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**ADOLESCENT FERTILITY AND THE CHARACTERISTICS
OF ADOLESCENT MOTHERS IN KISHI DISTRICT**

**BY
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DECLARATION

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

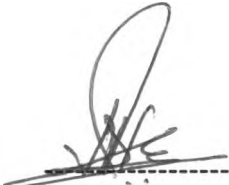
Signed _____

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This research project has been submitted for examination with our approval as the university supervisors.

Signed _____

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Signed _____

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DEDICATION

This research project is dedicated to my beloved sister the late Bathsua who passed away when I was about to start writing this project.

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ABSTRACT

This study is an investigation into adolescent fertility and the characteristics of adolescent mothers in Kisii district. The study used data obtained from the Kenya Demographic and Health Survey data conducted in 1993.

The principal methods of analysis employed in the study are cross tabulation, and the chi-square test to show relationships between independent and dependent variables. In addition descriptive statistics particularly the mean and frequency distribution were also used.

The results obtained indicate that adolescent fertility is high. 36.7% of the 237 adolescents interviewed had had at least a child at the time of the survey. The study also found that the use of contraception was low among adolescents. Only 16%(23) out of all the adolescents (87) were using contraceptives of whom 20 were adolescent mothers while 67 were not using.

The results show that some of the adolescent mothers are not married. 64.5% of all the adolescents were single and the rest were either married, living together or divorced or separated. About 16% of the single adolescents were already mothers.

Most adolescents have attained at least primary level but very few have completed secondary. The result show that 3 had no education, 38 had not completed primary, 21 had completed primary, 17 had not completed secondary and only 8 had completed secondary.

The results show that most of the adolescent mothers prefer to have sex while breast feeding. There were 21 breast feeding adolescent mothers who preferred sex while breast feeding.

The results indicate that most of adolescent engaging in sexual intercourse at tender age and the age at average age at first intercourse is on the decline. The result show that there has been a decline from 15.6 years to 9.9 years in the 1950s to in 1960s. Results on age at first marriage show that the mean age is reported at 18.5 years which is at the adolescent age. Results on trends in both age at first marriage and first birth show slight decline in age which is given at 18 years.

From the findings, the study recommends need for better access to family planning and

reproductive health services, permitting and encouraging young pregnant women to continue and complete school after pregnancy, to institute or expand sex education in schools, national health policies to provide post-abortion care that includes provision of contraception information and counselling of the youths in order to avoid repetition of abortions.

CHAPTER ONE

INTRODUCTION

1.1 GENERAL INTRODUCTION OF THE STUDY

Pregnancy in adolescent girls is a common problem in both developed and developing countries. Despite early sex education in Scandinavian countries and easy accessibility to contraceptives in most Europe and America, these regions still have a high rate of adolescent pregnancies. Most of the adolescent pregnancies take place outside marriage thus causing a high desire for abortion in order to avoid shame, and for fear of missing out opportunities (Rogo et al, 1986:1).

Teenage pregnancy all over the world has generally been acknowledged as a problem, and there has been general disagreements among experts, politicians and the general public on how best to attack it. Sex education and family planning programmes have, as a result, been charged as part of the problem rather than the solution. The argument is that they actually result in increased sexual activity, pregnancies and abortions. The Government of Kenya in a bid to solve the problem has through its actions and pronouncements (Sessional Paper No 4 of 1984) supported the implementation of Family Life Education (FLE) for both in-school and out of school youths and provision of information on reproductive health and establishment of counselling services, especially for the youth in schools.

The sexual behaviour of adolescents in Kenya as in many African countries has been changing with the breakdown of the traditional system. Many traditional values and social practices including pre-marital sexual behaviours have undergone changes during the course of modernization. This study therefore, focuses on establishing the level of adolescent fertility and the characteristics of adolescent mothers in Kisii district.

Adolescent is an important transitory stage in human life which transforms one from childhood

to adulthood. It is also the stage at which puberty and menarche set in including acquisition of some biological and physical traits which they tend to display.

Adolescence has been described for example by Macgrath (1979) as the period of transition from childhood to adulthood, characterised by a number of physical and social changes which include the following;

- * Progress from the initial appearance of secondary sex characteristics to reproductive maturity.
- * Attainment of full adult size.
- * Beginning of sexual interests and activities.
- * The replacement of a dependent childhood attachment to parents with a mature adult relationship to them and to others.
- * Formulating of personal standards and tastes.
- * Making educational and vocational choices.
- * Transition from economic dependence to independence.

It has been recognised that boys and girls in the approximate age range of 10-20 years differ physiologically and psychologically from children and adults and therefore, constitute a distinct group of individuals (Hunt,1976). Therefore, there is overwhelming concern that teenagers are increasingly becoming sexually active at increasingly younger ages. The most worrying aspect of this phenomena is that of "children who have children" before they are old enough to be socially and economically responsible.

The young people between the ages of 15 and 19 years of age make up about 10% of the worlds population (Hunt 1976). Because of the consistently high rates of population growth, many countries especially the less developed have young populations. More than half of these populations are below 25 years old. It has been projected that before the end of the century, the 1-25 age group in

less developed countries will increase by 8% from 1975 levels. By the year 1990, less developed countries had more than a billion people 15-19 years old, already at the age of marriage and childbearing.

Typically, pregnancy during adolescence occurs prematurely and is unintended pregnancy confronts the prospective parents with unexpected and unwelcome choices that carry profound long-term implications whether to terminate the pregnancy or to resolve it hastily through marriage, or to bear the child outside marriage. Adolescents are not usually well equipped to make such choices in a fully informed way. An unwanted pregnancy in a young girl can be a disaster. She may be far from being emotionally ready to have a baby and will probably not have money to bring it up. Even if she is ready to have a baby, being an unmarried mother causes serious difficulties in most cultures.

Studies done in Kenya and other parts of the world have shown that schools do not generally cater for the needs of pregnant students. Students who become pregnant are faced with two choices; either abort their pregnancies before they are detected in order to continue their education, or to drop out voluntarily in order to have the child. Most of them are simply dismissed from school (Population Report F no. 7 1980). This restricts future opportunities for improved social economic status because employment opportunities are curtailed.

On the other hand, maternal and child health programs in the country do not appear to cater for the needs of the adolescents. The emotional and other psychosocial problems that pregnant teenager faces, particularly those who are unwed, are invariably ignored (Gyepi-Garbrah, 1985:26).

In Kenya, about 10,000 girls drop out of primary and secondary schools annually because of unwanted pregnancy (Njau and Rogo, 1985). Nearly 80% of girls who drop out of school do so due to pregnancy as compared to other factors. 50% of the girls who drop out of school due to pregnancy want to go back to school after delivery, but are not able due to lack of fees and someone to care for

their baby (Division of Family Health\GTZ, 1988).

In Kenya today there are many organizations which have done and still doing some work on adolescent fertility. They can be divided into two groups; research oriented organizations, and service oriented organizations. Most of these are affiliated to the National Council for Population and Development (NCPD). There are also other small projects, research or service oriented, that have been initiated by individual organizations. Discussions on adolescent fertility has attracted views from educationist, religious leaders, parents, leaders and adolescents themselves (Rogo et al,1986).

Although a lot of studies on adolescent sexuality are being carried in kenya today, there are no accurate and comprehensive studies on some areas which include, knowledge of adolescents towards sex, the ideal contraceptives for adolescents, when adolescents should start using contraceptives, the total picture of abortion despite numbers and rate of illegally induced abortion on the rise and who is to teach the adolescent about sex since the role of grandparents is fading away. Any such studies available are based on limited hospital surveys and clinical studies which tend to give a somewhat anecdotal picture.

1.2 BACKGROUND OF THE STUDY AREA

This study is based in Kisii district of Nyanza province. The background characteristics of the area provide information that is used to explain population dynamics of the place.

Geographical location

Kisii district is one of the six districts of Nyanza Province. Kisii district is the smallest in terms of area but the second largest in population of the four districts that make up Nyanza province. Its area constitute 17.6% of the total land area of the province. It shares common borders with Nyamira to the North and East, Narok to South, Homabay and Migori districts to the West. The district lies between Latitude 00 30' and 10 South and longitude 340 38'and 350 East. It is the second smallest district in the Province after Nyamira. Kisii has an area of about 1,302.1 km sq and it is subdivided into 11

administrative divisions (District Development Plan, 1994-96:1).

Relief

Kisii district has the advantage of having both fertile soils and reliable rainfall that encourages both intensive and extensive farming that in turn contributes to high yields of food products. Initially, Kisii district land was mainly used for grazing/fallow, maize cultivation, bear ground hedges, Woodland and tea growing (Kenya Rangelands Ecological Monitoring Unit, 1983). However, due to population pressure most of the land has been used for maize cultivation and bananas so as to feed the growing population.

The district is dissected by permanent rivers which flow westward into lake Victoria. Among the notable ones are Kuja, Mogusii, Riana, and Lyabe. There are also depressions and valleys. The hilly nature of the district exposes it to serious soil erosion and road communication is difficult especially during the rainy season when many roads become impassable. In most cases roads are forced to meander around the hills and ridges. Tea and pyrethrum are mainly grown in areas above 1800m above sea level while sugarcane, coffee and bananas are grown in lower altitude areas.

Climate

Kisii district lies on a highland equatorial climate. It receives rain almost throughout the year. There are two rainy seasons. Long rains start from the end of March to May while the short rain starts from October to November. However, some changes in weather patterns have been noted though not frequent. As a result heavy rains may be received unexpectedly. The average rainfall received is usually over 1500mm per annum and it's highly reliable. The high and reliable rainfall received support cash crops such as tea, coffee, pyrethrum; subsistence crops such as maize, beans, finger-millet, potatoes; and dairy farming (District Development Plan 1994-96:2).

Population profile

From the 1979 census, Kisii district had a population of 568,556. Using the 1989/93 District

Development Plan, this population was projected to increase to 932,846 in 1993. This represents an increase of 364,292, or a percentage change of 61%. The annual rate of population growth between 1979 and 1993 was 3.6%. Using the rate, population was projected to increase to 966,428 in 1994 and to 1,037,263 in 1996. From the 1989 census, Kisii district had a population of 137,054 people over the 1979. Taking Kisii district population in relation to that of Nyanza province, it was the most populous district with 32.4% of the total population in the province with 3,507,162 people.

One of the major constraints to development in Kisii district is high population growth rate. The district has a high population growth rate of 3.5% per annum. The high growth rate is attributed to low use of family planning methods which is currently estimated at 32%. Other factors which contribute to high population growth rate in the district are linked to cultural practices where large families are preferred for old age security reasons. Currently the average desired family size is 7 children. This high growth rate leads to increased demand for social amenities, food, employment, health facilities and educational facilities. There is therefore, need to control the population growth rate.

The 1979 and 1989 censuses also showed that most of the population consisted of below 19 years age group; a population that is not economically active meaning that the dependency ratio was reasonably high. The census also indicated that there were more females than males in the economically productive and reproductive ages. This is possibly because most of the male population has moved out of the district to search for employment opportunities, implying that there is not enough labour-force in the area especially from the middle aged men. There is a large proportion of women in the reproductive ages. This seem to encourage polygamous marriages.

Fertility

Current total fertility rate is estimated at 4.7 from the sample of women interviewed in 1993

Kenya Demographic and Health survey (KDHS). Trends in family planning indicate that the current acceptance rate is between 60-65%. There are five permanent clinics within the District (District Development Plan, 1994-96:67).

Health facilities

As regards the socio-economic infrastructure, there are 50 health facilities in the district. The Municipality has the highest concentration of these facilities and most of them are private hospitals. The Government operates 62% of the district health facilities which include the district hospitals. The rest of the facilities, 38% comprise of mission hospital, four private maternity nursing homes, four mission health and nine dispensaries (District Development Plan, 1994-96:38-39).

Infant mortality rates have been declining and the trend is expected to continue into the next century. This decline has been attributed to improved health-care and immunization against the killer diseases. Malaria is increasingly becoming a major health problem especially in the rainy seasons, of late, there has been a rampant incidence of meningitis in the area.

1.3 STATEMENT OF THE PROBLEM

Kisii district is one of the densely populated districts in Kenya and from a demographic point of view, adolescent fertility has been associated with rapid population growth because those adolescents who start child bearing early have long reproductive period. Early child bearing has also been associated with higher parity, short birth interval, and large completed families. Therefore, emphasis on delaying first births can be an important element in population control program.

Health risks of early pregnancy are greater for adolescents and their children than for women aged 20 or more (Hunt,1976). In Kisii district, it has been learnt that large proportion of pregnancies among adolescents and teenagers end in abortion. Many adolescent women seek illegal abortions which

are carried out under clandestine circumstances. This has proved to be a risky undertaking resulting in serious health problems. Intercourse and pregnancy at very young ages have also been associated with increased risk of venereal infections (Rogo et al, 1986).

Restriction of future economic opportunities for improved social economic status are also some of the consequences of early pregnancy. Whether married or not, the pregnant adolescent frequently quit work or leave school due to shame, fear and embarrassment and physical demand of pregnancy and child birth. This sometimes lead to early marriages which result in marital instability and high divorce or separation rates. As a result of this career options and prospects for future earnings thus become limited. Out of wedlock births to girls may lead to child neglect or abandonment. Likewise out of wedlock child may face social and legal discrimination and aggravated economic hardship. The girl suffer psychological torture and the money spent by the parent on school fees become a waste.

Traditionally Kisii district, adolescent education was the most important of all because it was the one in which learning was deliberately planned and executed. It was at this age ceremonies were performed according to well observed rules and regulations. Formal teaching was intensified although it was likely to have been started before the child reached adolescence. Sex education was formally and informally taught to prepare the young people for marriage, to become more proficient at domestic and farm activities. It was the adolescent education which prepared and put final touches on the young men and women in their readiness to enter into adult life. Currently in Kisii district, traditional systems for teaching about sex and reproduction are rapidly becoming inadequate for disseminating useful information, and so far no other thorough going means of educating and informing adolescents have been devised to provide information and services relevant to the needs of the youth today . Many young people work or attend school or college far away from home where parents can not monitor them. As a result of this increased freedom, many young people have had an opportunity for sexual contact than it was possible in traditional society.

With increase on HIV/AIDS, many adolescents are likely to fall victims as most of them do not

sually use condoms. This situation is likely to worsen because the Church in particular, parents and leaders do not allow the use of condoms by the adolescents who are still in school and under the care of their parents.

The research problem of this study is based on the view that the actual level of adolescent fertility is not known in the district. Similarly, the characteristics of adolescent women are not known. The study aims at studying the characteristics of adolescent women to shed more light on the problem of adolescent fertility. It aims at investigating the social, economic and demographic characteristics of adolescent women.

1.4 OBJECTIVE OF THE STUDY

1.4.1 General Objectives

(a) The study hopes to investigate the social-cultural, economic and demographic characteristics of adolescents in Kisii district.

1.4.2 Specific objectives

- (a) To investigate the level of adolescent fertility in Kisii district.
- (b) To investigate the extent to which adolescents use contraceptives in Kisii district.
- (c) To find out the marital status of adolescents.
- (d) To investigate the average education level of adolescents.
- (e) To find out the mean age at first marriage for adolescents.
- (f) To find out the mean age at which adolescents engage in sexual activity.
- (g) To find out the major occupation of the adolescent mothers.

1.5 JUSTIFICATION OF THE STUDY

Adolescent fertility in Kenya has generally been recognised as a problem, a drain on a country's resources and a significant contribution to the high fertility in the country. A review of existing literature points to the fact that a lot of research has been done in identifying its causes and consequences with a lot of recommendations for the need of population education to the adolescents. In the light of this, various programmes have been set up with a view to providing population education.

Adolescent fertility is of great concern since about 20% of the national population is made up of adolescents and it is the fastest growing population segment (Rogo et al, 1987:13). The age group between fifteen and twenty four is not only the fastest growing segment projected to double within the next fifteen years but is also among the most fertile, contributing significantly to Kenya's high fertility. Kisii district's singulate mean age at first birth is 17 years while mean age at marriage is 18 years (Kenya Demographic and Health Survey KDHS 1993). This means that more girls are giving birth out-of-wedlock. Therefore, the study will help us understand more about adolescent fertility and the characteristics of adolescent mothers in Kisii district and on the basis of the findings, some recommendations will be made.

Sexual activity during adolescence is likely to increase the spread of HIV/AIDS and other STDs. The reason being that the sexual intercourse among adolescents is likely to be high and also most of them usually practice unprotected sex as they usually do not have access to contraceptives.

Kisii district has been chosen because from the demographic point of view, it is one of the most densely populated districts in rural Kenya. It has a growth rate of 3.6% compared to 3.1% at the national level (Kenya Development Plan 1994/96). The fertility rate is estimated at 5.3 births per

woman (NCPD et al, 1994).

Kenya's population policy is concerned with curbing the high rate of population growth. One way to achieve this is by delaying the child bearing age to beyond 20 years thus reducing cumulative fertility.

1.6 SCOPE AND LIMITATION OF THE STUDY

The study focuses on Kisii district. The data for the study will be drawn from 1993 Kenya Demographic and Health Survey (KDHS). The study will include the following variables; education, occupation, marital status, contraceptive use, age at first birth, age at first intercourse, age at first marriage, and sex while breast feeding. Adolescents in this study are women aged between 15-24 years. The study will also include women aged 25-49 so as to compare them with adolescents. To analyze the characteristics of adolescent mothers, this study will consider women with children aged 15-24 years. Kisii district has been chosen as a study area because fertility is high in the district and little is known about adolescent fertility in the district. Further the researcher is more familiar with the district's socio-economic, cultural and demographic configuration.

1.7 LIMITATION

One of the major limitations of the data used arises from the objectives. The 1993 Kenya Demographic and Health Survey (KDHS) was collected with different objectives in mind other than the objectives of the current study. The result of secondary data thus, implies that one can only get a general picture of the real situation.

Coupled with the fact that fertility studies involve answering personal questions such as age at first intercourse and frequency of intercourse, their responses may be subject to some inaccuracy. This

is because issues related with sex are regarded as private and personal and with some secrecy due to cultural issues related to sex.

As indicated in specific objectives, only a few variables are employed for studying adolescent fertility. This study could not use variables like abortion, the effect of modernization on adolescent fertility, sexual diseases other than AIDS and clinical attendance for adolescents before and after birth. As a result of that this study will only make use of the following variables; marital status, contraceptive use, occupation, age at first birth, age at first marriage, age at first intercourse, education and sex while breast feeding.

1.8 ORGANIZATION OF THE STUDY

This study is presented in five chapters.

Chapter one covers the presentation of the general introduction of the study, background information of the study area, problem statement, the objectives of the study, the justification, scope and organization of the study. The second chapter covers the presentation of the relevant literature review, the conceptual framework, variables for the study, operational framework, and hypotheses. The third chapter covers the source and quality of data used and the methodology used to analyze the data. Chapter four covers the presentation of the results. And chapter five presents the summary of the findings, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents a review of the literature which has been done. The first section presents studies which have been done in the world, followed by those which have been done in Africa, and finally studies which have been done in here in Kenya. These studies include those which have been done by individuals, groups of people, organizations and research surveys. The last section presents a summary of the literature review and the identified gaps.

A review of the literature indicates that a lot of research has been going on to provide information about the problem, describing adolescent fertility per se, identifying the possible causes, the consequences and likely solutions. Most of the work that has been done in the area of adolescent fertility has been concentrated on determinants of adolescent fertility. However, not much has been done on the characteristics of adolescents mothers especially in developing countries. Most research in this area of adolescent fertility began in the early 1970s. It was thought necessary to do research on adolescents since they form a group of individuals with their own special needs and problems (WHO, 1977).

Studies in Europe and America

A number of studies which have been done in United States of America, Europe and other countries have shown some of the consequences of early pregnancy.

Menken (1972) carried out a study on the medical aspects and implications of teenage child bearing for the United States population. The study was based on data from the National Centre for Health Statistics. The findings of the study indicated that two interrelated problems were clearly delineated first, infants of young mothers were subject to higher risks of prematurity, mortality and serious physical or intellectual impairments than children of older mothers. Second, the mother and

perhaps father and children were more likely to find themselves in unstable family situations than those who postponed childbearing at least until the mother was in her early twenties.

Fennelly (1980) carried out a study to compare marital and non-marital fertility among hispanic adolescents in the United States. The data on marriage and childbearing came from the original marriage tabulations from the 1980 census. Marital status was especially significant for adolescents because a particularly strong stigma was affected to non-marital child bearing among this age group. Young couples were also more likely than older couples to marry when a pregnancy occurs (UN 1983). A woman's marital status at the time she bears a child was important because of the implications for her later fertility and for her own and her children's economic and social status.

The UN (1986) found that most of the consequences of adolescent fertility result due to fear and ignorance on the part of the adolescent. The younger adolescents under 18 years were exposed to greater risks of child bearing than those aged over 18 years. The under 18 years usually hide the pregnancy, delay attending the ante-natal clinics and that most do not get proper nutrition as required.

Melvin and Kanter (1977) argued that due to contraceptive use and accessibility, adolescent fertility was found to be lower in developed countries than in the developing countries.

Bragonier (1973) has cited some physiological reasons for the non-use of contraceptives among adolescents, these include;

- *The fact that adolescents consider the use of contraceptive as a planning of sexual act which they consider wrong, improper and unromantic.
- *Girls confused with respect to their values avoid contraceptives because it provokes a sense of guilt in them.
- *They use the sexual act and pregnancy as a means of rebellion towards their parents particularly when the youth lack confidence to communicate with their parents.

Card and Wise (1982) carried out a study on the impact of early childbearing on the parents personal and professional lives. The study documented the educational, occupational, marital and fertility consequences of adolescent birth for young mothers and father. Data was obtained from a large prospective nationwide study project (TALENT) of high school boys and girls. The data was analyzed to document the long-term and short-term impact of adolescent childbearing on the parents future educational, occupational, marital and childbearing lives. The project (TALENT) sample included data for both adolescent child-bearers and a comparison group of high school classmates data covering a 15 year period were analyzed and the consequences of adolescent childbearing were assessed at three different points which included those in the parents care, five and eleven years after high school and when they are approximately aged 19, 23 and 29 years old. A nation wide random sample of 375,000 students from 1,225 senior and junior high schools participated in the project (TALENT). The findings of the study indicated that the repercussions of teenage childbearing were long lasting. The young parents acquired less education than their contemporaries. They were more often limited to less prestigious jobs and the women to more dead-ended ones. Their marriages were less stable than those of their contemporaries who postpone childbearing. Couples who became parents at adolescent expected to have more than they want.

Townsend (1985) in a survey conducted in two urban areas of Mexico city on sex education he focused on both males and females aged 15-25 years. Nearly 85% of his respondents were aware of unintended pregnancies among their peers and 75% of them felt that they had lacked information about population, sex and reproduction but they did not know where to go for reliable information.

Hunt (1976:163-164) observed the major social consequences of adolescent fertility interrupted education and career opportunities which lead to a host of social sufferings. He puts it clear that the actual births of out-of-wedlock had untold social consequences varying from culture of one place to another place. These consequences lead to pre-mature marriage which result to untold misery.

on the couple due to economic unpreparedness. It concludes that such marriage end up in divorce and more social sufferings.

Baldwin and Cain (1980:34-43) the two have associated teenage childbearing with social and economic consequences for the young adolescent mother. As a result of the young age of the mother, they suggest the following as some of the problems which include reduced occupational attainment of the mother, increased welfare dependency, low education, low income, greater marital instability, high fertility, marital disruption and physical health problems.

Cutright (1972:24) has suggested that possible causes of rising teenage illegitimacy may not be due to so much to increase in the extent to which young unmarried people are sexually active but may be due to recent health status changes.

Presser (1974:8-14) gives major reasons for non use of contraceptives and advocates for education for high and junior high schools to help close the knowledge gap. Courses which teach the biology of human reproduction are not likely to solve the problem unless an accurate notion of risk of pregnancy is stressed and practical advice on effective contraception offered.

Edwards et.al (1980:32) in a study on adolescent prevention services in high school clinics discovered that most of the teenage pregnancies experienced by project participants are unplanned as a result of lack of knowledge about the risk of pregnancy or how to prevent it or the unavailability of services designed for adolescents. He recommended a project with a comprehensive medical and educational programme on adolescents.

Jones (1986:53-63) advocates for more openness about sex related matters in the society as it is correlated with low levels of teenage pregnancy. On the same point of sex education, Dawson, 1986 has documented that exposure to formal sex education courses appear to have no consistent effect on the subsequent probability that a teenager will begin to have intercourse though it influences contraceptive knowledge and behaviour.

Zelnik and Kim (1982) argued that sex education helps teenagers avoid pregnancy through use of contraceptives at first intercourse and does not result in increased sexual activity among teenagers

Markavonnakit and Bennet (1978) carried out a study on the health consequences of induced abortion in rural North West Thailand. They sampled a closed population of women who had abortions within a fixed period of time. These women were then classified according to those requiring and those not requiring hospitalization. The findings of the study indicated a very high rural abortion rate of 107 per 1000 women of reproductive age (15-44). This was attributed to very poor availability of contraceptives.

Cooper (1972) documented that teenagers who for the first time sought professional help to obtain contraceptives were previously sexually active. The data suggested that contraceptive information and educational programs directed at minors were to be a significant factor in their decision to become sexually active as well as the fact that if a minor requested for contraceptives, she was in great need of it, both in terms of prior onset of coital activity and length of time she had been exposed to the risk of pregnancy.

Studies in Africa

Studies which have been done in some parts of Africa also show that adolescent fertility has far reaching effects to both the child and the mother on both social, economic and cultural aspects.

Feyisetan and Pebly (1986:343-354) carried out a study on Pre-marital sexuality in Urban Nigeria. According to this study, relatively few pre-marital sexually active women attempted to avoid pregnancy by using a contraceptive method. Underlying this concern is the observation that girls and women who became pregnant out of a socially recognized marriage are much more likely to seek or attempt induced abortion and if they give birth may be more likely to abandon their children or provide them with poorer care.

Kulun (1988:727-735) observed that adolescents of today were engaging in various sexual practices at early ages and as a result were at great risk of contracting AIDS, conceive while still very young and suffer many health consequences associated with early pregnancy; abortion and childbearing.

Studies in Kenya

Studies in Kenya have confirmed adolescent fertility increase as also described by studies in other countries. Concern has been expressed repeatedly in the country over the social, health and economic problems related to every pregnancy.

Oucho (1987:1-8) looked at the social and economic consequences of adolescent fertility with attempts to expound on the major social and economic consequences of adolescent fertility. He considered the adolescence to be ages 15-24; for those married or not married. He says that out-of-wedlock birth may pave the way for prostitution, contributes to population growth, as well as may lead to high child morbidity and eventually mortality due to the inexperience of young mothers. He says that adolescent fertility is influenced by the characteristics of adolescents. Short sighted love which may lead to increased sexuality tends to influence adolescent pregnancy which in turn leads to premature childbirth, as a result future opportunities are curtailed.

Gachuhi (1980:1-12) identified two causes of teenage pregnancy as disruption of traditional controls and inadequate school education, which include lack of appropriate knowledge about reproduction. He lists major consequences of adolescent fertility as nutrition problem, psychosocial stress, rural-urban migration and unemployment. He recommends for population education and family life education to in and out of school going adolescents.

Omondi-Ahawo (1980:106-119) through examining age at first marriage, found that although age at first marriage had gone up due to increased school enrolment for women, adolescent fertility was

on the increase in Kenya. In conclusion he said that delaying marriage for one or two years was unlikely to have any significant effect on fertility. He continued to observe that where early marriage was permitted, the resulting maternal and child mortality as well as perpetuation of the low status of women could contribute to high fertility.

Rogo (1987:1-49) argued that among the factors associated with adolescent fertility were social and cultural factors. He noted that with increased modernization, the roles of grandparents, aunts and uncles in educating and modelling the adolescents in matters related to sex had shifted to school, peers, films and magazines. All these provide the youth with knowledge related to sex thus increasing the opportunities for indulging in pre-marital sex. The study came up with the following recommendations;

- *That Family Planning programmes to be intensified in areas where illegal abortion and unwanted pregnancies were high.
- *That counselling and family planning services to be made available to anyone who had an abortion.
- *That education on reproductive health and Family Life Education to be intensified at all levels; family, schools, media, churches and seminars.
- *Need for parents to change their attitudes towards unwanted pregnancies and to help them adopt a more supportive and understanding role.
- *Need to identify and define reasons why unwanted pregnancies occur.

Khasiani (1985:29-46) carried a research study on adolescent fertility in Kenya among high school students in Nairobi schools. The study involved 109 girls who had dropped out of school and those who were currently pregnant but still enrolled in school. The study found that for those adolescents who were pregnant, it was not their wish to become pregnant. The school girls who got

pregnant and eventually dropped out of school were usually from poor families. Dropping out of school was disastrous in society where economic advancement was linked to educational level. Women involvement in development process was undermined by these drop out rates.

Gyepi-Garbrah (1985:2-41) carried out a study on adolescent fertility in Kenya and used secondary sources of information from censuses, surveys, research reports and administrative publications. He did an analysis on the social-economic characteristics of adolescents and also the reproductive behaviour of adolescents. He came up with the following results;

- *That adolescents were generally aware of contraception, but very few used them.
- *That adolescent marriages tended to be less stable than those within the older general population.
- *That youth population aged 15-24 was growing faster than the general population.
- *That adolescent population was more educated than the adult population aged 25 years and above.
- *That adolescents tended to live in urban areas.
- *That adolescent professed more to christian faith than the rest of the population.
- *That because of increased schooling among adolescent, their labour force participation rates were low and falling compared to those of the adult population.
- *That polygamy continued to be an important aspect of Kenya's culture. Of married female adolescents aged 15-24, most of them were married to husbands with more than one wife.
- *That the adolescent population is marrying at later ages.

Mang'oka (1987:28-29) carried out a study on social consequence of adolescent fertility in Kenya. He aimed at finding out the extent of the problem of adolescent fertility e.g school drop outs for girls due to pregnancy or abortion. The study also strived to look at these social consequences at the

individual, family and community levels. The study found that there was scanty information on the subject and the population growth rate was high. The study specified social consequences of adolescent fertility such as dropping out of school prematurely which limits career development and entry into gainful employment thus triggering off loss of a host of opportunities culminating in suffering and perpetual poverty on the part of the adolescent. In cases where the girl was not married, social discrimination and frustrations were targeted to her and the baby. Such social pressures were likely to lead to forced marriages which were usually unstable. He recommends that this can be reduced by use of contraceptives among the youth, introducing sex education in schools as well as out of school to the youth.

Ferguson (1988:35-37) carried out a study involving 20,000 secondary school girls and 9,000 primary schools girls in 166 Kenyan schools. The study reported the highest pregnancy related school drop out rates in Harambee schools, Day schools, and Mixed schools. Drop out rates were also found to be highest among standard eight and form four students. On the characteristics of the drop outs, the study found that the drop outs tended to be older than the class average; and also that the dropouts tended to be under-achievers academically.

Ocholla-Ayayo (1991:66;129;139) found that a large number of children were born outside wedlock and he observed that the trend was likely to continue to the future. He attributed the problem of increasing adolescent pregnancies to erosion of traditional rules which used to control premarital heterosexual union which had resulted in a higher rate of child birth to single women and the breakdown of the adherence of socio-cultural measures particularly the sex education systems.

Njau and Rogo (1985) in their study on early adolescent reproductive health in Kenya, showed that sexual relations begun early in the life cycle, and that by the age of sixteen the majority of young people in Kenya were sexually active. They also found that the vast majority (80% or more) of such relationships involved sexual intercourse which was both unplanned and unprotected and that in Kenya

a third of sexually active girls claimed that initial experience was the consequence of trickery or coercion. They have indicated that as a consequence of the above behaviour, unplanned pregnancy was to be an experience of one girl in every ten presently enrolled in upper primary or secondary schools and some 16,000 to 13,000 girls drop out of school annually due to unintended pregnancy.

Kekovole (1991) on the basis of a youth fertility management survey, observed that major problems facing the youths include drug abuse, early pregnancy, prostitution and unemployment. He recommended for creation of more counselling facilities as well as the government to consider its policy regarding provision of contraceptives to the youth.

Njogu (1980) carried out a study among school girls in Naivasha and found that girls who dropped out of school due to pregnancy had psychological problems and were not able to feed and clothe their babies adequately.

Okumu (1989) in a study of 500 antenatal female adolescents in Nairobi, it was found out that sexually active adolescents suffer a disproportionate increase in STD rates compared to adults. The younger the adolescent, the higher the rates STD infection rates among teenaged women 15-19 years old who comprised 18 per cent of the sample size. The highest infection rates for gonorrhoea 10% trachomatous 10% virginals 28% and syphilis 5% were found among teenagers between 15-19 years old.

According to the *1985 State of World Population*, enabling women to make decisions about childbearing allows them to allocate time for education, economic and political activities. Unplanned pregnancies directly affect women's life chances. Thus, a need to provide adolescents with information and services to combat unwanted pregnancy is paramount.

Rogo et al (1986) in a study conducted at Pumwani Maternity Hospital between February and March 1986 which used hospital files of mothers aged fourteen to twenty years who delivered. The study revealed that births to adolescents accounted for 28.9% of the total deliveries at the hospital. It also revealed that majority of

the adolescent mothers were single however the number of married adolescent mothers exceeded that of the single mothers from the age of seventeen to twenty years. Married adolescent mothers were 71.8% compared with single mother 28.2%.

Kenya Contraceptive and Prevalence Survey (KCPS 1989) showed that whereas the prevalence of pregnancy decreased between 1 and 3% in age-group 20-49, it remained the same for the age-group 15-19. According to KDHS survey data, of those adolescents aged 15-19 who get pregnant, 28% do so after marriage, 32% before marriage and 40% never get married.

Kenya Demographic and Health Survey (KDHS 1993) estimated fertility or birth rate for 15-19 years old as 110 births per 1000 which translates into 142,000 births per year or 11.4% of all births. The average age at menarche had fallen to 13 years. It was further reported that childbearing begun early in Kenya. One in five teenage women (15-19) had began child bearing either given birth or was pregnant with her first child. By the time they reached 19 years, 40% of the women had begun child bearing. The survey further indicated that 17% of all 15-19 years old women had at least one child and another 8.6% were pregnant at the time of the survey. Despite of the general fertility decline throughout Kenya, the rate for the adolescent group was much slower than for the older age group.

A Germany organization (GTZ, 1988) sponsored review of adolescent pregnancy at Kenyatta National Hospital found that 11 per cent of the total deliveries were to adolescents 19 years old or below of which 25 per cent were below 16 years. In the same hospital, the youngest recorded delivery was by a mother of 10 years and 3 months old. She must have conceived at age 9 1/2 years and most likely engaged in sexual intercourse even earlier (Ladipo, 1992).

Summary of literature review

A summary of literature review shows that sexual activities of the adolescents are characterised by a markedly low use of contraceptives due to limited access to contraception services including information. Most of them receive information from friends, books and magazines while churches, parents and leaders mainly condemn contraceptive use by adolescents. Literature review has also

shown that there is lack of clear focused services for youth to access to contraceptives in the country. Literature review has shown that a combination of early sexual activity accompanied by low contraceptive use leads to early pregnancy among adolescents. Hence 55% of Kenyan women become pregnant by age 20 (Rogo 1994:2). Teenagers constitute a high percentage of all maternity cases.

Research findings also indicate that adolescent fertility is on the increase in Kenya and in order to avert pregnancy related consequences, most adolescents resort to abortion. The methods used by adolescents to induce abortion are dangerous and often result in serious complications leading to death. Adolescent fertility has also been associated with sexually transmitted diseases and HIV which are quite common among young people due to their early exposure to sexual behaviour, multiplicity of sexual partners, lack of sexual information and scarcity of treatment services targeted at adolescents.

Writers have recommended that young people everywhere, in particular, young girls, need more and better schooling and job opportunities. They need and deserve more support from their families and communities in making decisions that are right for them about when and if to have a child. They need better access to family planning and reproductive health services to help them achieve these goals. Further recommendation of literature review include permitting and encouraging young pregnant women to continue and complete secondary school, during pregnancy and after birth. To institute or expand sex education programmes in schools. Writers have also recommended that national health policies need to adopt a non-punitive approach which provides quality post-abortion care that includes provision of contraception information and counselling of the youths in order to avoid repetition of abortions.

Identified gaps

Coverage: Studies done in Kenya have not really focused their coverage on characteristics of adolescent mothers. A few of those studies that have been done have not focused on Kisii district in particular. For example Gyepi-Garbrah (1985) carried out a study on adolescent fertility in Kenya and used secondary sources of information from censuses, surveys, research reports and administrative

publications. The study did an analysis on the social-economic characteristics of adolescents and also the reproductive behaviour of adolescents. Mang'oka (1987) also carried out a study on social consequence of adolescent fertility in Kenya with an aim of finding the extent of the problem at the individual, family and community levels. Oucho (1987) also looked at the social and economic consequences of adolescent fertility with attempts to expound on the major social and economic consequence of adolescent fertility. This study views the above as national studies representing the whole of Kenya. Therefore in order to come up with a district level study, this study will cover Kisii district.

It is from the above pointed gap and their likely adduced remedies that this study intends to use 1993 Kenya Demographic and Health Survey (KDHS) to capture information from Kisii district on characteristics of adolescents.

2.2 CONCEPTUAL MODEL

The social-economic, socio-cultural and demographic variable do not affect fertility directly but they do so indirectly through the proximate determinants. For example, a woman's level of education does not affect her fertility directly. An educated woman is able to purchase any contraceptive since she has an income. She is also well informed about contraceptive methods and can therefore use any suitable one. The fact that most educated women are working means that they are occupied during the day such that when they come in the evening, they are too tired to indulge in sexual intercourse. Ocholla-Ayayo (1991:108,110) says "In the short run, education can lower fertility levels since educated people will readily adopt modern methods of contraception or retain hope for new

opportunities. A rise in women's education production produces a corresponding rise in the age at first marriage and is further associated with a decline in fertility among educated women."

Socio-cultural variables such as religion also can not affect directly fertility but do so through the proximate determinants. Certain religions, such as the catholic, do not approve the use of contraception. This means that women who uphold such beliefs are not using modern contraceptives to prevent pregnancy. " The belief that a child is a gift or a blessing from God stems from these ethics or customs so widely practised. Such belief is likely to prevail into the future. Children are considered to be ancestors who have been reborn. They are often named after departed grandparents. This custom is practised among christians, Muslims and believers of African Traditional Faith alike. The fear that a family line may come to an end because of lack of a male heir is a deeply socio-cultural conviction." Ocholla-Ayayo (1991:141).

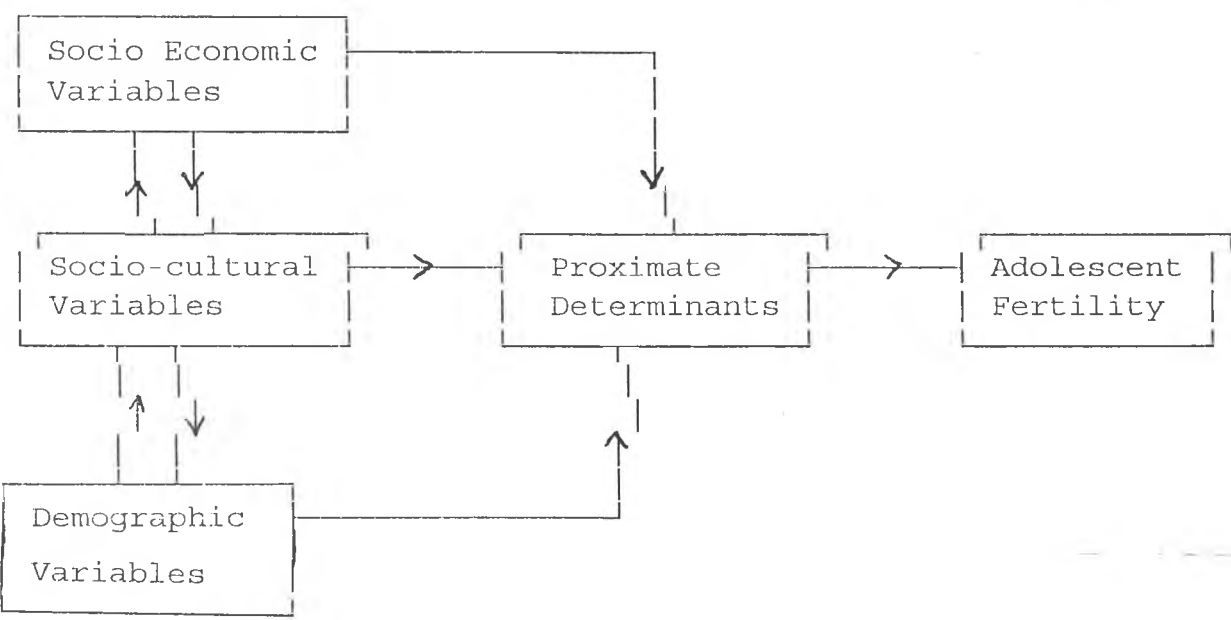
Demographic factors such as age at first intercourse do affect fertility directly. Early age at first intercourse combined with high frequency of intercourse and non-use of contraceptives leads to high fertility.

The above three examples explain how fertility is affected by scio-economic, socio-cultural and demographic variables through the proximate determinants such as contraceptive use and frequency of intercourse.

Bongaarts (1978) argued that the intermediate fertility variables (proximate determinants) affect fertility directly and if they change then fertility necessarily changes also. While this is not necessarily so for the indirect determinants such as income or education.

From the above argument the conceptual model, adopted from Bongaarts (1978) is as follows;

2.3 Fig:1 CONCEPTUAL FRAMEWORK



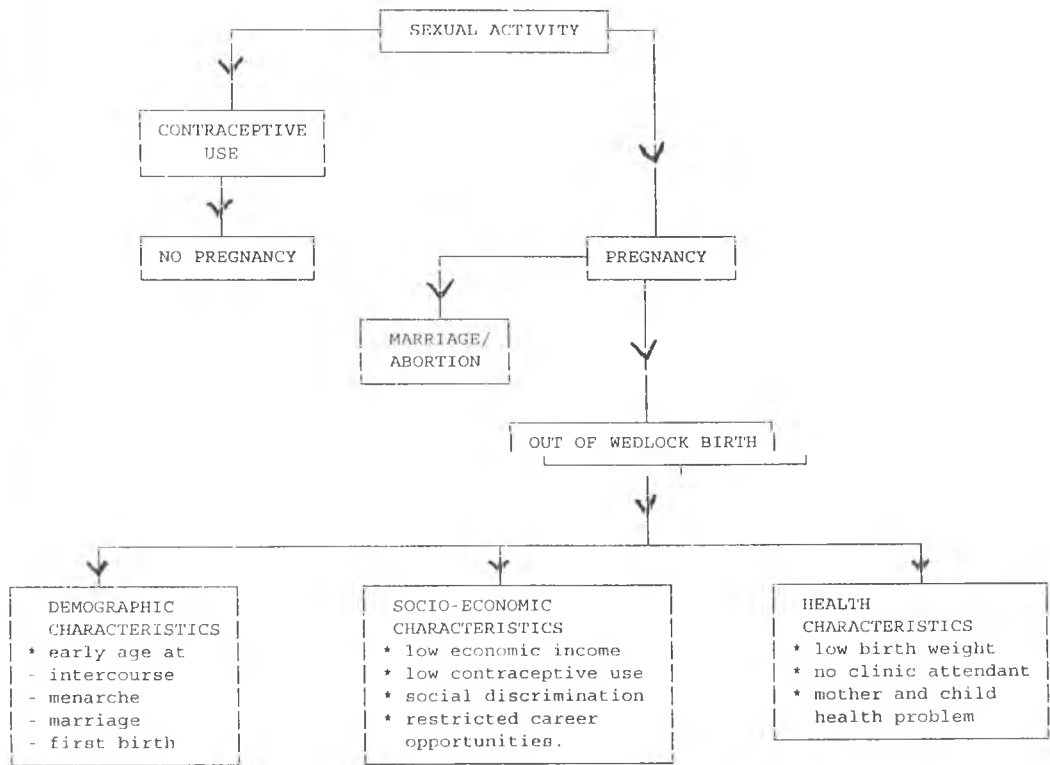
Source:Adopted from Bongaarts model,(1978:515).

2.4 OPERATIONAL FRAMEWORK

In order to examine some of the characteristics of adolescents, the following framework will be used on this study. The framework considers adolescent fertility and their characteristics. Due to lack of adequate data, this study will not be able to show all that which is indicated in the framework. Variables that are included in health characteristics like low birth weight, no clinic attendance and health problems for both mother and child will not be included in this study.

Fig:2

THE PROPOSED OPERATIONAL FRAMEWORK



Source:by author

2.5 OPERATIONAL HYPOTHESIS OF THE STUDY

- (a) Mean age at first birth is decreasing with time.
- (b) Average age at first sexual intercourse is very low for adolescents when compared with the rest of the women.
- (c) Majority of adolescent mothers continue having sex while breast feeding.

- (d) Majority of adolescents start engaging in sexual activities
- (e) Majority of adolescents do not use contraceptives.
- (f) Majority of adolescents engage in agricultural activity as a source of income.
- (g) Adolescents are likely to be more educated when compared with the rest of the women.

2.6 CONCEPTUAL HYPOTHESIS

- 1) Socio-cultural variables can influence adolescent fertility.(Sex while breast feeding, marital status)
- 2) Socio-economic variables can influence adolescent fertility. (Contraceptive use, education, occupation)
- 3) Demographic variables can influence adolescent fertility.
(Age at first marriage, age at first birth, age at first intercourse)

VARIABLES FOR STUDY

In studying adolescent fertility in Kisii District, a number of variables have been considered which will eventually help in realizing the objectives of the study.

2.7 INDEPENDENT VARIABLES

These are variables whose change either positively or negatively will have an effect on the character of the adolescent. The following are considered in the study among others.

1. Education: This refers to the educational level attained. This is categorised into no education, primary education and secondary education.
2. Occupation: This refers to any activity depended upon. It is categorised into sales, manual, agricultural, and skilled professions.
3. Age at first birth: This refers to age the adolescent had her first baby.

4. Age at first marriage: This refers to the age that a woman enters into a conceptual union.
5. Sex while breast feeding: This refers to those women who continue having sex while breast feeding.
6. Marital status: It refers to the state of union in which a woman is involved in. Such union include marriage, single,divorced, separation, widowhood or widowerhood and consensual union.
7. Contraceptive use: The means or methods used to prevent or delay conception. The number of women who use these methods.
8. Age at first intercourse: This refers to age at which an adolescent start engaging in sexual intercourse.

2.8 DEPENDENT VARIABLES

This is the variable which shows a pattern that is determined by the independent variables. In this study, adolescent fertility is the dependent variable which will be considered against the above variables. Adolescent fertility is measured whether or not the respondent in question has had a child.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter covers sources of data, its reliability and quality and methods of data analysis. This study will use cross tabulation technique in analysis. The first part of this section presents data source and the second part presents the methodology of data analysis.

3.2 DATA SOURCE

The data for this study were drawn from the 1993 Kenya Demographic and Health Survey (KDHS). The 1993 Kenya Demographic and Health Surveys (KDHS) was national representative survey of 7,540 women age 15-49 and 2,336 men. The Kenya Demographic Health Survey (KDHS) was designed to provide information on levels and trends of fertility, infant and child mortality. Family planning knowledge and use, maternal and child health, and knowledge of AIDS. In addition, the male survey obtained data on men's knowledge and attitudes towards family planning and awareness of AIDS. The data are intended for use by programme managers and policy makers to evaluate and improve family planning and maternal and child health programmes.

The 1993 Kenya Demographic and Health Survey (KDHS) national survey was carried out by the NCPD in collaboration with the Central Bureau of Statistics (CBS). Macro international inc. of Calverton, Maryland (USA) and the local office of Agency for International Development (USAID).

The 1993 Kenya Demographic and Health Survey (KDHS) excluded all the three districts in North Eastern province and four other northern districts (Samburu and Turkana in Rift Valley province and Isiolo and Marsabit in Eastern province together the excluded areas account for less than 4% of Kenya's population. The Kenya Demographic and Health Survey (KDHS) utilised a two, stratified sample consisting of 536 sample units (Clusters).

Kisii district was one of the districts that were covered in the 1993 Kenya Demographic and Health Survey. In Kisii district, a total of 525 households were selected for survey out of which only 488 households were successfully interviewed. Of those women who were interviewed, 237 were adolescents out of whom 36.7% (87) were adolescent mothers. There were 137 women aged 25-34 and 116 women aged 35-49 years. In the study, women were asked about their age, marital status, education level, occupation, religion. On religion, most of the women were found to be christians. Results on education level in Kisii showed that it was inversely related to age; that is older women were less educated than younger women. A good number of the women interviewed in Kisii district were found to be residing in rural areas where they were found to be disadvantaged in access to media.

For the purpose of this study, adolescents will be considered women aged between 15-24 years both married and unmarried while adolescent mothers will be considered those women who had at least a child as at the time of the survey.

3.3 METHODOLOGY

The study will utilise descriptive statistics. The Cross tabulation method is deemed fit for the analysis of this study because of its simplicity and appropriateness for purposes of comparison as it tests for association between each category of the selected variables. Frequency distribution tables and percentages will be used for comparisons of various distributions of phenomena.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF DATA

4.1 INTRODUCTION

This chapter presents the results of the analysis of data. In order to achieve this, a sample of women aged 15-49 has been used. This has been categorised into three groups 15-24, 25-34, 35-49. To analyze the characteristics of adolescents, women aged 15-24 have been compared with the rest of the women. The first section of this chapter shows how an analysis and interpretation of data is to be presented. The second section presents the sample characteristics of the total women interviewed. The third section presents means and cohort analysis on some variables and results from cross tabulations.

4.2 ANALYSIS AND INTERPRETATION OF DATA

As pointed earlier in chapter three, this study has made use of descriptive statistics and bar graphs for pictorial presentation. Cross tabulations have been used to assess the association between the dependent and the independent variables. The chi-square test has been used to test the null hypothesis that there is no relationship between the dependent and independent variables. The chi-square test has been set at 0.05 level for all the cross tabulation in the study. If the significance level is greater than 0.05 we reject the hypothesis but if it is less than or equal to 0.05 we accept the hypothesis and reject the alternative hypothesis, that there is a relationship between the dependent and the independent variable. Tables will be presented and the relationship between independent variables given. Means and cohort analysis on some variables will be done to show the trend of adolescent fertility.

4.3 SAMPLE CHARACTERISTICS

A total of 525 women were interviewed in Kisii district during the 1993 (KDHS). Table 4.1 below shows that almost half of the women interviewed were adolescents aged between 15-24 because they account for 237 women out of 525 women interviewed. There were 55 women aged 25-

29 age group while the number increased to 80 for women in 30-34 age group. There were fewer women aged 35 years and above compared with women in younger ages. There were 37 missing cases making exactly 488 women who responded to the question.

Table 4.1 The distribution of women interviewed in Kisii district by 5 year age groups; KDHS 1993.

Age-group	No of women	Percentage
15-19	139	28.5
20-24	98	20.1
25-29	55	11.3
30-34	80	16.4
35-39	42	8.6
40-44	36	7.4
45-49	38	7.8
Total	525	100

Source:Primary analysis of the 1993 KDHS data.

4.4.1 AGE AT FIRST BIRTH

Out of the total 525 women who were interviewed in Kisii district during the 1993 (KDHS), 237 were adolescents aged 15-24. 36.7%(87) of the adolescents interviewed had given birth. 91.8%(124) of the 135 women in 25-34 age group had given birth at adolescent age while 87%(101) out of 116 women also had a child at adolescent age among those aged 35-49 years. This shows that among this age group almost all the women were having a child by age 24. There were 150 adolescent who did not gave birth at a adolescence In age group 25-34, 11 women fif not give birth during adolescence period while there were 15 in age group 35-49 who also did not give birth Percentages do

not add to 100% because there were 37 missing cases which makes exactly 488 women interviewed.
Table 4.2 Distribution of women aged 15-49 interviewed in Kisii district by age and birth at adolescent, Kisii district: KDHS 1993.

Age-group	No of women	Given birth at adolescence	Did not give birth at adolescence
15-24	45.1% (237)	36.7% (87)	.63.3% (150)
25-34	25.7% (135)	91.8% (124)	8.2% (311)
35-49	22.1% (116)	87% (101)	13% (15)
Total	(525)	(312)	(176)

Note:Figures in brackets denote the number of cases.
Source:Primary analysis of the 1993 KDHS data.

4.4.2 Mean age at first birth

The average age at first birth seem to be decreasing with age group. The average age at first birth for women aged 35 years and above is 18.7 years while for those in age group 25-34 is 18.4 years and for adolescents aged 15-24 is 17.5 years. The results show a clear decline in age at first birth for women in younger ages especially adolescents. These results confirm that adolescent sexual activity is occurring at younger ages resulting to early age at birth. Ocholla Ayayo (1991:132), has argued that lowered age at first birth has been associated with menarche which comes too early as a result of improved nutrition.

Table 4.3 Percentage distribution of women aged 15-49 by average age at first birth, Kisii district: KDHS 1993.

Age-group	Average age at first birth
15-24	17.5
25-34	18.4
35-49	18.7

Source:Primary analysis of KDHS data.

4.4.3 Trends in mean age at first birth

Table 4.4 shows the mean on age of respondents at first birth for the 1968-1978, 1957-1967, 1946-1956 cohorts. The table shows that there is some decline in age at first birth over years although occurring at a slower rate. Mean age at first birth decreased from 18.6 years for women in 1946-1956 cohort to 17.7 years for 1968-1978 cohort who are the adolescents. Cohort analysis shows that age of respondent at first birth has decreased by one year. First births take place during the adolescent age.

Out of 353 total cases analyzed in trends in mean age at first birth, there were 149 missing cases
Table 4.4 cohort analysis on women aged 15-47 on mean age at first birth, Kisii district: KDHS 1993.

Age-group	Cohort	Mean age at first birth
15-25	1968-1978	17.7 (78)
26-36	1657-1967	18.4 (82)
37-47	1946-1956	18.6 (44)

Note:Figures in brackets denote number of cases.

Source:Primary analysis of KDHS data.

4.5 AGE AT SEXUAL INTERCOURSE

4.5.1 Mean age at first sexual intercourse

Table 4.5 on mean age at first sexual intercourse shows that most women especially adolescents start

engaging in sexual intercourse at very young ages. There seem to be a sharp decline in mean age at first sexual intercourse from 18.4 for women aged 25-34 to 10.3 for women aged 15-24 who in this study case are adolescents. Mean age at first sexual intercourse for women aged 35-49 declines again to 15.7 from 18.4 for those women aged 25-34. One clear characteristic of adolescent fertility seen from the table is that mean age at first sexual intercourse has come down drastically from 18.4 years to 10.3 years in only after 10 years. This confirm that adolescent fertility is very high due to early engagement in sexual intercourse. As noted elsewhere below, contraceptive use is very low and with early age at first sexual intercourse, adolescent fertility is expected to be very high.

The chi-square test gives a significance at zero level which shows that there is a very strong relationship between age group and age at first intercourse. Age influence adolescent fertility. The early the age at first sexual intercourse the higher the adolescent fertility.

Table 4.5 Percentage distribution of women aged 15-49 by average age at first sexual intercourse, Kisii district: KDHS 1993.

Age-group	Average age at first intercourse
15-24	10.3
25-34	18.4
35-49	15.7

Source:Primary analysis of KDHS 1993.

4.5.2 Trends in mean age at first sexual intercourse

Table 4.6 show the mean age at first intercourse for the various birth cohorts of women. The table shows a downward trend in mean age at first intercourse. Analysis show that women born 1946-1956 that's those aged between 37-47 years had a mean age at first intercourse at 15.6 years. The trend decreases by a meagre fraction to 15.5 years for women born between 1957-1967 that's 25-35 years of age. There is a sharp drastic decline in age at first intercourse for the 1968-1978 cohort from the

previous 15.5 years to 9.9 years. This trend shows that age at first intercourse for current adolescents has decreased sharply for the last 10 years by almost 5 years thus confirming that adolescent fertility is high. Out of the total 353 cases analyzed in trends in mean age at first sexual intercourse, there were 5 missing cases.

Table 4.6 cohort analysis on women aged 15-47 on mean age at first intercourse, Kisii district KDHS: 1993.

Age group	cohort	mean age at first intercourse
15-25	1968-1978	9.9 (220)
26-36	1957-1967	15.5 (84)
37-47	1946-1956	15.6 (44)

Note: Figures in brackets denote the number of cases.
source:Primary analysis of KDHS data.

4.6 AGE AT FIRST MARRIAGE

4.6.1 Mean age at first marriage

Women distribution by age at first marriage shows that the average age at first marriage is age 18. This shows that age at marriage takes place during the adolescent age. When compared with other women, the mean age at first marriage is fairly the same for adolescents and that of women aged 25-49. For women aged 15-34, age at marriage is given at 18.3 years while for those aged 35-49 years, it is 18.6 years. This shows some slight decline in age at marriage for women in younger ages. This confirm that most women get married at adolescent age. Ocholla Ayayo (1991:132), has associated this drop to the social-economic change which appears to have a strong influence on marriage patterns and desire to have many children.

Table 4.7 Percentage distribution of women aged 15-49 by average age at first marriage, Kisii district: KDHS 1993.

Age-group	Average Age at first marriage
15-24	18.3
25-34	18.3
35-49	18.6

Source: Primary analysis of 1993 KDHS data.

4.6.2 Trends in mean age at first marriage

Table 4.8 shows the mean age at first marriage for the various birth cohorts of women. The table shows that there is some decline in age over the years although at a very slow rate. Age at first marriage for 1946-1956 cohort that's women aged 37-47 years is reported at 18.9 years. Women aged 26-36 years which is represented by 1957-1967 cohort have a mean age of 18.5 years while it decreases to 18.2 years for 1968-1978 cohort which represent the adolescent women. Although decreasing slowly, cohort analysis has shown that mean age at first marriage is averagely the same for all women in the three cohorts. Age at first marriage takes place during the adolescent age. Out of the 353 cases analyzed in trends in mean age at first marriage, there were 161 missing cases.

Table 4.8 cohort analysis on women aged 15-47 on mean age at first marriage, Kisii district KDHS: 1993.

Age-group	Cohort	Mean age at first marriage
15-25	1968-1978	18.2 (65)
26-36	1957-1967	18.5 (83)
37-47	1946-1956	18.9 (44)

Note:Figures in brackets denote the number of cases.
source:primary analysis of KDHS 1993.

4.7 Marital status

Percentage distribution of women by marital status shows that 32%(156) of all the total women interviewed were single. 98.1%(153) of those who were single were adolescents as compared to only 1.9%(3) of the rest of the women. 24 out of 153 adolescents who were single were adolescent mothers while 51 out of 67 married adolescents were mothers. All the 16 adolescents who were in other marital status including those either living together, widowed or divorced were all adolescent mothers. There were no women aged 35 years and above who were not married. 57%(278) of the total women were married of whom only 24.1%(67) were adolescents aged 20-24 while 75.9%(211) were the rest of the women. 11%(54) are women in other marital status who include those living together, widowed and divorced. From the table we learn that a large number of adolescents aged 15-24 are not married. The fraction married is so low when compared with the rest of the women interviewed.

There is a very strong relationship between age of the respondent and current marital status because the chi-square test gives a significance at zero level.

Table 4.9 Percentage distribution of women aged 15-49 by age and Marital status, Kisii district: KDHS 1993.

Age-group	Marital status		
	Single	Currently Married	Others
15-24	98.1% (153) a (24) b	24.1% (67) a (51) b	38.1%(16) a (16) b
25-34	1.9%(3)	41.4%(15)	34.8%(5)
33-49		34.5%(96)	27.1%(5)
Total	32%(156)	57%(278)	11%(54)

Note: Figures in brackets denote the number of cases.

a - Represent figures of the adolescent women.

b - Represent cases of the adolescent mothers.

Source:Primary analysis of the 1993 KDHS data

4.8 Education attainment

The percentage distribution of women by educational attainment shows that 48.2%(235) of the total women interviewed had not completed primary education of whom 55.3%(130) were aged between 15-24 years while 23%(54) were aged 25-34. 16%(78) had completed primary education of whom 59%(46) were aged 15-24 and 32.1%(25) were aged 25-34. Only 3.7%(18) had completed secondary education of whom 88.9%(16) were adolescents aged 15-24. Out of the 87 adolescent mothers, 3 had no education, 38 had not completed primary level while 21 had completed primary level. Those who had completed secondary were 8 while 17 adolescent mothers had not completed secondary level. Educational attainment levels show that more than half of the women interviewed in Kisii district had attained at least primary education level and below. Only a very small number completed secondary education thus showing low level of education. When compared with all the women interviewed, adolescents have averagely higher educational level than the rest of the women in the study.

The observation for the chi-square test is that there is a very strong relationship between age of the respondent and educational attainment. The chi-square test with a significance level at zero confirm that education level is highly related to age. Younger women are more likely to be educated and to be more educated than the older women. Education level of older women is lower than that of women in younger ages. Ocholla Ayayo (1991:91) says," There is relatively early exposure to sexual relations, and even marriage for those who don't go beyond the primary level of education". There were 37 missing cases.

Table 4.10 Percentage distribution of women aged 15-49 by educational attainment, Kisii district: KDHS 1993.

Age-group	Education attainment				
	Not educated	Incomplete primary	Complete primary	Incomplete secondary	Complete secondary
15-24	6.8% (5) a	55.3% (130) a	59% (46) a	48.2% (40) a	88.9% (16) a
	(3) b	(38) b	(21) b	(17) b	(8) b
25-34	20.3% (15)	23.1% (54)	32.1% (25)	47% (39)	11.1% (2)
35-39	73% (54)	21.7% (51)	9% (7)	4.8% (4)	-
Total	15.2% (74)	48.2% (235)	16% (78)	17% (83)	3.7% (18)

Note: Figures in brackets denote the number of cases.

a -Represent figures of the adolescent women.

b -Represent cases of the adolescent mothers.

Source:Primary analysis of the 1993 KDHS data.

4.9 Sex while breast feeding

On sex while breast feeding, interviewed women were asked whether a mother should wait until she has completely stopped breast feeding before starting sexual relations again, or does not matter. Table 4.11 below shows that 5.7%(28) of the total women interviewed prefer waiting until they finish breast feeding to start engaging in sex. 85.7%(24) of those who prefer to wait are aged 15-24 while 14.2%(14) are the rest of the women aged 25-49. A high percentage of 94.9%(460) of the total women with children prefer to continue having sex while breast-feeding. Not all adolescent mothers were having breast feeding children by the time of the study. There were only 21 breast feeding adolescent mothers during the time of the study who preferred to continue with sex while breast feeding. This thus raises chances of getting another child soon after birth. When compared with older women, a bigger number of adolescents with children prefer to wait until after breast feeding to start engaging in sexual intercourse. But the number of those adolescents who prefer not to wait is half that of the rest of the women indicating that most of them prefer to continue with sex while breast feeding thus increasing chances of another birth.

The chi-square test at a significance level of .00027 shows that there is an association between age group and sex while breast feeding. A higher number of those who wait are in the younger ages. There were 37 missing cases.

Table 4.11 Percentage distribution of women aged 15-49 by age and sex while breast-feeding, Kisii district: KDHS 1993.

Age-group	Sex while breast-feeding	
	Wait	doesn't Matter
15-24	85.7% (24)	46.3% (213)
25-34	7.1% (2)	28.9% (100)
35-49	7.1% (2)	24.8% (114)
Total	5.7% (28)	94.3% (460)

Note: Figures in brackets denote the number of cases.
Source: Primary analysis of the 1993 KDHS data.

4.10 Contraceptive use

About 72%(354) of the total women interviewed were not using contraceptives and 60%(214) of them were adolescents. Only 27.5%(134) were using contraceptives of whom 83.8%(17) were women aged 25-49. Only 16.2%(23) of all the adolescents were using contraceptives. 20 out of all the 23 adolescents who were using contraceptives were those with at least a child. This shows that almost all those adolescents who were using contraceptives were adolescent mothers. This comes out as a clear characteristic that it is not only the adolescents who do not use contraceptives but all the women in the study area. The low usage for adolescent mothers could be due to unavailability of contraceptives to unmarried adolescents due to lack of information or due to policy which exclude adolescents from using contraceptives. Table 4.12 shows that although contraceptive practice is low, adolescents are more likely to use contraception than the older women.

The observation for the chi-square test gives a significance at zero showing that there is a strong relationship between age and contraceptive use. The younger the age the lower the usage. This could be due to policies which do not allow usage of contraceptive by adolescents who are not married.

Table 4.12 Percentage distribution of women aged 15-49 by age and Contraceptive use, Kisii district: KDHS 1993.

Age-group	Contraceptive use	
	Not using	Using
15-24	60.5% (214) a (67) b	16.2% (23) a (20) b
25-34	22.6% (80)	35.7% (54)
35-49	16.9% (60)	48.1% (56)
Total	72.5% (354)	27.5% (134)

Note: Figures in brackets denote number of cases.

a -Represent figures of the adolescent women.

b -Represent cases of the adolescent mothers.

Source:Primary analysis of the 1993 KDHS data.

4.12 Occupation

Table 4.13 below shows occupation of all the women interviewed in Kisii district. It shows that a large number of adolescents engage in household and domestic and also in manual jobs. Agricultural activity and sales occupy 64.5%(44) for adolescents. There were 15 adolescent mothers engaged in sales while 20 out of 23 adolescents who engaged in manual activities were adolescent mothers. There were no professional jobs taken by adolescents e.g clerical, technical, managerial when compared with the rest of the women. This is because below age 24 adolescents seem not to have qualified for these jobs which need more years in school. This is confirmed by table 4.10 above which shows low educational level for adolescents. From the table it is clear that most of the adolescents engage in different occupations.

The chi-square value with a significance at .27415 shows that the results are not very significant. This could be because, other than professional jobs, the occupation engaged in above does not depend on age. Any adolescent mother can work in either agricultural farms, household, domestic or in manual jobs.

There were 301 missing cases indicating that a large number of the women interviewed did not respond to the question.

Table 4.13 Percentage distribution of women aged 15-49 by respondents occupation, Kisii district: KDHS 1993.

Age-group	Occupation					
	Sales	Agriculture	House/Domestic	Manual	Don't Know	Prof tech
15-24	33.9 (21) a	30.6% (23) a	100% (1) a	63.3% (3) a	50% (1) a	—
	(15) b	(20) b	-	(3) b	-	
25-34	37.1% (23)	38.6% (22)	-	10% (1)	50% (1)	62.5% (5)
35-49	29% (18)	30.8% (20)	—	26.7% (1)		37.8% (3)
Total	27.7% (62)	63% (141)	.4% (1)	3.5% (8)	.9% (2)	3.6% (8)

Note: Figures in brackets denote the number of cases.

a -Represent figures of the adolescent women.

b -Represent cases of the adolescent mothers.

Source:Primary analysis of the 1993 KDHS data.

CHAPTER FIVE

ANALYSIS AND INTERPRETATION OF DATA

5.1 INTRODUCTION

The purpose of this chapter is to give a summary and conclusions of the major findings of this study. In the first section of this chapter, summary and conclusions are presented. The second section presents some recommendations that emerge from the findings of this study. The last section provides highlights on a few areas recommended for further research.

5.2 SUMMARY OF THE FINDINGS

The purpose of this project was to study adolescent fertility and the characteristics of adolescent mothers in Kisii district. The study aimed at establishing the level of adolescent fertility in Kisii district. The results show that out of 237 adolescents interviewed, 36.7%(87) were mothers. There were 22 adolescent mothers with children before marriage.

The study also aimed at finding out the extent of adolescent use of contraceptives. That is the safety measures taken by adolescent mothers to prevent unwanted pregnancy and has found out that majority of sexually active adolescent mothers do not use contraceptives. The study has also found out that majority of the adolescents engage in unprotected sex. The study has shown that the level of contraceptive use is low. Only 16%(23) of all the adolescents interviewed were using contraceptives 20 out of 23 were adolescent mothers while 67 were not using. As a result, this leads to out of wedlock births thus coming out as one of the characteristics of adolescents in the study area. This information confirms the hypothesis that majority of adolescents do not use contraceptives. Ocholla-Ayayo (1991:134) has blamed this on high rates of child mortality, insufficient provision of contraceptives and relevant information, reluctance of people themselves to change, the scarcity and inaccessibility of

health centres, inadequate health centres to be used as distribution centres for contraceptives, and or the dissemination of information.

The findings show that some of the adolescent mothers are not married. 32%(56) of all the total women interviewed were single whereby 98%(153) of those not married were adolescents. Out of 153 adolescents who were single, 24 were adolescent mothers. This comes out clearly that not all the adolescent mothers with children are married but some of them are single. This could be due to cultural values which categorise those women as wrong doers and as a result married as second wives by older men. "To have sexual relations when still uncircumcised or to become pregnant before female initiation rites were regarded as sinful. Up to very recently, single mothers were not accepted by society. Pregnancy outside marriage disadvantaged both mother and the child, the child became illegitimate and mother could only be accepted as a second or third wife" Ocholla-Ayayo (1991:139,149).

The results show that most adolescent mothers have attained some education at least primary level. Most of them have at least completed primary level but very few have completed secondary. The results show that 3 had no education, 38 had not completed primary, 21 had completed primary, 17 had not completed secondary and only 8 had completed secondary level. Low level education could be due to school rules which expel pregnant adolescents from school or due to shame and fear of discrimination as a result most adolescent mothers do not return to school after birth. Muganzi and Ocholla-Ayayo (1988-89) observed that girls do complete secondary education when they are still young in age and if there is no other opportunity open for them, they quickly enter into early marriage just like their counterparts who dropped out at the primary level. They also argued that girls who drop out of primary school are more likely to join polygamous unions, or monogamous marriage at age 15 whereas those with complete secondary education are often reluctant to join polygamous union but the drop out may enter reproduction at age 18 or 19.

The results show that age at first marriage is quite low when most of the adolescent mothers have not finished school. The mean age is reported at 18.5 for all the women. This shows that for those

women who are married, they do so at adolescent age. As it was hypothesised, the information confirm that adolescent fertility is likely to lead to early marriage. "There has been a drop in age at marriage, and a consequent drop in age at first birth. The desire to have many children is still strong and birth intervals have shortened. Reproductive span lengthened for most couples probably as a result of improved nutrition and a higher life expectancy" Ocholla-Ayayo (1991:132).

The results show that adolescent mothers engage in sexual activity at very early ages. The study has shown that adolescents are getting exposed to sexual activity at the mean age of 12 years. This information confirm the hypothesis that adolescent mothers start engaging in sexual activity at early ages. Ocholla Ayayo (1991:127) says that early age at marriage with early age at first birth have been found to have a high total fertility rates. "Higher coital frequency outside marriage implies a greater hetero-sexual freedom among unmarried population and is a proof of availability of privacy to facilitate such union" Ocholla Ayayo (1991:91). Also early exposure to sexual intercourse could be due to western culture (T.v, Radio, Film, movies) and lack of traditional counselling which was to guide youngsters on how to approach life.

The results show that most of the adolescent mothers prefer having sex while breast feeding. There were 21 breast feeding adolescent mothers who preferred sex while breast feeding. Ocholla Ayayo (1991:129) has argued that this is due to increasing disregard of taboos that outlawed sex during breast feeding. He further continues to says that as a result, this reduces birth intervals during the long reproductive span of marriage life.

The study has shown that most of the adolescent mothers engage in household, domestic and also in manual jobs. There are no professional jobs taken by adolescent mothers e.g clerical, managerial, technical when compared with older women.

The results show that most of the women started engaging in sexual intercourse at a tender age. The result has shown that there has been a drastic decline in mean age at first intercourse for women aged 35 years and above from 15.6 years to 9.9 years for those women currently at adolescent age.

This decline confirm that adolescent fertility has increased within a very short period and still age at first intercourse continue to decrease. The decline also confirm that current adolescents in general engage in sexual intercourse at an earlier age than those in older ages did thus confirming that adolescent fertility has increased in Kisii unlike 30 years ago.

Cohort analysis on both age at first marriage and first birth also show a slight decline in age. Average age at first birth and first marriage are given at 18 years. The trend remains the same for women aged 35 years and above and even for those currently adolescents. Mean age at first marriage has declined a bit by a year for age at first birth for those in current age. Age at first birth and marriage is slowly decreasing although at a slower rate.

In summary, the study has revealed that adolescent fertility is quite high in Kisii district. That adolescents engage in sexual activity at early ages and that there has been a drop in age at first intercourse. Majority of the sexually active adolescents also engage in unprotected sex. The study has also shown that levels of contraceptive use are low not only for the adolescents but for all the women in the study area. This results in unwanted pregnancies that finally lead to out of wedlock births or unplanned early marriages.

5.3 RECOMMENDATIONS

On the basis of the above findings, certain recommendations concerning reduction of adolescent fertility are made below.

- 1) Adolescents who become pregnant should have ante-natal services made accessible to them irrespective of socio-economic background. This can reduce substantially the serious complications associated with pregnancy. They should be guided to avoid abortion. The government should set up programmes that will cater for the emotional and other psycho-social problems that pregnant

adolescents face. The adolescents who drop out of school due to pregnancy can also be provided with meaningful and economically productive work and dignified social roles should be made available to all adolescent women irrespective of previous sexual behaviour. The negative attitudes and perceived policies regarding school drop outs because of pregnancy should be discouraged. The society should help these girls and not dehumanize them but allow them back to school, give them support and guidance. "One major failure of the Family Planning Programme has been its over-emphasis on the family at the expense of adolescents. The issue of adolescent fertility in the overall population increase has been largely ignored. Family planners should include in their programmes practical advice and counselling for adolescents in matters of sexual behaviour" Ocholla-Ayayo (1991:134).

2) There is need for youth programmes which should be organised by peer groups. Youth programmes that respond to the needs of the youth. Innovate youth programmes to keep out-of-school youth gainfully engaged and assist their transition to adulthood. This will make the youth discuss their problems freely because they understand their problems than adults. These activities should be coordinated by youth leaders and counsellors.

3) The adolescents should change their attitude towards pre-marital sex and use of contraceptives. Sex has its place in society and if one does not have self control then he/she must use contraceptives to avoid unwanted pregnancies.

4) There is need for more detailed research in the area of adolescents fertility although substantial research has been done. The information available is not enough for the characteristics of adolescents to be well understood and solution for adolescent problem to be found. The research findings should be used as a basis of suggestions on possible solutions and recommendations to a problem well understood.

5) Provision of loan grants to the youth who would want to establish any project or business.

6) Parents should not shy away from the role of imparting sex education to their children. They should be free to discuss sex related issues with their children instead of assuming that teachers will do

5.4 FURTHER RESEARCH

Primary data should be collected in Kisii district on characteristics of adolescent mothers because the data used by the study is from a very small sample of 237 women which form a small fraction of the total population of the reproductive women in the district. Further research should be done using a large sample of adolescents who are adequately representative of the total population.

This project only focused on the characteristics of adolescent mothers in Kisii district. Further research should be carried out nationwide on adolescent characteristics to get a clear picture.

Further research should be carried out to find out why most women adolescents included do not use contraceptives in Kisii district.

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