has weakened extended family networks which provided stability and support and have largely disappeared. Early and unintended pregnancy is a major cause for discontinuation of education among school-going female adolescents. Consequently, opportunities that would have otherwise been available become foreclosed for the female due to unintended pregnancy during schooling years (Youri, 1993, Assis-Lumumba, 1995).

It is estimated that 10,000 girls drop out of primary and secondary schools every year because of unwanted pregnancy (Division of Family Health/GTZ, 1998, Njau and Radeny, 1994). A majority of these girls do not return to their previous schools. The statistics presented in a DHS Chartbook on marriage and childbearing (1992) indicates that the adverse consequences of termination of schooling fall not only upon

the young mothers, but also on society at large. There is loss of added potential of an educated person. Acquiring education attains socio-economic development. It enables the adolescents to evaluate their social status, and to make significant financial contributions to their families and participate in the development of their societies.

Forced marriages by parents of the adolescent have been utilized to provide legitimacy to an unintended pregnancy. However, it contributes to the end of a young woman's education, which puts her in a dependent status. Also, young unmarried teenagers who do not marry before their babies are born are usually stigmatized. In extreme cases, these young women may be rejected by their families and even be forced into prostitution.

The reasons given by adolescents for low use of contraceptives include lack of access, safety concerns, and lack of knowledge. There is also a wide disparity in "general knowledge" on family planning and correct and relevant method-specific information. Kamau et al (1993) and Bongaarts and Bruce (1995) have reported that there was fear of failure to return to fecundity after stopping contraception use. Ajayi et al (1991), Kane (1993) and Sullivan (1995) have reported that adolescents showed a lack of appropriate knowledge of reproductive health, with less than one in ten recognizing the fertility cycle, and only 50% knowing that pregnancy could occur at first intercourse. Bongaarts and Bruce (1995) have also documented that few pathways exist through which adolescent women obtain information about the access to contraception. Although family planning services in Kenya are basically free, the

reasons usually given for non-use of family planning services have been lack of information and difficulty in access.

Early pregnancies have also been associated with higher than usual risk of morbidity during childbirth and higher incidences of maternal and perinatal deaths (Makinson, 1985, Senderowitz and Paxman, 1985, Geronimus, 1987 and UN, 1989). Various reasons have been put forward to account for high incidence of teenage pregnancies. These include, lack of knowledge on contraceptives (Ajayi et al, 1991), early marriage accompanied by need to prove one's fertility (Barker and Rich, 1972) and the erosion of traditional practices coupled with lack of family control in urban areas (Feyisetan and Pebly, 1989).

A variety of studies in Kenya suggest that significant proportions of adolescents are premarital sexually experienced. Lema (1987) found that a quarter of high schoolgirls he interviewed in Nairobi were sexually experienced. Oniang'o and Rogo (1988) found that 72 per cent of the high school boys in their Embu study had a history of coital activity. Maggwa (Mati, 1989 and in Njau and Lema, 1988) documented that 76 per cent of the boys and 42 per cent of the girls in Machakos region had engaged in sexual intercourse. In a study of primary and secondary students in Nyanza, Obongo (1989) found that 59 percent of the boys and 38 per cent of the girls had commenced coitus.

Lema (1987) found that only five percent of the sexually active girls he interviewed at three percent, while Khasiani (1985) placed hers at less than one percent. In south Nyanza, Obongo (1989) presents appreciably different results: he found that 43 to 57 percent of the sexually active secondary school girls had used birth control, and fort four percent of the school girls were current users. A study done by The Population Council and Family Planning Association of Kenya in Central province in 1998, (A. Erulkar, et al,1998) noted that 47 percent of boys and 31 percent of girls reported having had sexual intercourse. Boys initiated sex significantly earlier than girls (age 14.5 for boys and 16.0 for girls).

2.1.7 Importance of sexuality for adolescents

All theories of adolescent development give sexuality a central place in negotiating the transition from child to adulthood. The nascent sexual urges which emerge at puberty must be blended with other aspects of teenagers' lives and channeled adaptively. It is especially important that the adolescent be able to integrate his or her sexual feelings, needs, and desires into a coherent and positive sexual identity, which contains, as one aspect, a sexual self. Unlike many of the activities we engage in, expression of our sexuality (for the most part) involves a relationship, no matter how limited or fleeting, with another individual. Sexual expression allows, indeed requires, a unique exposure of the self to another, an exposure which brings with it potential for both positive and negative consequences. On the one hand there is possibility of validating one's sense of self –worth and achieving a deeply satisfying intimate relationship. On the other hand, wrong choices can lead to destructive outcomes, to feeling of anxiety and guilt, and to a sense of unworthiness.

2.2 CONCEPTUAL FRAMEWORK

The conceptual framework adopted here is influenced by empirical research and by the health belief model (Becker, 1974, Janz and Becker, 1984) and Ajzen-Fishbein model (Ajzen and Fishbein, 1980). The framework considers decisions to engage in sexual activities or to use contraceptive or condoms to be predicted on (1) a consideration of the costs and benefits of engaging or not engaging in particular behaviour, (2) an assessment of the risks of becoming pregnant or contracting a sexually transmitted infection, (3) norms perceived to be held by significant others including peer groups, family members, and partners, (4) the willingness of the adolescents to conform to the wishes of significant others, and (5) sexual intercourse, purchase and use a condom, obtain contraceptives, or convince a partner to use a condom. The framework assumes that adolescents weigh the pros and cons of engaging in particular behaviour. The decisionmaking process is complex and entails an intricate mesh of socio-cultural, economic, community, family, dyadic, and individual influences.

The framework underscores the strong influences exerted by the socio-cultural context over the decision-making process, social influence include family partners, and peers. Cultural attitudes toward adolescent sexual activity may also have a direct impact on sexual and reproductive decision in this age group by defining the normative context of childbearing, by governing the level of kin and social support for adolescent mothers and their children, and by shaping the perceived economic and social consequences of unsanctioned children (Hakanson, 1994, Kilbride and Kilbride, 1990). Family influences are manifested not only through family structure and control of finances, but also through elders' power over marriages are the norm (Goyal, 1994).

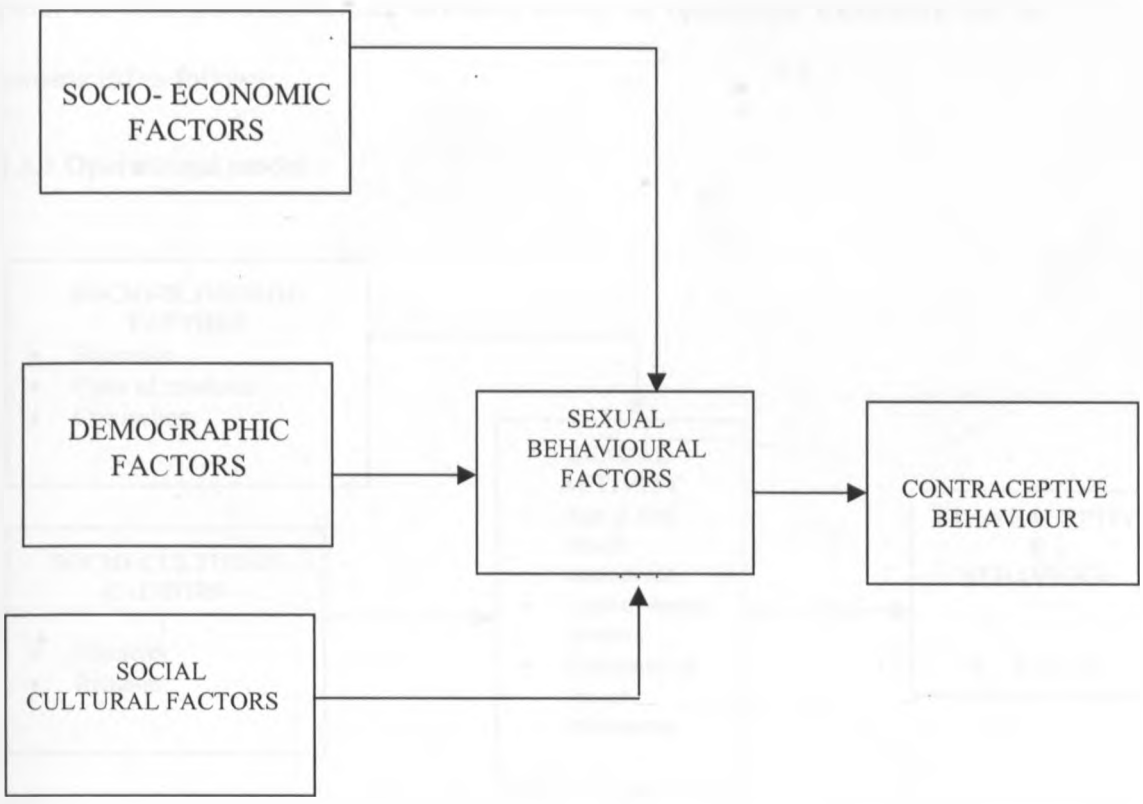
Dyadic factors are considered to exert a strong influence on adolescents' decision making process, because sexual activity, condom use, and, to a lesser extent, contraceptive use require simultaneous commitment from two partners. Adolescent decision making is assumed to be socially interactive and negotiated within a dyad in which sexual activity is often defined in terms of men's needs (see, for example, Balmer et al., 1995; Miles, 1993; Obba, 1993; Ssekiboobo, 1992; Strebel, 1996). Decision making may not occur, therefore, in a context of mutual choice and benefit for both partners. As mentioned above, cultural based gender roles that reinforce male control over sexual and reproductive decision-making may contribute in an important way to young girls' inability to make decisions about condom and contraceptive use, and to their vulnerability to the risk of intended pregnancy and STDs, including AIDS. Gender is not the only dimension of influence of influence within the Dyad. Economic and social inequality and age disparity between partners can create a situation of unequal power within the relationship (Mensch and Lloyd, 1998; Schoepf, 1994; Youri, 1994), which can, in turn, reduce girls' ability to negotiate whether intercourse will take place and whether condoms or contraceptives will be used. In many instances, the threat of male violence can also contribute to pressure on teenage girls to acquiesce to unsafe sexual practices.

In addition to social factors, individual attributes may influence how adolescents make decision about a particular behaviour. Aside from factors such as education, age, and urban residence, which have received a great deal of attention in the demographic literature, the framework emphasizes the importance of psychological empowerment and teens' confidence in their ability to perform certain tasks, such as obtaining and

using contraceptives or condoms, saying "no" to unwanted sex or convincing male partners to conform to safe sex practices.

Thus, the decision making process is a complex interaction of individual, social, family, and peer factors. These elements act in conjunction with sociocultural factors such as living conditions and job opportunities for women to influence the sexual and reproductive decisions that young people make. Where young people women's access to resources-be they cattle, money, or jobs-is restricted, they are likely to have few alternatives to marriage and childbearing if they cannot support themselves. In a situation of economic privation and a dearth of social opportunities, early marriage and childbearing may appear to be a means of obtaining necessary resources or as markers of social or personal achievement (Geronimus, 1992;Zabin, 1994).

2.2.1 Conceptual model



Source: Adopted from Ajzen –Fishbein model (1980)

The following conceptual hypotheses can be derived

1.Socioeconomic factors influence adolescent sexuality and contraceptive behaviour.

2.Socio cultural factors influence adolescent sexuality and contraceptive behaviour.

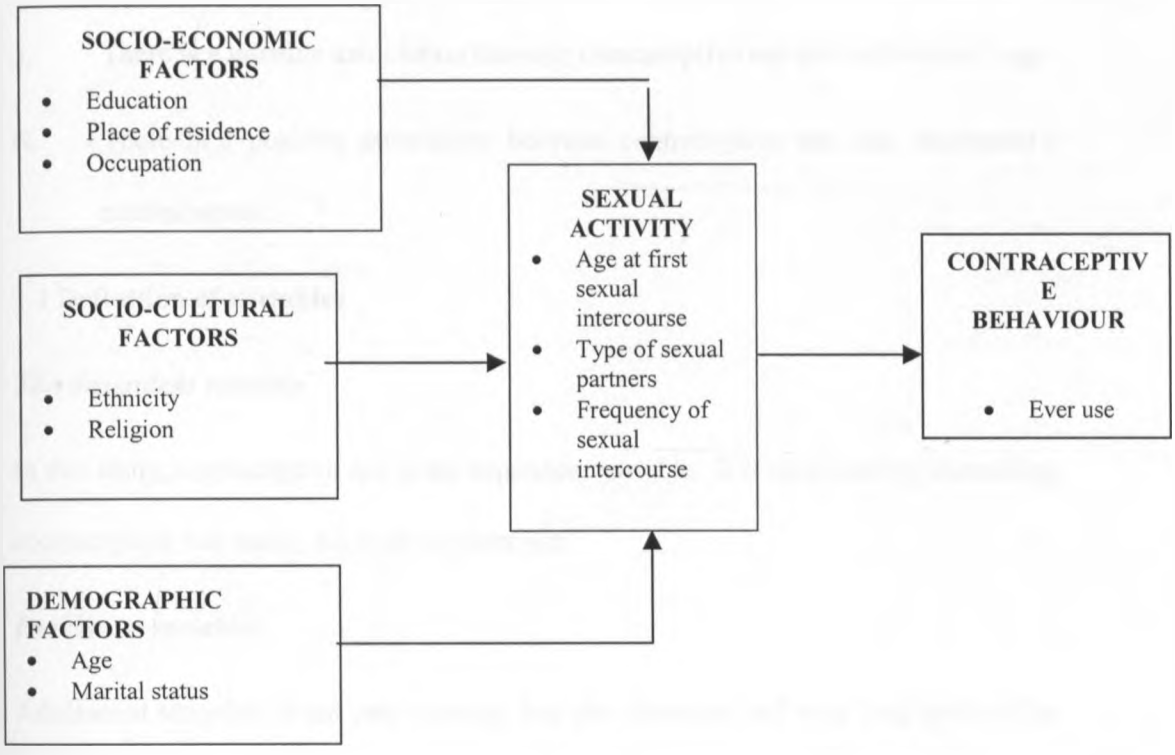
3.Demographic factors influence adolescent sexuality and contraceptive behaviour.

4. Sexual activity influences contraceptive use among adolescents aged 15-19 years in Kenya.

2.3 OPERATIONAL FRAMEWORK

From the conceptual framework described above, an operational framework can be constructed as follows:

2.3.1 Operational model



2.3.2 Operational Hypothesis

The following operational hypothesis can be derived.

1. There is a strong positive association between age at sexual debut and contraceptive use.

2. There is a positive association between the frequency of sexual intercourse and contraceptive use.

3. There is a positive association between the type of sexual partners and contraceptive use.

4. There is a positive association between contraceptive use and adolescent's level of education, religious affiliation, place of residence and occupation and ethnicity.

5. There is a positive association between contraceptive use and adolescent's age.

6. There is a positive association between contraceptive use and adolescent's marital status.

2.4 Definition of variables

The dependent variable

In this study, contraceptive use is the dependent variable. It is measured by examining contraceptive use status, i.e. ever or never use.

Proximate variables

Adolescent sexuality is not only sporadic but also characterized with long spells of no activity (NCPD, CBS and MI, 1998, Moore and Rosenthal, 1993). Indeed the data used in this study shows that only 19.4 per cent of adolescents were sexually active (defined as engaging in sexual activity in the preceding four weeks at the time of the survey). Sexual activity was analysed by examining the age at first sexual intercourse, frequency of sexual intercourse and type of sexual partners i.e. whether the respondent had no sexual partner, had regular or occasional/casual sexual partner.

Background variables

The following background variables were used in this study;

1. Education,
2. Type of place of residence
3. Marital status
4. Ethnicity
5. Religion
6. Age
7. Occupation

In this study, education attainment is measured in terms of the number of years in school as well as the highest educational level i.e. no education, primary, secondary and higher levels of education were considered in this study. Place of residence means living in an urban or rural area, while current marital status means the respondent was either never married, currently married, divorced, living together or not living together (separated) at the time of the survey. Ethnicity in this study was taken as membership to one of the following ethnic groups, Kikuyu, Kalenjin, Kisii, Kamba, Luyha, Luo, Meru/Embu, Miji Kenda/Swahili and Others. Religion denotes membership or affiliation to the following religious groups; Catholics, Protestants/other Christians, Muslim, Other religions and No religion. Occupation was categorized in to broad categories, i.e. those who reported not to be engaged in any gainful work; those in professional, managerial and administrative including technical work; unskilled manual work; skilled manual work; service and sales work; agriculture and extraction work; and domestic including cleaning and lodging work. In order to provide a more in-depth and interesting analysis, the age is analysed in single years.

CHAPTER THREE

3.1 STUDY METHODOLOGY

3.1.1 Data source

The study uses data from the 1998 Kenya Demographic and Health Survey, which was the third such survey to be carried out in Kenya. The 1998 KDHS was a nationally representative survey of 7881 women aged 15-49 and 3407 men aged 15-54. The survey was conducted by the National Council for Population and Development (NCPD) and the Central Bureau of Statistics (CBS) in collaboration with other institutions including Macro International Inc. of Calverton, Maryland, USA, US agency for International development (USAID/Nairobi) and the British Government's Department of International Development (DFID/UK). This study focuses specifically on female adolescents age 15-19 years (N=1852).

3.1.2 Study Area

The Republic of Kenya covers an area of 582,646 sq km and is situated in the eastern part of Africa. It currently has a total population of 29.8 million people. It borders Tanzania in the South, Uganda in the West, Sudan in the Northeast, Ethiopia in the North and Somalia in the East. It has 400 kilometers of Indian Ocean shoreline. Lying between 3 degrees north and 5 degrees south latitude and between 34 and 41 degrees east longitude, it is entirely within the equatorial zone. Kenya is divided into 8 provinces, which are subdivided into 75 districts.

3.1.3 The Sample Design

The 1998 KDHS covered the entire country with the exception of seven sparsely populated northern districts, which together comprise less than 4 per cent of the

country's population. A two-stage, stratified sampling approach was used. The first stage involved selecting sampling points or 'clusters' while the second stage involved selecting households within sampled points from a list compiled during a KDHS household listing exercise.

The sample points were selected from a national master sample-the sampling frame is referred to as the National Sample Survey and Evaluation Programme (NASSEP-3) maintained by the Central Bureau of Statistics (CBS). A total of 444 rural and 92 urban sampling points were drawn. Six of these clusters (comprising 1 per cent) were not surveyed due to inaccessibility. In order to produce reliable estimates of certain variables at district level, 15 districts were over-sampled. These were Bungoma, Kakamega, Kericho, Kilifi, Kisii, Machakos, Meru, Murang'a, Nakuru, Nandi, Nyeri, Siaya, South Nyanza, Taita Tavata, and Uasin Gishu. Also Nairobi and Mombasa were over-sampled. As a result of this over-sampling, the KDHS is not self-weighting; rather weights are needed to produce national estimates.

3.1.4 The Study Population

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The study population consists of 1852 respondents' aged 15 to 19 years, who were interviewed in the survey. The study population is essentially divided into married and unmarried female adolescents.

3.1.5 Method of data analysis

The study utilizes logistic regression, cross tabulations and the chi-square methods to analyze the data. Cross tabulation measures the association between two or more variables while the chi-square is used to measure the significance of the association

between variables in a cross tabulation analysis. The chi-square is calculated using the following steps;

1. Find the frequencies of each variable i.e., observed frequency.
2. Find the expected frequencies by multiplying the number of rows by the number of columns, and then divide the expected result by the grand total or sample size.

   F expected **(RxC)/N.**
3. Find the difference between the observed and expected frequencies in each cell, then square it, and then divide it by the expected frequencies for each cell, then sum all results for all cells of the table.

The equation is written as follows:

ErEc=(Fexpected-Fobserved)2/Fexpected

Note: E represents summation sign, c represents column, r represents rows and F represents frequencies

The Logistic Regression Model

The logistic regression model is specified as

Px=1/{1+Exp-(Bo+BiXi+....+BpBp)}.....1

The above equation implies that the probability, px, of the occurrence of the dependent variable depends on the independent variables X1, X2,....Xp. Logistic regression is used to analyze data where the dependent variable takes values either 0 or 1. Such data is generated by Yes/No responses. Odds ratio generated permit direct observation of the relative importance of each independent variable in predicting the

likelihood of the outcome, for instance, contraceptive behaviour, compared with the reference category.

Logistic regression has the advantage of allowing inclusion of statistical control,which is not possible with chi-square test.

The general equation takes the form

$y=eB0+BiXi/1+eB0+BiXi.$

To make the distribution linear, a logit transformation is carried out thus:

$g(x)=In\ [y/1-y]=Bo+BiXi$

Logistic regression uses the concept of maximum likelihood and results are analyzed using the iteration method. A negative value of Bi means the independent variable reduces the likelihood of making the observation. Odds ratios is the probability of having the observation to not having it is then computed by exponentiating Bi.

In the study logistic regression will be used to analyze the effect of the explanatory variables on the dependent variable.

CHAPTER FOUR

4. RESEARCH FINDINGS

4.1 Introduction

This chapter presents results of bivariate and multivariate analyses. Univariate analyses involved carrying out frequency distribution while bi-variate analyses involved cross-tabulations and chi-square tests. Logistic regression was carried out at the multivariate level of analyses.

4.1.2 Study Population

Frequencies and descriptive statistics were carried out to assess the nature of distribution of cases in each variable (both dependent and independent variables) in order to facilitate recording of variables, which would in turn facilitate meaningful bivariate and multivariate analysis. Specifically, recoding was undertaken to take care of categories with too few cases as well as to dichotomize the dependent variables. However, not all variables enabled the process of recording to be done.

The following is a summary of the demographic and some selected background characteristics of survey respondents: A summary of the frequency results of background characteristics are shown in Table 1 below.

Table 1: Selected background characteristics of the Respondents

Characteristic	Frequency (N= 1852)	Percent (%)
Age		
15	426	23
16	344	18.6
17	305	16.5
18	411	22.2
19	366	19.8
Ethnicity		
Kalenjin	314	17
Kamba	211	11.4
Kikuyu	231	12.5
Kisii	188	10.2
Luhya	282	15.2
Luo	231	12.5
Meru/Embu	119	6.4
Embu	144	7.8
Mijikenda and Swahili	132	7.1
Others		
Current Marital Status		
Never Married	1541	83.2
Married	266	14.4
Living together	20	1.1
Others	25	1.4
Religion		
Catholic	518	28
Protestants and others	1197	64.7
Muslims	92	5
No Region	31	1.7
Other Religion	11	0.6
Highest Education level		
No Education	62	28
Primary	1377	64.7
Secondary	407	5
Higher	1	0.6
Place of Residence		
Rural	312	16.8
Urban	1540	83.2
Occupation		
Not working	1417	76.6
Professional/Technical/managerial	30	1.6
Unskilled manual	11	0.6
Skilled manual	1	0.1
Sales worker/service	204	11
Agriculture/forestry	173	9.4
Domestic/cleaning	14	0.8

The table shows that the age range of the respondents is between 15 to 19 years with a mean of 16.97 years. Twenty three percent of respondents were aged 15 years, 18.6% were aged 16 years, 16.5% were 17 years, 22.2% were aged 18 years while 19.8% were aged 19 years. Majority of the respondents (83.2%) reported that they had never

married, 15.4% were currently married while 1.3% reported to have been formerly married. Of the married adolescents 3.5% reported that they were married before age 13 years, 21.6% reported that they were married at between ages 13 and 15 years, 74.9% reported to have been married between ages 16 and 19 years.

Eight of the main ethnic groups in Kenya were represented in the study. Seventeen percent of the respondents belonged to the Kalenjin ethnic group, 28.3% belonged to the Kamba ethnic group, 12.5% were Kikuyu, 15.2% were Luhya, 12.5% were Luo, while 10.2% belonged to Kisii ethnic group. Other ethnic groups represented in the sample include Mijikenda and Swahili 7.8 and Meru and Embu ethnic 6.4%. The remaining 7.1% belonged to the other remaining ethnic groups.

In terms of religion, Christianity is the dominant religion among the respondents. About 93% of the respondents were Christians; about 28% belong to Catholic denomination, and 64.6% were affiliated with Protestantism and other Christians. Only 5% of the respondents were Muslims. However, about 2% reported that they had no religious affiliation while less than 1 percent reported that they belonged to other religion.

The type of place of residence was looked at according to whether the respondents lived in the rural or the urban areas. Majority (83.2%) of the respondents lived mainly in the rural areas while 16.8% lived in the urban areas. Majority (76.6%) of the respondents reported that they were currently not working while 23.4% reported that they were currently working. However, when examined in terms of their various

occupations, those who were engaged in sales work and services were 11%, agricultural and extraction activities were 9.4% while those involved in some kind of professional/technical/managerial work were 1.6%. The remaining were involved in domestic and cleaning 0.8%, unskilled manual 0.6 and skilled manual work 0.1%.

4.1.3 Sexual activity

Of the 1562 respondents who provided information regarding their sexual activity, only 13.3%, a total of 207 respondents reported that they had regular sex partner while 77.1% reported that they had no regular sex partner. About 10% of the respondents reported that they had occasional sex partner while 15.7% either did not give an answer or were missing.

4.1.4 Age at fist sexual intercourse

About 57 % of the respondents reported that they had not had sex. The mean age at first coitus was 8.76 years. However, majority of the respondents, 57.3% reported that they had sexual intercourse at age 8 years. At age 12 years, 2.4% of the respondents reported that they had had sex while 3.1% reported they had their first sexual intercourse at age 13 years. Those who reported having first sexual intercourse at age 14 years were 6.7%. About 10% reporting having their first sexual intercourse at age 15 years, 8.8% had first sexual intercourse at age 16 years. About 5 % reported having sexual intercourse at 17 years while those who had sexual intercourse at age 18 years were 1.7% and those who had sexual intercourse at age 19 years 0.5% had had sex. . About three percent reported that their first sexual experience was at their first union. A life table was constructed to determine the probability of survival of sexual intercourse for the sample. The finding reveals that the median survival age 16.26 years and that the probability of survival decreases rapidly with increase in age. The

cumulative probability of surviving sexual intercourse at age 15 years is 0.56, at age 16 is 0.32, at age 17 is 0.17 while at age 18 years it is 0.06.

4.1.5 Contraceptive use

Majority of the respondents (85.4%) reported that they had never used any method of family planning. Only 14.6% reported to have ever used contraceptives. About 5% reported that they had used only traditional methods while 0.2% reported that they had used only folkloric methods while 9.4% had ever used a modern method of contraceptive, 1.5% were using the pill, 1.1% of the respondents were using injections, 1.3% were using condom, while 2.6% were practicing periodic abstinence. Those who were using withdrawal as a method constituted 0.1% and those who reported to be using other methods were 0.1%.

4.2 Cross-tabulation Results

The results of cross-tabulation analysis showing the distribution of background factors by contraceptive ever-use are presented below in Table 2.

Table 2 Distribution of Background Factors by Contraceptive Ever Use

Age	**Percent**	**(N)**		**Education**	**Percent**	**(N)**
15	4.2	(426)		No Education	7	(62)
16	4.9	(344)		Primary	14.2	(1377)
17	14.4	(305)		Secondary	16.2	(407)
18	20.7	(411)		Higher	16.7	(6)
19	29	(366)				
Religion	**Percent**	**(N)**		**Current marital status**	**Percent**	**(N)**
Catholic	13.9	(518)		Never Married	10.4	(1541)
Protestants/Other Christians	15.7	(1197)		Married	35.34	(266)
Muslim	7.6	(92)		Living together	25	(20)
No religion	6.5	(31)		Divorced	44.4	(9)
				Not living together	23.1	(13)
Place of Residence						
Urban	19.55	(312)				
Rural	13.57	(1540)				
Occupation				**Ethnicity**		
Not Working	11.29	(1417)		Kalenjin	12.1	(314)
Professional/Management/Administration/Technician	20.0	(30)		Kamba	17.1	(211)
				Kikuyu	16.5	(231)
Unskilled Manuals	9.09	(11)		Kisii	15.9	(188)
Skilled Manuals	0.00	(1)		Luhya	14.9	(282)
Sales and Service	25.49	(204)		Luo	16.5	(231)
Agriculture/Extraction	27.17	(173)		Meru/Embu	20.2	(119)
Domestic/Cleaning & Lodging	28.57	(14)		Mijikenda/Swahili	5.6	(144)
				Others	12.2	(131)
Total	**14.5**	**(1852)**		Total	**14.5**	**(1852)**

It is evident, from Table 2 that there was general increase of the proportions of ever contracepting adolescents with age. While only 23% of the adolescents aged 15 years reported to have ever used any contraceptive, about 29% of their counterparts aged 19 years had contracepted.

From Table 2, adolescents of urban background were more likely to report having contracepted than their rural counterparts. While 19.6% reported to have ever contracepted in the urban areas, only 13.57% of those in the rural areas reported the

same. It indicates that contraceptive use is slightly higher among urban adolescent dwellers than their rural folk counterparts. This is expected due to accessibility and availability of contraceptives in urban areas.

When education was considered, Table 2, illustrates that the proportions of adolescents who reported to have ever contracepted increased with increase in the level of education. About 11.29%, 14.23%, 16.22% and 16.67% of adolescents with no education, primary, secondary and higher education respectively reported to have ever contracepted. In total, 270 adolescents reported to have ever used contraceptive, 2.59%, 72.59%, 24.44%, were in primary, secondary and higher educational level respectively. This is expected as more education exposes one to the knowledge and use of contraception.

On religion, the proportion of adolescent ever contraceptors was higher among the Protestant/other Christian groups where 15.7% of the respondents reported to have ever contracepted. This was followed very closely by the Catholics (13.9%), Muslim (7.61%), while those of other religions and their counterparts with no religious background recorded less than 6 percent. Out of the 269 adolescents who reported to have ever used contraceptives, 26.77%, were Catholics, while, 69.89% ere reportedly Protestants/other Christians. Other religious affiliations represented included Muslims (2.6%), no religion (0.74%) and other religion had no representation at all.

When the various major ethnic groups in Kenya were considered, the Table 2 shows that the proportion of contraceptive ever users, was highest among the Meru/Embu and lowest among Mijikenda/Swahili adolescents at 20.17 and 5.56 per cent

respectively. Others include, Kamba (17.06%), Luo and Kikuyu (16.45%) each, Kisii (15.96%), Luhya (14.89), Other (12.21%) and Kalenjin at 12.10 percent. A total of 270 adolescents from various ethnic backgrounds reported to have contracepted. Out of these, Kalenjin adolescents had a proportional representation of 14.07%, Kamba (13.35%), Kikuyu (14.07%), Kisii(11.11%), Luhya(15.56%), Luo (14.07%), Meru/Embu (8.89%), Mijikenda/Swahili (2.69%) and others (5.93%).

Contraceptive ever use was reportedly highest among the currently divorced adolescents with 44.4% reporting to have ever contracepted compared to almost zero percent among the windowed adolescent. This, however, could have been due to very low number of widowed adolescents aged 15-19 whose total count was only three all of whom reported to have never contracepted. Marriage, though considered to be a risk factor to both conception, and STI and HIV/AIDS, attracted a proportion of 35.34 percent of contracepting adolescents. Those currently unmarried had 10.64% and divorced (44.44%) while those living together, perhaps cohabiting which is a common phenomenon nowadays, had 25.00 per cent.

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On occupation, adolescents who reported to be involved in lodging, cleaning and other domestic chores had the highest proportion (28.6%) of ever users of contraceptives. This was closely followed by those involved in agriculture and extraction at 27.7%, service and sales (25.5%), while those engaged in manual duties whether skilled or unskilled reported the lowest proportion of ever users. The proportion of never users was hence highest among the manual laborers and lowest among the lodging and domestic workers.

When age at first sexual encounter was considered, Table 3, there was, a general increase in proportion of ever contraceptors with increase in age at first sexual intercourse. Thus while less than one percent of those, mostly young adolescents who had never engaged in sexual intercourse reported to have ever contracepted, 33.3% of their counterparts who had their sexual debut at age 19 years reported to have ever contracepted.

This is consistent with research findings elsewhere which show that majority of those very young adolescents have not reached their menarche as they are physiologically immature. At their age they have no knowledge of what contraception is. But as one progresses beyond age 13, she becomes aware or at least has some knowledge of contraception. This is very clear from the table.

Table 3 Distribution of Proximate Factors by Adolescents currently using Contraceptive

Age at First Intercourse	Percent	(N)		Type of Partner	Percent	(N)
Never had intercourse	0.2	(1060)		No sexual Partner	3.1	(1205)
8	50.0	(8)		Regular Partner	40.6	(207)
9	0	(2)		Occasional Partner	33.3	(150)
10	33.3	(9)				
11	33.3	(30)				
12	38.6	(44)				
13	37.9	(58)				
14	31.5	(124)				
15	32.6	(187)				
16	35.2	(162)				
17	37.1	(97)				
18	40.6	(32)				
19	33.3	(9)				
At First Marital Union	20.4	(54)				
Total	**14.3 (1852)**			**Total**	**14.4 (1852)**	

On type of sexual partners, those adolescents who reported not to have had sexual partners had the least proportion of ever contraceptive users. Only 3.1% of adolescents in this category reported to have ever contracepted. Those who had regular sexual partners had 40.6% of them reporting having ever contracepted compared to 33.3% among those who had occasional sexual partners.

In general, while only 14.5% adolescents reported to have used contraceptives, 85.4% reported otherwise. This gives a clear indication that adolescents in the age group 15-19 years hardly contracept though known to be sexually active. As indicated earlier,

this could be due to various reasons which include lack of accessibility, non availability of the contraceptive and lack of knowledge on contraception. Moreover the Kenyan law does not allow contraceptives for young people.

Table 4: Types of place of residence by age at first sexual intercourse

Age category	Urban (%)	Rural (%)	N
Less than 13 years	11	89***	(73)
13-15 years	16	84***	(194)
16-19 years	23.8	76.2***	(522)
Total	20.7	79.3	(789)

Pearson Chi-square value=25.135[a], df=6; Asymp sig (2sided) 0.000

Overall, women in the rural were more likely to engage in sexual intercourse as compared to their counterparts in the urban areas. From the table above, for each age category, there were more adolescent women in the rural areas who had engaged in sexual intercourse as compared to those in the rural areas who had engaged in sexual intercourse as compared to those in the urban areas. However, the results show that the number of adolescent women who engage in sexual intercourse in the rural area decreases with increase in age while the reverse is true for the urban female adolescents.

When religion was examined by age at first sexual intercourse (Table 5), Protestants and other Christians were shown to be more likely to engage in sex across all the age categories. However, no significant differences were observed for various age categories according to their religious affiliation.

Table 5: Religion by age at first sexual intercourse among female adolescents

Age at first sexual Intercourse	Catholic (%)	Protestant and other Christians (%)	Muslim (%)	No religion (%)	Others (%)	N
Less than 13 years	28.8	69.7	1.5	-	-	(n=73)
13-15 years	28.5	64	4.1	2.4	1.1	(n=194)
16-19 years	26.1	68.6	4.3	0.3	0.7	(n=522)
Total	27.5	66.3	3.9	1.5	0.8	(N=789)

When ethnicity was considered by age at first sexual intercourse, the results shows comparatively more female adolescents from the Luo and Luhya ethnic groups had had sexual exposure at ages less than 13 years of age. Taita Taveta, MijiKenda and Masai ethnic groups were less likely to be exposed to sex at ages less than 13 years, Overall, Luos and Luyhas reported higher sexual exposure than other ethnic groups.

Table 6: Ethnicity and age at first sexual intercourse among female adolescents

Ethnicity	Less than 13 years	13-15 years	16-19 years	Total
Kalenjin (%)	12.1	17.6	17.3	17
Kamba (	12.1	8.4	9	9
Kikuyu	13.6	9.8	14.7	12.1
Kisii	6.0	8.4	8	8
Luhya	16.7	14.6	17.7	16.1
Luo	18.2	23.3	16	19.9
Masai	4.5	0.5	1.3	1.2
Meru/Embu	10.6	7.3	7	7.5
MijiKenda/Swahili	3.0	5.1	4.3	4.6
Somali	-	-	0.7	0.3
Taita/Taveta	3.0	3.0	3.0	3.0
Others	-	1.9	1.0	1.4
N	(n=73)	(n=194)	(n=522)	(n=789)

Table 7 below, indicates that adolescents who had sexual intercourse at age less than 13, 11% had no education 76.7% had primary education while only 12% were in secondary. For those who had had sexual intercourse at between ages 13-15 years about eight percent, 80% and 11% and 0% had no education, primary, secondary and higher level of education respectively. Similarly, those who had had their first sexual intercourse at between 16-19 years, two percent, 77%, 21% and 0.2 percent had no education, primary, secondary and higher level of education respectively.

Table 7: Education by age at first sexual intercourse among female adolescents.

Education	Less than 13 years	13-15 years	16-19 years	Total
No education	11	7.7	2.3	4.4
Primary	76.7	80.4	77	77.8
Secondary	12.3	11.9	20.5	17.6
higher	-	-	0.2	0.1
N	(n=73)	(n=194)	(n=522)	N=789)

Pearson Chi-Square value= 25.135[a]; df 6; Asymp sig (2 sided) 0.000

Table 8 shows that a big percentage of the respondents reported having no sexual partner, 20% were from urban while 79% were from rural areas. Those with regular partners, 21% were from urban while 79% were from rural whereas those with occasional partners, 21% were from urban and 79% from the rural areas.

Table 8: Type of sexual partner by type of residence among female adolescents.

Type of partner	Urban	Rural	N
No sexual partner	20.6	79.4	(n=160)
Regular partner	20.6	79.4	(n=199)
Occasional	20.7	79.3	145
Total	20.6	79.4	504

Table 9 presented below showing type of sexual partner by education indicates that there is a strong positive statistical significance between type of sexual partner and level of education.

Table 9: Education by age at first sexual intercourse among female adolescents

Education	No sexual partner (%)	Regular sexual partner (%)	Occasional (%)	N
No education	77.8	22.2	-	(n=9)
Primary	32.5	37.1	30.4	(n=385)
Secondary	24.8	49.5	25.7	(n=109)
Higher	100	-		(n=1)
Total	31.7	39.5	28.8	N=504)

Pearson Chi-Square value= 27.197[a]; df 6; Asymp sig (2 sided) 0.009

4.3 Results of Logistic Regression

To ascertain the strength of association between contraceptive use and selected demographic characteristics and proximate variables, logistic regression model was constructed. The association between respondents' characteristics and contraceptive use show expected results. The school status, whether the respondent is in or out of school, school attainment, age at first sexual intercourse and occupation were significant predictors of contraceptive use. In school adolescents were almost twice as likely to contracept as out of school. Similarly, there is positive association between school attainment and contraception.

Each additional year of education increases the likelihood of condom use 1.1 times. The result also reveals a strong positive association between occupation and contraceptive use

($p<0.01$); and age at first sexual initiation and contraceptive use ($p<0.05$). The age variable is also strongly associated with contraceptive use ($p<0.05$).

In all these cases, the results of the significant variables are consistent with what was shown by the data from the cross tabulations.

Table 10: Logistic Regression Model Predicting ever use of contraceptives among female adolescents aged 15 to 19 years

Variables	Co-efficient.(B)	SE	Sig	Odds ratios Exp (B)
Region				
Central	-1.1175	.8084	.1668	.3271
Coast	.2292	.8590	.7884	1.2576
Eastern	-.9099	.8323	.2743	.4026
Nyanza	-.7230	.8284	.3838	.4853
Rift Valley	-.1805	.8933	.8399	.8349
Western	-.7148	.4119	.0826	.4893
Type of Place of Residence				
Rural	-.7148	.4119	.0826	.4893
School status				
Out of school	-.6306	1.0139	.5340	.5323
Age at first sexual intercourse				
13-15 years	.3390	.5609	.5456	1.4035
16-19 years	.3651	.5767	.5267	1.4406
Age				
16	1.0167	1.3898	.4645	2.7641
17	1.9507	1.2024	.10447	7.0337
18	1.4550	1.1730	.2148	4.2843
19	2.1224	1.1692	.0695	8.3513
Age at first marriage				
13-15 years	.4410	1.3397	.7420	1.5542
16-19 years	.1632	1.3266	.9021	1.1772

Significant at p<0.05; **p<0.01; ***p<0.001

The results of logistic regression predicting the odds ratio of ever use of contraception are presented in table 10. Various variables were used to determine the odds of contraceptive ever use, for example, when various regions were examined with Nairobi as the reference category, it was noted that Central and Coast provinces wre more likely to have female adolescents who reported to have ever contracepted. However, when the place of residence was examined there was no statistical significance on ever use of contraceptive.

Age is a very important factor in determining contraceptive ever use and as shown by the results it is clear that as an adolescent gets older, she is more likely to use contraceptives. That results show that , when using age 15 as the reference category, at age 17 years, adolescent girls are more likely to have ever used contraceptives, than is, by7.0337, as compared to the 16 year olds (2.7641). The most significant result indicated was at 19 years of age (8.3513). This would suggest that the girls are more mature, thus better informed on the various sources and benefits of contraception. Also it would suggest that by age 19 most of the girls are sexually active and thus would want to use contraceptive to either prevent a pregnancy or protect themselves from sexually transmitted diseases.

Age at first sexual intercourse also had a great significance on contraceptive ever use. As clearly indicated, the results suggest that those adolescents who are sexually active are more likely to have ever used contraceptives, however, when the two age groups 13-15 years and 16-19 years were examined with those below 13 years being the reference category, both age categories had no significant difference in their odds ratio

of 1.4 and 16-19 years had an odds ratio of 1.4 and 16-19 years had an odds ratio of 1.44.

Marital status, when examined showed that there was a significant relationship between age at first marriage and contraceptive ever use. The female adolescents who were below age 13 years was used as the reference category, it clearly showed that the odds of those adolescent aged between 16-19 years who were married of ever using contraceptive was more likely.

This is true because, these adolescents who are married are also more likely to have give birth and thus are exposed to various sources and methods of contraception, for instance, when they attend antenatal clinics and as the cross the bridge from begin children to mothers, they become more knowledgeable and exposed to.

CHAPTER FIVE

5 CONCLUSIONS, RECOMMENDATIONS AND POLICY IMPLICATIONS

5.1 Summary

The current study analysed the strength and direction of association between adolescent sexuality and contraceptive use, where contraceptive use was examined as 'ever use' of contraceptive. Adolescent sexual behaviour was examined under various variables that represent sexual activity, these included, age at sexual debut, the types of sexual partners (regular or occassional), and frequency of sexual intercourse.

The study uses the 1998 Kenya Demographic and Health Survey (KDHS). The data analysed was limited to 1852 female respondents aged 15 to 19 years only. Analysis was carried out at two stages, bi-variate and multi-variate. The statistical tools used included chi-square and cross-tabulation at the bivariate level, while, logistic regression was used to demonstrate the presence of statistical association between adolescents' sexuality, contraceptive use and selected socio-cultural, socio-economic and demographic facto

The findings of the study have underscored the importance of socio-economic, demographic and cultural factors as far as adolescents' sexual behaviour and contraceptive use are concerned. The results provide further evidence of these characteristics, in shaping the lives of adolescents particularly their knowledge about

adverse consequences of early sexual intercourse, pregnancy, and other reproductive health issues such as fertile days and sexually transmitted infections.

5.2 Implication for policy

Young people lack the power to advocate for themselves, their needs cannot be communicated through normal channels of constituent politics. Public policy must set an agenda for adolescent girls that is organized around the distinctive features of their lives, their risk of exploitative living arrangements, confinement to domestic roles and responsibilities, restricted mobility, inadequate and occasionally threatening school experience, acknowledged work needs and compromising work situations, pressure to marry and begin childbearing early, and limited control over, and knowledge about, their sexual and reproductive health and fertility, even (perhaps especially) in the case of married girls. The study has come up with findings that have various policy implications. These include the following,

- A significant proportion of adolescents are sexually active, some with multiple partners, but contraception is low.
- It is also apparent that many factors influence sexual and reproductive adolescent behaviour.
- When age at first sexual intercourse was examined, there was a generally increasing proportion of ever use of contraceptive with increase in age at first sexual intercourse.

5.13 Policy recommendations

While efforts encouraging sexual abstinence until marriage should be lauded, the policy regarding unavailability of sexual and reproductive health services for adolescents' needs to be thoroughly reconsidered. Many service providers are apprehensive about serving young people, in part because of perceived prohibitions against it. Consequently, many young people secure it from friends, the media, and peers, a precarious and unreliable alternative. Adolescents' needs for reproductive health services are often misunderstood, unrecognized or underestimated. The social and economic lives of adolescents have been blacked out.

The following are therefore some of the policy recommendations that should be undertaken:

- Create a safe, supported passage for girls from ages 10 to 19, recognizing that

recognizing second decade of their lives is a period of critical capability-building and heightened vulnerability, which does not end with marriage and childbearing.

- Acknowledge that adolescent girls' lives are often governed by harmful, culturally sanctioned gender rules imposed by males, parents, and other elders and perpetuated at times by girls themselves.
- Expand girls' social participation, schooling, and economic opportunities, understanding that these are basic entitlements and that they frame girls, reproductive behaviour.

- Recognize that a large proportion of adolescent girls are already wives and mothers, who need support and investment at least as much as do their unmarried female peers.

5.4 Recommendations for further Research

The findings underscore the need for further studies in understanding the reasons sexually active adolescents do not contracept. The studies should further identify strategies and interventions that can help increase contraceptive use among the sexuality active adolescents.

5.3 Conclusion

In Kenya, family planning services are available in many hospitals, clinics and dispensaries. However, these services are available only to adults and married women. Sexually active adolescents are therefore disadvantaged as far as access to family planning services is concerned. This lack of access promotes their inadequate use of family planning methods.

Although contraceptive use among adolescents has been highly criticized, government officials, NGO's community leaders, church leaders and parents need to provide alternative solutions to the high pregnancy and school drop-out rates among adolescents. Health and family planning service providers should be more accommodative of adolescents' needs. They should be educated on the need to provide support to adolescents in their efforts to minimize the adverse effects of early and unprotected sex on their lives.

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Logistic Regression

Notes		
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Comments		
Input	**Data**	C:\ruth_okoth.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	1852
Syntax		LOGISTIC REGRESSION VAR=v302r /METHOD=ENTER v024 v025 v525r v012 v148 v511r /CONTRAST (v024)=Indicator(1) /CONTRAST (v025)=Indicator(1) /CONTRAST (v525r)=Indicator(1) /CONTRAST (v012)=Indicator(1) /CONTRAST (v148)=Indicator(1) /CONTRAST (v511r)=Indicator(1) /CRITERIA PIN(.05) POUT(.10) ITERATE(20) CUT(.5) .
Resources	**Elapsed Time**	0:00:00.66

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Total number of cases:      1852 (Unweighted)
Number of selected cases:   1852
Number of unselected cases: 0

Number of selected cases:                 1852
Number rejected because of missing data:  1596
Number of cases included in the analysis: 256


Dependent Variable Encoding:

Original        Internal
```

Value	Value
.00	0
1.00	1

	Value	Freq	Parameter Coding (1)	(2)	(3)	(4)	(5)	(6)
V024								
Nairobi	1	10	.000	.000	.000	.000	.000	.000
Central	2	12	1.000	.000	.000	.000	.000	.000
Coast	3	37	.000	1.000	.000	.000	.000	.000
Eastern	4	35	.000	.000	1.000	.000	.000	.000
Nyanza	5	59	.000	.000	.000	1.000	.000	.000
Rift Valley	6	73	.000	.000	.000	.000	1.000	.000
Western	7	30	.000	.000	.000	.000	.000	1.000
V012								
	15	9	.000	.000	.000	.000		
	16	10	1.000	.000	.000	.000		
	17	38	.000	1.000	.000	.000		
	18	73	.000	.000	1.000	.000		
	19	126	.000	.000	.000	1.000		
V511R								
less than 13 yrs	1.00	4	.000	.000				
13-15 yrs	2.00	55	1.000	.000				
16-19 yrs	3.00	197	.000	1.000				
V525R								
less than 13 yrs	1.00	19	.000	.000				
13-15 yrs	2.00	131	1.000	.000				
16-19 yrs	3.00	106	.000	1.000				
V148								
No	0	250	.000					
Yes	1	6	1.000					
V025								
Urban	1	52	.000					
Rural	2	204	1.000					

Dependent Variable.. V302R evers used contraceptives

Beginning Block Number 0. Initial Log Likelihood Function

-2 Log Likelihood 336.61022

* Constant is included in the model.

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number
1.. V024 Region
V025 Type of place of residence
V525R age at first intercourse
V012 Current age - respondent
V148 Respondent still in school
V511R age at first marriage

Estimation terminated at iteration number 3 because
Log Likelihood decreased by less than .01 percent.

-2 Log Likelihood	310.745
Goodness of Fit	258.400
Cox & Snell - R^2	.096
Nagelkerke - R^2	.131

	Chi-Square	df	Significance
Model	25.865	16	.0560
Block	25.865	16	.0560
Step	25.865	16	.0560

Classification Table for V302R
The Cut Value is .50

		Predicted		
		never used	ever used	Percent Correct
Observed				
never used	n	145	17	89.51%
ever used	e	66	28	29.79%
			Overall	67.58%

---------- Variables in the Equation ----------

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
V024			14.4282	6	.0252	.0849	
V024(1)	.8544	1.0317	.6857	1	.4076	.0000	2.3498
V024(2)	-1.1175	.8084	1.9111	1	.1668	.0000	.3271
V024(3)	.2292	.8540	.0720	1	.7884	.0000	1.2576
V024(4)	-.9099	.8323	1.1951	1	.2743	.0000	.4026
V024(5)	-.7230	.8284	.7618	1	.3828	.0000	.4853

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number
1.. V024 Region
V025 Type of place of residence
V525R age at first intercourse
V012 Current age - respondent
V148 Respondent still in school
V511R age at first marriage

Estimation terminated at iteration number 3 because
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-2 Log Likelihood	310.745
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	Chi-Square	df	Significance
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Classification Table for V302R
The Cut Value is .50

		Predicted: never used	Predicted: ever used	Percent Correct
Observed				
never used	n	145	17	89.51%
ever used	e	66	28	29.79%
			Overall	67.58%

---------- Variables in the Equation ----------

Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
V024			14.4282	6	.0252	.0849	
V024(1)	.8544	1.0317	.6857	1	.4076	.0000	2.3498
V024(2)	-1.1175	.8084	1.9111	1	.1668	.0000	.3271
V024(3)	.2292	.8540	.0720	1	.7884	.0000	1.2576
V024(4)	-.9099	.8323	1.1951	1	.2743	.0000	.4026
V024(5)	-.7230	.8284	.7618	1	.3828	.0000	.4853

V024(6)	-.1805	.8933	.0408	1	.8399	.0000
.8349						
V025(1)	-.7148	.4119	3.0123	1	.0826	-.0548
.4893						
V525R			.4159	2	.8122	.0000
V525R(1)	.3390	.5609	.3653	1	.5456	.0000
1.4035						
V525R(2)	.3651	.5767	.4007	1	.5267	.0000
1.4406						
V012			7.2268	4	.1244	.0000
V012(1)	1.0167	1.3898	.5351	1	.4645	.0000
2.7641						
V012(2)	1.9507	1.2024	2.6320	1	.1047	.0433
7.0337						
V012(3)	1.4550	1.1730	1.5386	1	.2148	.0000
4.2843						
V012(4)	2.1224	1.1692	3.2953	1	.0695	.0620
8.3513						
V148(1)	-.6306	1.0139	.3869	1	.5340	.0000
.5323						
V511R			.5751	2	.7501	.0000
V511R(1)	.4410	1.3397	.1084	1	.7420	.0000
1.5542						
V511R(2)	.1632	1.3266	.0151	1	.9021	.0000
1.1772						
Constant	-1.8304	2.0081	.8308	1	.3620	