Topic

AN INVESTIGATION OF THE SOCIO-ECONOMIC, SOCIO-CULTURAL AND DEMOGRAPHIC DETERMINANTS AND CHARACTERISTICS OF ADOLESCENT FERTILITY IN NAIROBI
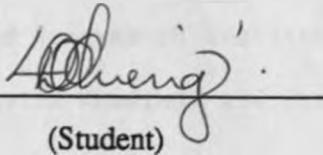
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Q/67/8169/90

P.S.R.I DEPARTMENT; UNIVERSITY OF NAIROBI
(1990/91)

DECLARATION

I certify that this project report is not my original work. It is a study based on the Kenya Demographic and Health Survey of 1989.The study is done in partial fulfillment of the postgraduate Diploma in population studies at the population and Research Institute, University of Nairobi 1990/91 .
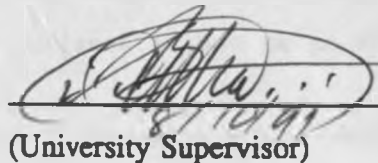
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CHAPTER 1

GENERAL INTRODUCTION

1.1 INTRODUCTION

According to population Reports Series J. Number 10 July 1976 and Series M. Number 9 November - December 1985, it has been found that throughout the world, pregnancy and childbearing are occurring at younger ages than in the past, resulting in adverse health, demographic and social consequences postponing first births until age 20 or later would significantly reduce the maternal and infant mortality. It would also slow population growth and contribute to improvements in the quality of life for people elsewhere.

Adolescent fertility is a major area of concern in relation to population and development in Kenya. It has been established that fertility in Kenya is high, both in level and rate of increase. High adolescent fertility is as a result of a combination of social, cultural, economic and demographic factors.

With improved health care and nutritional intake in Kenya, the onset of menarche is occurring at an earlier age, rendering a number of young girls susceptible to pregnancy. The low age at menarche combined with the changing social and economic circumstances have led to the erosion of traditional authority over adolescent behaviour. This has led to a high increase in adolescent fertility. More adolescents are engaging in frequent sexual intercourse at a younger age leading to a high rate of unwanted pregnancies. Despite knowledge of contraceptive use, very few adolescents use them.

Pregnant adolescent females in secondary schools are faced with the threat of expulsion from schools. The social stigma attached to pre - marital adolescent childbearing prompts a pregnant teenage girl to resort to illegal abortions even periodically. Expulsion from school means a bleak future for the adolescent girls, unplanned marriages which eventually end up in divorce. Such burdens or hardships cause adolescent mothers to abandon or throw away their babies.

Many of these problems could be averted if an interventionist programme would be established to target the affected adolescents as the primary beneficiaries. Such a programme would provide them with appropriate information on sex and health education suited to adolescents. The programme would also teach or train adolescents in income generating skills.

It would also provide counselling services to them. An example is the proposed Adolescent Women's Centre to be funded by pathfinder and implemented by YMCA.

1.2 BACKGROUND OF THE STUDY AREA

Nairobi province was one of the areas covered by the Kenya Demographic and Health Survey of 1989. it is a geographically concentrated area and the largest urban centre in Kenya with a population of about 2,000,000. This provided a suitable environment for my project because the socio - economic and demographic factors being investigated are magnified in this kind of environment. These factors are interrelated and influence adolescent fertility. Due to shortage of time I will only concentrated on Nairobi.

Nairobi lies within the central highlands, east of the Rift Valley. On the eastern side it is bordered by the Athi Kapiti plains, by the Ngong Hills in the south and the Aberdare ranges on the west.

Its altitude varies between 1600M to the east to about 1800M to the west.

Nairobi experiences a modified Equatorial type of climate because of the relief features surrounding it. Temperatures vary from the east towards the west. The western uplands experience lower temperatures than the eastern lowlands which are warmer. Temperatures vary between 17°C 28°C.

Rainfall amounts and distributions also vary. The eastern plains receive mainly convectional rainfall while the western highlands mainly experience relief rainfall . Rainfall varies between 900mm to 1,500mm in the western side. There are two rainy seasons mainly the long rains received between Mid march to May and brought about by south easterly winds and the short rains occurring between mid October to mid December brought about by the North Easterly Trade winds. Weather varies from clear blue skies, sunny days to foggy, cloudy and rainy and windy days over the year.

Communication and Transport is well development over Nairobi province since it is the headquarters of most services in the country. It also has a high population density. Various types of industries have been established in Nairobi ranging from primary, secondary and tertiary industries. Some industries are Agro - based while others are non - Agro-based industries.

A number of streams make up Nairobi's drainage system. They descend the Aberdare and pass through Nairobi and ultimately join the Athi River which flows towards the east.

Examples include Nairobi River, Kirichwa Kubwa, Motoine river in Ngong forest and Gitathiru in the north western area.

Nairobi, being the capital city of Kenya comprise all races namely Whites, Asians and the African majority not forgetting Arabs. There are Ethnic groups from all communities in Kenya who live and work in Nairobi namely Kikuyu, Luo, Luhya, Kalenjin, Maasai, Kamba and many others.

1.3   STATEMENT OF THE PROBLEM

Adolescent fertility is causing global concern as it is connected with negative Demographic, Social and Economic consequences at the individual, family and national levels. The problem of adolescent fertility is highly prevalent in Kenya as a whole. There is an overwhelming concern over the number of pregnances and consequent births to adolescent girls aged between 10 and 24 years in kenya. With approved health care and nutritional intake in Kenya, The onset of menarche is occurring at an earlier age, rendering a large number of girls, susceptible to pregnancy. Modernization has brought about social and economic changes, thus weakening traditional controls on fertility through the regulation of sexual behaviour whilst the age of sexual maturity has been falling, ignorance of anatomy and reproduction have put many girls in a highly vulnerable position with neither parents , teachers nor religious organizations willing to take full responsibility of imparting the necessary knowledge in a way which is relevant to contemporary conditions.

The gradual erosion of traditional controls on adolescent fertility together with the failure of modern contraceptive methods to be sociably acceptable to most Kenyans has created a dangerous situation in which early sexual maturity and ignorance of reproductive biology provides the starting point.

As a result of adolescent pregnancy most girls are forced to drop out of school even as early as at standard eight level. At this stage, even though the adolescent girl has reached menarche, she still has not attained full physical and emotional maturity. In many ways the adolescent is still a child, not yet capable of withstanding the physical and psychological stress of pregnancy and childbirth.

Far worse, the adolescent girl being shy of her pregnancy opt not to attend any anti - natal clinics and most of them are not even aware of the importance of attending such clinics.

Dropping out of school for a girl leads to restrictions on choice of future career and

consequently low socio - economic status. This leads the girl to such anti - social behaviour like prostitution. Abortion, which has both social and health risks on the girl and the unborn baby results. The unborn girl and her baby become "social misfits" and hence delinquents and use of drugs.

There are also medical risks of early pregnancy and obstetrical complications apart from the Demographic and socio-economic consequences. Psychological problems on the part of the adolescent and her baby also occur. This is the feeling of not belonging to the family due to discrimination by the family and the social stigma placed on unwed girls with babies.

Therefore adolescent fertility deserves serious consideration at the included family and national levels in Kenya (Mang'oka J. N. 1987 p.3). I will elaborate on the consequences of adolescent fertility in a bit more detail.

1.3.1 DEMOGRAPHIC CONSEQUENCES

Early age at marriage at age 15, provides the longest reproductive life between couples resulting in fast population increase in a short period. Marriage at age 25 provides a slower rate of population growth over a longer period of time. (Oucho 1987:7) (Coale 1974) showed the importance of age at marriage and childbearing in determining the average rate of population growth over a long period of time.

In Africa, Sexual activity among adolescents is believed to be high and increasing, while use of contraceptives is low especially among unmarried ones. Oucho et al tells us that this is due to the legal and societal restrictions which may not change towards relaxation before the year 2000. This means the problem of adolescent fertility is expected to increase in the future.

1.3.2 ECONOMIC CONSEQUENCES

At individual level, adolescent pregnancy and childbirth interrupts educational and career opportunities. The in - school adolescent who falls pregnant must leave school. The adolescent career prospects for future earnings thus become limited. (Population Report F. No. 7) 1980)

Once the individual drops out of school, for a long period, she becomes a burden to the family. The family resources have to meet the new mother's added demands and also the child's. She needs extra clothing, maternity care and better nutrition immediately after

delivery.

When the family background is poor and resources are inadequate to cater for the adolescent mother and her child economically, chances of the mother abandoning the baby are high and such babies are given up for adoption while others not discovered are left to die. In Kenya cases of abandoned babies are very common. This is manifested through the growing number of children's homes and reports from these homes say that they cannot take in any more children since theirs are already overcrowded. (mang'oka 1987). Mang'oka tells us that these homes act as substitutes of a natural home for these children. Even though the homes provide for their physical needs, the children's emotional needs are not fully met. Thus as these children grow up they lack social integration found in children who grow up in their biological homes.

Some girls who are not able to get enough money to support themselves and their children resort to crime and prostitution in an attempt to survive.

According to Nyaga, in order to meet their economic needs, some adolescent mothers decided to be employed as daily maids.

When the adolescent girl is expelled from school her chances of joining training institutions are very narrow. She has no certificate and the kind of institution she can join is of a very low calibre.

The parents of the drop - out has alot to loose. The money they used educating their daughter is wasted and cannot be refunded back to them. The kind of loss is greatly felt by the parents especially if they had to struggle to get her school fees. Education in most African societies is viewed by parents as insurance against old age. Parents therefore loose their insurance since the girl does not live upto their expectations. This leads to a feeling of loss and demoralisation.

At national level, alot of money is wasted on the education and provision of health facilities for both the adolescent and her child. When the pregnant adolescent is expelled from school, the nation loses money , woman resources, time and the opportunity which could have been utilized by some other students. Adolescent fertility contributes significantly to population increase and this calls for expansion of basic needs and services so as to cope with the rate of population growth. This means more government expenditure which overstretches the National Revenue for expansion of school places, health facilities and employment opportunities.

1.3.3 SOCIAL CONSEQUENCES

The adolescent who has had her first child before 17 is likely to obtain less education, be out of work, have a low paying job, less income and be separated from her partner or divorced (population report 1985: 368).

In most societies, out of wedlock pregnancy is regarded as sinful and a disgrace to the girl and her entire family. Pregnancy to a single adolescent leads to out of wedlock births. For urban girls out of wed births may pave way for prostitution and other forms of urban crime or deviance. The problem thus has complex forms of social and legal discrimination of the victims. Birth to poor girls in urban areas often leads to child neglect or abandonment. (population report 1976: 163).

Adolescent fertility leads to what Mang'oka refers to as "gun-shot marriages. Due to societal disapproval of premarital births, many view marriage as a necessary remedy. Even though this may solve the immediate problems such as social disapproval or social discrimination for the pregnant adolescent, it does not solve her other problems. Some of such early marriages are forced resulting in marital instability and high divorce or separation rates. Premature marriage seals all the prospects there are for the future from retrospective and prospective perspectives.

The adolescent mother places greater demand on the household to provide accommodation for both mother and child who cannot continue to share room with other family members. This may provoke negative feeling from the family members and may create feelings of "not belonging" on the part of the adolescent mothers. This may lead to apathy and feeling "not wanted" which may cause complicated social and psychological repercussions. The adolescent mother may decide to run away from home, leaving the child behind under the family's care. Such a child may not receive proper care and this may lead to poor physical and mental development. Such children more often become social misfits and resort to deviant and anti - social practices.

It is difficult in many societies for the teenage mother who was forced out of school by a pregnancy to return to school. Both school and community will not openly allow it for fear that the teenage mother will become a bad influence in the school. Such girls were found to be "too ashamed to return" in Nigeria (Oronsage 1982) or too preoccupied with child care to return to school as in Siera leone (Gyepi - Garbrah 1985). In kenya such girls are already considered mothers and assume a most detested social status in the society. If the girl

manages to go back to school she may have to put up with alot of ridicule from her school mates (mang'oka 1987)

Pregnancy to adolescent girls lead to strained relationship with parents. Nyaga(1985) found that 95% of respondents indicated strained relationship with the parents and in particular the male parents. He concluded that this was so because most male parents are the "breadwinners of the family and feel that this is an additional problem. Some blame their wives not having counseled their daughters. In most cases family problems come as result of adolescent pregnancy.

1.3.4   Definition of Adolescent Fertility

Adolescent fertility can be defined as the childbearing performance of adolescents whether pre-marital extra-marital or intra-marital (Oucho 1987).

The concept of adolescence as a time of gradual transition from childhood to adulthood is relatively new, particularly in developing countries. Only recently has it been recognized that boys and girls in the approximate age range of ten to twenty years differ physiologically and psychologically from children and adults. Therefore they constitute a distinct group of individuals. (Population Reports series J. Number 10 July 1976).

Many definitions have been put forward about the adolescent group but non has been adopted universally. For example in most societies the adolescence period coincides with the onset of puberty while in others especially african societies, it coincides with the period of institutional training of adolescents to become responsible adults. The period of adolescence is short in most traditional societies due to early marriage with a consequence of lengthening the reproductive life span of the married couples. In developed countries the period is prolonged by social legislation or by schooling with the consequent effect of shortening the reproductive life of the couples.

Because traditions and customs vary so widely from one socio-cultural setting to another, adolescence is difficult to define in a socio-cultural perspective (Omondi - Ahawo, 1980 P3).

For the purpose of this study the adolescents will comprise those females aged between age 10 and 24 as provided by the Kenya Demographic and Health Survey (KDHS) of 1989. This is because, age at menarche has dropped as a result of better health and nutrition practices. At (Kenyatta National Hospital) 1981, it was recorded that a nine year old

girl had given birth. Sexual maturation is occurring early therefore many adolescents are prone to the risk of conception. The breakdown of socio-cultural codes governing the moral authority has worsened the situation. Modernization has displayed sexuality to the youth through various mass media such as Televisions, Videos, Magazines and films as a source of pleasure without pointing out its consequences.

The period of adolescence encompasses important events which influence and determine the future life - course of young men and women. (population Newsletter No. 40/41, December 1986).

It is during this period that decisions about education marriage and career are made. For this reason there is growing concern about adolescent fertility in Kenya, considering that over half of the population has to pass through the adolescent period and develop into responsible adults.

1.4 OBJECTIVES OF THE STUDY

1.4.1 GENERAL OBJECTIVE
To help explain how socio-economic Demographic and socio-cultural factors influence adolescent fertility.

1.4.2 SPECIFIC OBJECTIVES
a.   To establish the relationship between socio-economic factors and adolescent fertility

b.   To explain how demographic factors influence adolescent fertility

c.   To find out relationship between socio-cultural factors and adolescent fertility

1.5 RATIONALE (JUSTIFICATION OF THE STUDY)
Kenya's population policy is concerned with curbing the high rate of population growth. One way to achieve this is delaying the childbearing age beyond twenty years, thereby lengthening the period between the generations and reducing cumulative fertility (Oucho, 1987). This study aims at establishing the socio-economic, socio - cultural and

demographic determinants and characteristics of adolescent fertility. This study may assist the Government in its attempt to curb problems associated with adolescent fertility hence succeed in uplifting the status of women as outlined in the government's population policy.

This can probably be achieved through orientating suitable family planning services to adolescents to help curb on unprotected intercourse. Sex education, Health education and population education in general would also be relevant in the adolescents education curriculum. There is a general limited access to family planning information and services especially to the younger adolescents.

Recommendations that sex education programmes need to be extended to adolescents in schools as well as out of youth in polytechnics and youth programmes through the Non-Governmental Organizations (NGOs), such as through the National Council of Churches of Kenya (NCCK), the Family Planning Association of Kenya (FPAK), the Catholic Secretariat, would help in alleviating the adolescents' problems by engaging them in income generating activities.

Current trends are that pre-marital sex and pregnancy among adolescents is increasing and this contributes to high total Fertility Rate (TFR) of an individual woman since childbearing starts early.

We hope that other indepth studies in the areas of socio-economic and health consequences will be taken by interested researchers to give meaning and achievement to our population policy.

1.6 THE SCOPE AND LIMITATION

The study focuses on the adolescents in Nairobi province as provided by the kenya Demographic and health survey.

The study has chosen to cover the socio-economic variables as obtained from the Kenya Demographic and Health Survey of 1989. Socio - cultural factors have also been included. The study is based on this source of secondary data due to time limit for the study period. This does not allow us to give the risks and consequences of adolescent fertility in Nairobi.

Therefore the variable chosen include level of Education place of residence, religion, Ethnicity, contraceptive use and source of contraceptives as the socio - economic determinants of adolescent fertility with particular reference to Nairobi province. We shall describe the

CHAPTER 2

2.1 LITERATURE REVIEW

Very little has been done in the area of adolescent fertility although it is emerging as a global problem. Few people who have attempted at the problem have looked at its extent both in the developed and developing countries; its health, social and economic consequences.

Omodi - Ahawo (1980) in his M.A Thesis looked at the extent of the problem in Kenya by examining age at first birth and age at first marriage. He observed that adolescent fertility was on the increase in Kenya although age at first marriage had gone up due to increased school enrolment for women.

Melvin and Kantner (1977) observed that adolescent fertility was higher in developing than in developed countries, probably because contraceptives use and accessibility was lower in the former countries.

The population division in the United Nations Secretariat in New York (1986) found out that most of the consequences of adolescent fertility result due to fear and ignorance on the part of the adolescents. That younger adolescents under 18 years are exposed to greater risks of childbearing than those aged 18 and over. The under 18s usually hide the pregnancy, delay attending the anti - natal clinics and that most do not get proper nutrition as required. This adds on to the risks associated with adolescent fertility population reports J. (1976) observes that major social consequences of adolescent fertility as interrupted education and career opportunities lead to a host of social sufferings. Out of wedlock births and gun - shot marriages varying from culture to culture and end up in divorce and more social suffering.

Age at marriage in many countries is rising and urbanization and lifestyles associated with it provide more opportunities for sexual relationships and reduce the effectiveness of traditional social restraints.

Gyepi - Gabrah (1985) found that in Kenya, of all married women one - fifth have given birth before their first marriage. He also found out that early pregnancy is one of the principle causes of rising drop - out rates among students in elementary school to secondary school education. Also that the social and economic disadvantages of early childbirth for both mother and child are enormous and are aggravated if the young mother is unmarried.

Population Reports M (1985) states that a woman who has her first child before age 17 is likely to obtain less education, be out of work, have a lower paying job and less income and be separated from her partner or divorced.

Khasiani (1985) did a study on adolescent fertility in Kenya with special reference to high school teenage pregnancy and childbearing. It was done for Nairobi schools and focused on girls who were currently pregnant and still enrolled in school but faced the prospects of leaving school. The study examined their social, economic psychological and health problems as well as their training and employment possibilities. The study was based on primary data. The data collection mainly consisted of interviewing whereby the researcher administered a questionnaire to the respondents. At the same time detailed unstructured interviews were administered by the researcher to the relevant Government officials, heads of schools and the parents of some pregnant adolescents. In addition the researcher used the existing data in the area of study.

Research findings showed that 82.6% of female youth in the sample had sex by age 19. There was also some reluctance among the youth to practice contraception, though about 43.1% of the total sample had not been exposed to any kind of contraceptive information. A young school girl who becomes pregnant in Kenya has her education terminated and a stigma attached to her. It has been established that abortion presents an additional health risk to the population of pregnant adolescent mothers. There is an average of 11 abortions a day at Kenyatta hospital alone. Findings also show that only a few (9%) attended private clinics while the majority (55%) attended public maternal health clinics. 10% of them did not know about the need to attend clinics while 20.0% did not wish to expose themselves to people as pregnant.

The findings also showed that for most of the respondents (75.3%) a gap had been created between them and their parents so that they did not feel as close to them as before. A substantial number of respondents from larger families with one or more siblings (83.3%) did not receive any financial assistance from anybody. 31.2% of those in the sample wished to go back to school after delivery.

Oucho (1987) studied the social and economic consequences of adolescent fertility. He used secondary data from selected African Countries. He considered the adolescence age to be of ages 15-24 whether married or not. In the study, the following selected indicators of adolescent fertility were used namely Total Fertility Rate

Age - Specific Fertility Rate (15 - 19) (20 - 24)

Percentage never married and mean Age at first marriage.

In this paper, the author dealt with demographic, social and economic consequences

of adolescent fertility. Kenya was among the countries under this study. Findings from this were similar to those of other researchers but very close to what Garbral's study had shown.Garbrah (1985) studied adolescent fertility in Kenya and used secondary sources of information from censuses surveys, research and administrative publications. In this study Garbrah analysed the socio - economic characteristics of adolescents.

Under this he looked at:-

Educational attainment

Age at first marriage

Marriage type

Residence and

Economic activity they are involved in.

The study also looked at the reproductive health behavior of age at menarche, fertility, maternal, mortality and morbidity, contraception pregnancy termination and STDs. He also looked at the implications of adolescent fertility. Garbrah found that educational attainment among the adolescents has increased from 18% (1969) to 70% (1979). Age at marriage has increased from 18.4 to 20 . A small proportion of about 24% of adolescents were in polygamous unions. The proportion of adolescents living in the urban areas has increased from 10% (1969) to 20% (1978). He also found that less female adolescents were involved in the labour force participation. In connection with reproductive behavior Garbrah found that the age at menarche is falling from 14.4 (1970s) to about 12.9 (1980) and fertility rate rose from 141 (1962) to 168 (1977). But he noted that fertility was low among the adolescents of secondary level. He found that maternal mortality among adolescents is high (32%) far higher than among those aged 25 years and over. There is also low contraceptive use among the adolescents (4.7%) pill and the condom being the most popular. From figures got from Kenyatta National Hospital alone in 1978, there were 1,424 abortion cases; 84% of the cases were adolescents. Though no data was available, he concluded that Sexually Transmitted Diseases had declined.

Gachuhi (1980) did a similar study on teenage pregnancies in Africa. First he looked at the causes of teenage pregnancies as being the disruption of social or traditional controls and inadequate school education. Secondly he studied the consequences of teenage pregnancies. Under this he listed four major consequences as:-

.   Psychological stress

.   rural - urban migrations

.   unemployment and

.   nutrition problems

In the summary he gave two suggestions of what may be done to improve the problem of adolescent fertility.

First, is the need for sex education or family life education to the school going population. Then population education to the rest of the community.

Rogo K.O (1987) wrote the proceedings of a workshop held at Kwale, coast province, Kenya (1986). The workshop looked at the state of adolescent fertility in Kenya in 1986. It looked at the social and cultural factors associated with pregnancy among the unmarried teenage girls. And the adolescent in her socio - psychological context in a changing Kenyan society.

More issues on medical aspects of adolescent fertility were discussed. Included among them were:-

.   the organisation of family planning services for adolescents in Kenya

.   medical consequences

.   A study of adolescent mothers at Pumwani Maternity Hospital, Nairobi,
          Eldoret District Hospital, Kisii District Hospital and kericho District Hospital.

From the workshop it was noted that 28% of the cases of induced abortions at the Kenyatta National Hospital were from those aged below nineteen years of age and 26% were school girls. It was agreed that family planning services for adolescents in Kenya has been neglected for a long time and it is the time something is done about it.

It was found that adolescent fertility in the hospitals studied was more than 25% of all deliveries. The highest was recorded in Kericho. However most of the adolescents were already married. It was also agreed that most delivery complications are common among the adolescents.

The various religious groups represented in the workshop showed different concern about the adolescent. The Hindu for instance have people who the adolescents can turn to talk to and seek advice from. The Catholic Bishops in Kenya condemn any indiscriminate distribution of contraceptives to the youth. The protestant churches have gone ahead to form a programme called the Youth Information and Education towards responsible adulthood. It is a christian oriented programme and its main objective is to help the school adolescents to

solve the problems of their irresponsible sexual behavior.

Nyaga (1989) studied adolescent fertility in Chogoria Location. Meru District. Nyaga found that 95% of adolescents got pregnant accidentally since they had no information on contraceptives. Nyaga's finding confirms the argument that adolescents have very little knowledge on contraceptives.

Mugwe's (1989) findings were also similar to Nyaga's et al. In her study of adolescent fertility in Kirinyaga district, Mugwe found that only 1.7% reported having ever used contraceptives. However 62.6% of the girls expressed their intention to use contraceptives in future. She also found that the age at menarche to be low. Among the 115 girls studied 102 had their menarche before the age of 16 years.

Mugwe also found that there is a relationship between age at the first intercourse and frequency of pregnancy. The earlier the age at first intercourse the higher the frequency the higher the likelihood of the adolescent having a child.

Frequency of sexual activity also increase with age and was greatly determined by boy/girlfriend relationship. Correlation coefficiency for boyfriend and pregnancy was found to be 80. This implies a strong correlation between pregnancy and boyfriend relationship.

There has been alot of controversies that the use of contraceptives among unmarried teenagers will encourage immorality. There are many factors associated with non-use of contraceptives by teenagers. Fursterburge (1977) says these include lack or non-availability of contraceptives to the teenagers.

According to a study by Bragonier (1973) there are physiological reasons for the non - use of contraceptives among teenagers. These include:-

a   The fact that adolescents consider the use of contraceptives as a planning of sexual act which act which they consider wrong, improper and unromantic

b   Girls, confused with respect to their social values avoid contraceptives because it provokes a sense of guilt in them

c   They use the sexual act and pregnancy as a means of rebellion towards their parents, particularly when the youth lack confidence to communicate with parents.

Whereas the number of teenage pregnancies in the developed countries is decreasing it is vise versa in Kenya. In a study by a Agrawal and Mati (1983), the incidence of teenage pregnancy in Nairobi was 18.1% and 10% in Machakos. This evidence could be higher

considering that many teenagers have been engaging in premarital sexual intercourse as demonstrated by Gachuhi's study of (1974) which showed that only 105 of teenage males and 38% of females had not had sexual intercourse before the age of 20.

Due to better nutrition and improved health facilities, age at menarche has gone down dramatically and it is now possible for girls aged nine to get pregnant (Kenyatta National Hospital 1987). The young people today are definitely healthier, more active sexually and more especially urban youths. Due to the drastic fall in the age at menarche more girls are prone to pregnancy thus leading to a high increase in adolescent fertility.

Age is an indicator of whether a young pregnant woman has reached full physical maturity or whether the reproductive effectiveness of the older women has began to decline. Girls who marry or have a first child at an early age tend to bear their subsequent children at a rapid rate so that the intervals between the births are relatively small. Coale (1974) argues that marriage at an early age provides the longest reproductive life between couples resulting in the fastest increase of population in the shortest period of time.

However, age at menarche, age at first sexual intercourse or age at marriage do not have direct influence on adolescent fertility. It is through other factors such as use or non-use of contraceptives. The adolescent knowledge, attitude and use of contraceptives has been found to be very low according to various studies.

The breakdown of traditional system of support and preparation for adult life has also played a major part in emphasizing the problem of high adolescent fertility and widening the gap existing between the youths and the parents. No institutions have emerged to provide information and services relevant to the needs of the Kenyan youth today. Neither parents, schools nor religious institutions are ready to handle or talk about matters related to sex. To fill this gap young people are looking for all possible channels of information some of which are not very good ones.

Many young people particularly in urban areas have only their peers to learn from mass media to turn for sexual guidance while parents, schools and religious institutions shy away from involvement or restrict themselves to practically meaningless do's and dont's.

There is alot of audio - visual literature which influences the behavior of adolescents yet structural sexual education is lacking. Cognitive learning depends upon language. Jeffery (1978) argues that lack of adequate vocabulary on any matter impedes thinking and communication. Cognitive learning about sexual matters is derived from jokes stories, direct

explanations books and other abstract symbols which include beliefs, values, rules of behavior. If teenagers lack adequate sexual language from parents to label and discuss their genital parts, sexual activities, curiosity and to understand their bodily feelings they will be forced to rely on the subterranean language and behavior of playmates and the media which are punished by parents and accepted by peer who are their models (Wang Njau, 1986).

A number of social and cultural factors have made it difficult for the existence of conducive learning conditions of acceptable sexual behavior among teenagers. This has resulted in ignorance, misinformation and confusion regarding sexual matters which are ripe conditions for teenage pregnancy. Among these factors are socialChange and its associated factors of industrialization, modernization, rural - urban migration, urbanization and the infiltration of foreign cultural values. These have resulted to the breakdown of traditional values, socialization fora and the strict social taboos that regulated sexual behaviour among the unmarried youths. Thus a newset of social life has introduced new situations which contribute to the socialization of children. In particular, schools and other institutions of learning shape the attitude of youngsters who go through them more than does the family or communities from which they come. The age of accepting things without questioning is gradually disappearing and the youth consider it their right to show why they are told to do certain things (Kalaule 1980)

In most African traditional societies, there were constrains on teenage fertility, which were largely accomplished by the mechanism of social behavior, using restrictive marriage and sex codes. Among the Kikuyu, Kenyatta (1965) tells us that girls were expected to be virgins at marriage and any boy who made a girl pregnant was severely punished by the tribal council and sent into conventry. The strict traditional taboos, rules and rituals concerning sexual intercourse played a big part in preventing pregnancy among married teenagers. Early marriages were encouraged so that teenage girls could give birth within a socially acceptable setting thus avoiding pregnancy and childbirth outside marriage (Muriuki 1975). However the breakdown of the traditional social control has led to a permissive kind of atmosphere thus encouraging unmarried adolescents to get pregnant and give birth without any stigmatization.

Various studies have been carried out to determine the effect of socio-economic factors on adolescent fertility. Such factors include the parents occupation, profession, income, level of education and other economic factors.

Mugwe (1989) carried out a case study of adolescent fertility in Kirinyaga district. She

found out that most adolescent who get pregnant are from families of low socio - economic status. Adolescents from such families engage in sexual behavior/activities at tender age of 8 years and the frequency is high. However Mugwe does not explain to us how the socio - economic status affects adolescent activity. The socio-economic status on its own does not affect fertility directly but only through other factors. Such factors could include idleness among adolescents of low socio - economic status. The parents are not able to pay their children's school fees and therefore the adolescents are left idle at home with very little to do. Such adolescents are prone to pregnancy since they suffer from idleness.

Professional parents tend to have few incidence of their young daughters having babies. Nyaga (1989) argued that parents profession affects adolescent fertility.He argues that the mother's profession has more influence than the fathers. Most professional parents have good income and are therefore in a position to give family life education to their daughters so they are not as ignorant as their counterparts. This means that informal counselling is done at home. The peer group among the daughters of professional parents may have some influence in informal exchange. It can be argued that such children have access to family planning services unlike those from low socio-economic families. There is also a possibility that such children have access to abortion done by specialists at high costs which their parents can afford. Nyaga supports this argument that such girls after completing their ordinary level education join other training institutions, others are employed or enter into high schools. Mugwe does not bring out this argument. Therefore Nyaga's findings clearly shows how economic status affects adolescent fertility. The adolescents from high income families have no time to idle around. They mind about their careers than having babies.

Mugwe et al carried out a regression frequency of intercourse and educational level of the adolescent and found an inverse relationship. The higher the level of education of the adolescent the less the frequency of intercourse. Adolescent from higher classes stated frequencies ranging from 1, 2 and 3 times per year while those from lower classes stated frequencies ranging from 3 to 12 times per year.

2.2 CONCEPTUAL FRAMEWORK

Various authors have used various frameworks in explaining the factors that influence adolescent fertility.

2.2.1. Davis and Blake, (1956) and Bongaarts and potter (1983) used the socio-

economic and environmental variables such as education and health which operate through the proximate determinants such as contraception and age at marriage to influence fertility.

2.2.2. John C Caldwell and Pat Caldwell (1977) explained fertility in Tropical Africa using the social cultural and Demographical variables such as Africa traditional Religion, Family and Lineage, Morality and Polity which operate through the proximate determinants such as childlessness, contraceptive practice and marriage to determine fertility.

2.2.3. Bongaarts J. (1982; 179) in his study demonstrates that certain demographic factors are responsible for most of the variation in fertility levels of population. He calls them intermediate fertility variables with respect to sensitivity of fertility and variability among population. The complete set of intermediate fertility variables as presented by Bongaarts are:-

a   proportion married among females

b   contraceptive use and effectiveness

c   prevalence of induced abortion

d   duration of postpartum infecundability

e   fecundability (or frequency of intercourse)

f   prevalence of permanent sterility

g   spontaneous interuterine mortality

2.2.4. Harvey Leibenstien (1957) put forth that the idea underlying the economic approach to fertility is that the number of children is an economically constrained choice on which traditional income and prices are important conditioning variables. But Gary Becker (1960) developed a more formal version of the economic theory of fertility. Subsequent work by Jaob Mincer (1963) and Gary Becker (1965) has led to the extension of the consumer demand theory to incorporate the allocation of time and its valuation at its market opportunity cost. This extended model is usually referred to as the household production model (schultz, 1981).

In the household production model economists are provided with the necessary analytical framework within which to study non - market allocative decisions especially those related to the production of children (Nalvore, 1974 and wills 1973). These include personal characteristics such as age, education etc; market for labour; market for goods through

production, consumption physical environment; climate and geography and policy instruments such as infrastructure, public services and Technology. All these factors influence fertility at the household level.

This study will use the framework adopted from Bongaarts model of 1978 which combines the influence of socio - economic, social cultural and demographic factors on infertility.

Socio - economic, socio - cultural and demographic factors play specific roles to determine adolescent fertility in any given population.

2.3 CONCEPTUAL HYPOTHESIS

The following is the conceptual hypothesis used in the study as a model of operations

1.   Socio - economic variables can influence adolescence fertility

2.   Soio - cultural variables can influence adolescent fertility

3.   Demographic variables can influence adolescent fertility

CONCEPTUAL FRAMEWORK

```
┌─────────────────┐
│ SOCIO-ECONOMIC  │
│                 │
│ FACTORS         │
└────────┬────────┘
         │
┌────────┴────────┐     ┌──────────────┐     ┌──────────────┐
│ SOCIO-CULTURAL  │     │ PROXIMATE    │     │              │
│                 │────▶│ DETERMINANTS │────▶│ ADOLESCENT   │
│ FACTORS         │     │ OF FERTILITY │     │ FERTILITY    │
└────────┬────────┘     └──────────────┘     └──────────────┘
         │
┌────────┴────────┐
│ DEMOGRAPHIC     │
│                 │
│ FACTORS         │
└─────────────────┘
```
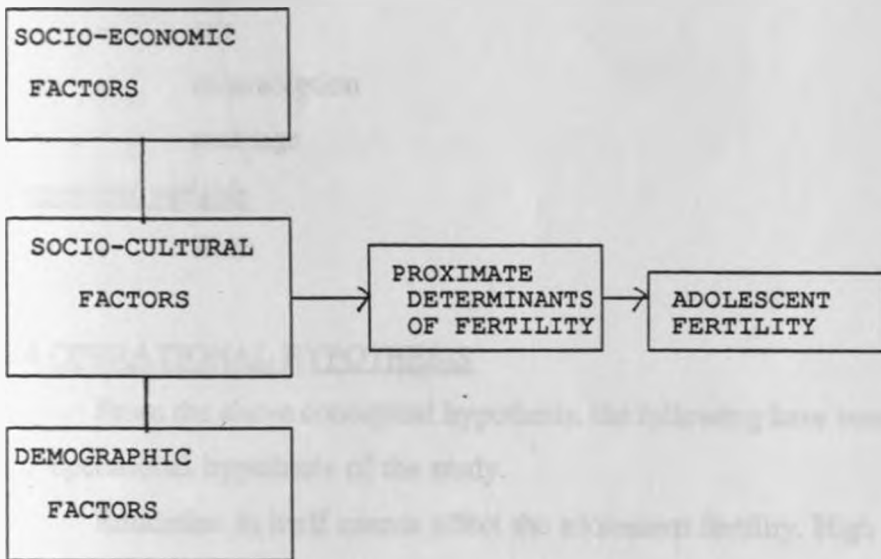
Adopted from Bongaarts model (1978)

DEFINITION OF CONCEPTS

1.   Socio - economic factors include income and level of education of the adolescents. It also includes the type of place of residence.

2.   Socio - cultural factors will include Religion, and Ethnicity.

3.   Demographic factors will include age

4.   Proximate determinants are contraception and marriage

   Independent variables are as follows;

   -   level of education
   -   ethnicity
   -   Religion
   -   place of Residence
   -   age
   -   contraception
   -   marriage

Dependent variable

   -   Birth / Fertility.

- place of Residence
- age
- contraception
- marriage

Dependent variable
- Birth

2.4 OPERATIONAL HYPOTHESIS

From the above conceptual hypothesis, the following have been identified to represent the operational hypothesis of the study.

Education in itself cannot affect the adolescent fertility. High education means better knowledge of contraception and with this knowledge one is able to take precaution. High education also means better income with which one an purchase contraceptives early.

Soio - cultural and demographic factors also work in both direction to influence adolescent fertility. The operational hypothesis are as follows

1.   The adolescent's level of education is likely to influence her fertility

2.   The adolescent's environment i.e place of residence can affect her fertility behavior

3.   Socio - cultural factors such as ethnicity and Religion play important roles in adolescent fertility

4.   Better knowledge and practice of contraception is associated with low adolescent fertility

5.   Young adolescents are more prone to pregnancy than the older ones

6.   Low age at first birth influences fertility

7.   Low age at marriage influences fertility

OPERATIONAL FRAMEWORK

OPERATIONAL FRAMEWORK

```
┌─────────────────────────┐
│ SOIO ECONOMIC           │
│ FACTORS                 │
│ EDUCATION LEVELS        │
│    -NO EDUCATION        │
│    -PR. EDUCATION       │
│    -SEC-EDUCATION       │
│    -HIGHER              │
│ RESIDENCE;              │
│  -URBAN                 │
└─────────────────────────┘

┌─────────────────────────┐
│ SOCIO - CULTURAL        │
│ FACTORS                 │            ┌─────────────────┐
│ RELIGION;               │            │ PROXIMATE       │
│ -CATHOLIC               │            │ DETERMINANTS    │      ┌─────────┐
│ -PROTESTANT             │            │ -Contraception  │      │ Birth   │
│ -MUSLIM                 │            │ -Marriage       │      │         │
│ -OTHER                  │            └─────────────────┘      └─────────┘
│ ETHNICITY               │
│ -LUO                    │
│ -LUHYA                  │
│ -KIKUYU                 │
│ -KALENJIN               │
│ -KISII                  │
│ -MERU/EMBU              │
│ -MIJIKENDA/SWAHILI      │
│ -SOMALI                 │
└─────────────────────────┘

┌─────────────────────────┐
│ DEMOGRAPHIC FACTOR      │
│  AGE                    │
└─────────────────────────┘
```
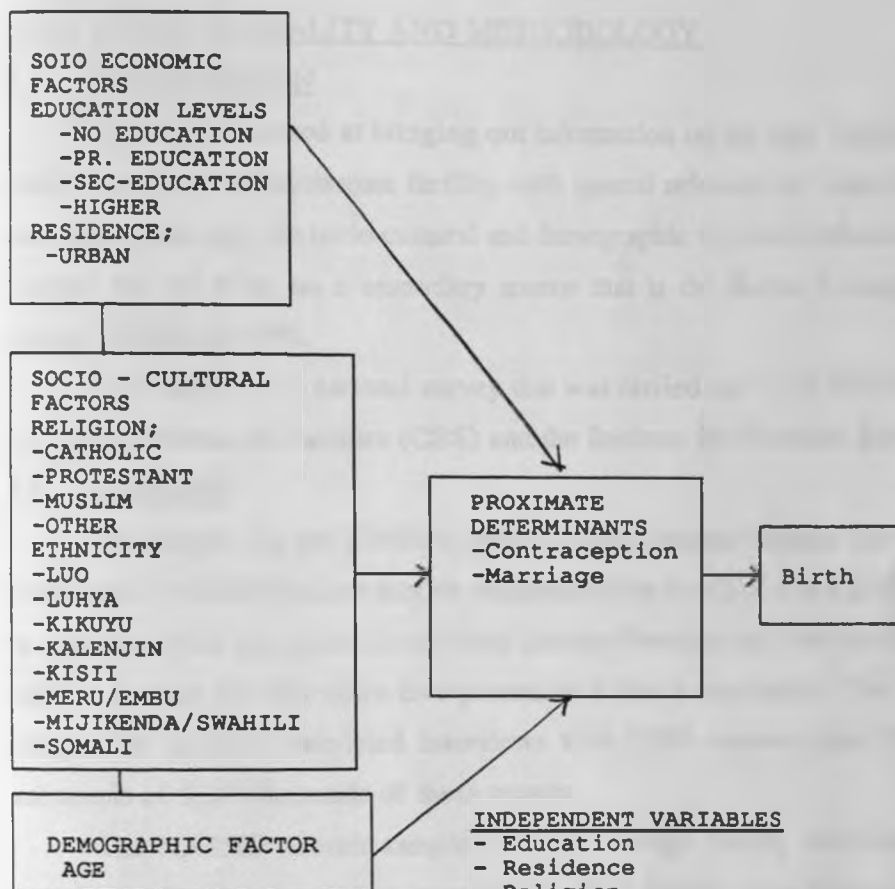
INDEPENDENT VARIABLES
- Education
- Residence
- Religion
- Ethnicity
       - Age
       - Contraception
           (types of)
       - Marriage
           (Marital status)
DEPENDENT VARIABLE
- Birth

CHAPTER 3

DATA SOURCES, QUALITY AND METHODOLOGY

3.1 INTRODUCTION

This study is aimed at bringing out information on the soio - economic determinants and characteristics of adolescent fertility with special reference to Nairobi province. Also to state and explain how the socio-cultural and demographic variables influence fertility. My data analysis will be based on a secondary source that is the Kenya Demographic and Health Survey (KDHS) of 1989.

The KDHS was a national survey that was carried out by NCPD in collaboration with the Central Bureau of Statistics (CBS) and the Institute for Resource Development (IRD).

3.2 SOURCES

The sample for the KDHS is based on the National Sample Survey and Evaluation programme (NASSEP) master sample maintenance by the CBS. The KDHS sample is national in coverage {with the exclusion of North Eastern Province and four northern districts which together account for only about five percent of Kenya's population} The KDHS sample was designed to produce completed interviews with 7,500 women aged 15 - 49 and with a subsample of 1,000 husbands of these women.

The NASSEP master sample is a two - stage design, stratified by urban - rural residence and within the rural stratum by individual district. In the first stage, the 1979 census enumeration areas (EAs) were selected with probability proportional to size. The selected EAs were segmented into expected number of standard-sized clusters, one of which was selected at random to form the NASSEP cluster. The selected clusters were then mapped and listed by CBS field staff. In rural areas, household listings made between 1984 and 1985 were used to select the KDHS households, while KDHS prelist staff were used to relist households in the selected urban clusters.

The KDHS utilised three questionnaires. One to list members of the selected households (household questionnaire); another to record information from all women aged 15 - 49 who were present in the selected households the night before the interview (woman's questionnaire); and the third to record information from the husbands of interviewed women in a subsample of households (husband's questionnaire). The questionnaire's were pretested in August 1988.

The field staff for the KDHS consisted of nine teams, each of which was fluent in one

of the major indigenous languages. The teams were composed of four or five female interviewers, one supervisor and a male interviewer. The teams were supervised by the local District population Officer, the District Statistical officer, or in some cases, an officer from NCPD headquarters.

Interviewers and data entry staff were recruited in october 1988 and trained in November 1988. The training included interviewing both in the classroom and in the field. Data collection began on 1 December and was completed during the last week of May. The proportion of women interviewed by month was December 1988 (7 percent); January 1989 (13 percent); February (14 percent); March (24 percent); April (25 percent); and May (17 percent).

3.3 DATA LIMITATION (Quality of Data)

The secondary data information from the KDHS for Nairobi province on adolescent fertility provides the following variables.

Education, place of residence.

Age at first birth, age at first marriage, Religion, Ethnicity.

Contraceptive use and source of contraceptives. However it leaves out other important variables such as source of income or (coital frequency) occupational status of women, health status of the adolescents aged between 10 and 24 years. Migration as a factor influencing adolescent fertility is also not provided.

Therefore the selected variables do not fully represent the factors influencing adolescent fertility.

3.4 METHODOLOGY

Secondary data will be used in this study. This will be mainly from the Kenya Demographic and Health Survey which was carried out in 1989 (KDHS).

The secondary data to be collected comprise determinants of adolescent fertility. For Nairobi Province, We will rely on the variables provided in the data such as Education, Age, Religion, Ethnicity, Contraceptive use and source of contraceptive use. We will therefore not deal with factors that have been left out such as income, or occupation, Health and nutrition and migration.

The sample size of the adolescents aged between 10 and 24 years who were interviewed during the KDHS survey is, 362 within Nairobi (KDHS 1989).

We shall use cross tabulation as a statistical technique to present my findings. We will also use descriptive statistics such as the mean to explain adolescent fertility. Bar graphs and maps will also be useful in explaining certain variables affecting fertility.

CHAPTER 4

DATA ANALYSIS

4.1 INTRODUCTION

Data analysis on the socio - economic, socio - cultural and Demographic factors that influence adolescent fertility in Nairobi was based on the Kenya Demographic and Health Survey data of 1989. The factors given in the data which we will be discussing include level of education of the adolescents aged between age 10 and 24, age at first marriage, place of residence, contraceptive use, age at first birth, Religion and ethnicity. It is important to point that out that these factors interact to some degree to influence adolescent fertility in any community.

During the Kenya Demographic and Health Survey a total of 9,836 households were selected. Of these, 8,173 were identified as occupied households during the fieldwork and 8,173 were successfully interviewed. Respondents for the individual interview were women aged 15-49 who had spent the night before the interview in the selected household. In the interviewed households 7,424 eligible women were identified and 7,150 were successfully interviewed. In addition 1,116 husbands were interviewed out of a total of 1,397 eligible for a response rate of 81 percent.

This report briefly examines that background characteristics of adolescent female respondents in Nairobi aged between 10 and 24 years. According to the KDHS (1989) 7.7 percent of women respondents were from Nairobi province. The weighted number of females respondents aged 15 - 49 years in Nairobi province were 554. Out of this total, 362 were female adolescents aged between 10 and 24 with whom this report is concerned.

4.2 Socio - economic determinants of Adolescent Fertility

4.2.1 LEVEL OF EDUCATION

The level of education can influence age at first birth and hence fertility. According to data analysis based on the Kenya Demographic and Health Survey, it was found out that adolescents aged between 10 and 24 years with no education at all had a lower age at first birth (16.8) as compared to adolescents with secondary education (19.03) and those with higher education (22). Those with primary level education experienced the first birth at age 17.4 which is still a lower age at first birth than those with secondary or higher education. Therefore, we can infer that the l   e education level, the higher the age at first birth and

vice versa.

We can therefore conclude that lack of or low education creates a state of ignorance about reproductive biology on part of the adolescents affected. Hence a low age at first birth for those with no education or primary education only. This can enhance fertility especially if accompanied with no - use of contraceptives. Those with higher - education are more concerned with building their careers and hence a higher age at first birth (age 22).

Table 1

Summary showing number of adolescents in each age group between 10 to 24 in Nairobi by level of education and mean age at first birth.

EDUCATION LEVEL	NUMBER OF FEMALE ADOLESCENTS	MEAN AGE AT FIRST BIRTH
NO EDUCATION	40	16.8
PRIMARY EDUCATION	186	17.4
SECONDARY EDUCATION	61	19.01
HIGHER EDUCATION	186	17.4

Table 2

Summary of number of female adolescents aged between 10 and 24 and percentage at each education level in Nairobi (KDHS 1989)

AGE	NUMBER OF FEMALE ADOLESCENTS AND PERCENTAGE AT EACH EDUCATIONAL LEVEL				
	NO EDU.	PRIMARY EDU.	SECONDARY EDU.	HIGHER EDU.	TOTAL %
10 - 14	11 3.0%	22 8.0%	8 4.9%	--- 1.0%	41 16.9%
15 - 19	20 5.0%	126 32.5%	61 15.4%	--- ---	207 52.9%
20 - 24	9 3.0%	38 10%	61 16.7%	6 0.5%	114 30.2%
TOTAL NO. TOTAL %					362 100.0%

Only 37% of female adolescents in Nairobi had gone beyond secondary education. Education can have a great impact on fertility but in combination with socio - cultural and other socio - economic factors such as marriage, occupation and also environmental factors. More years spent in school during the educational process can delay age at first marriage and therefore age at first birth. This can have the impact of lowering fertility and hence slow population growth. On the other hand, low education level is combined with low age at first birth. This means more of the adolescents' life is spent in reproduction and this could lead to rapid population growth due to high fertility over a short period of birth.

4.2.2 TYPE OF PLACE OF RESIDENCE

362 female adolescents interviewed during the 1989 Kenya Demographic and Health Survey were living in Nairobi which is an urban residence and a capital of Kenya. Through data analysis, it was found out that the mean age at first birth for the adolescents aged between 10 and 24 was age 18.13. In 1979 census data show that fertility in urban areas is slightly lower than in rural areas. This can be explained by the higher mean age at first birth for urban adolescents whose contribution will be to lower fertility. Other reasons for this higher mean age at first birth could be due to the constraints of the urban life, which places greater strain on parents in their effort to provide food, Health care, Housing and Education for children. This is a factor that can also lead to delay in marriage, and hence further decline

in fertility in an urban areas such as Nairobi.

4.2.3 CONTRACEPTIVE USE

Adolescent women in Nairobi which is an urban area have the advantage of greater knowledge, accessibility, availability and use of contraceptives. According to the KDHS of 1989, the various types of contraceptives included the pill, IUD, Injection, Diaphram/ foam/jellies, condom, female sterilization, periodic Abstinence, withdrawal and others not specifically mentioned.

These contraceptive types were obtainable from various sources according to KDHS (1989). These sources included:-

        Government Hospitals

        Government Clinics

        FPAK Clinic

        Other Hospitals and Clinics

        Mobile Clinics

        Field Educators

        Pharmacies and

        From husbands or spouses

Contraceptive use can influence age at first birth. Use or non - use of contraceptives can either lower or increase fertility and hence influence population growth positively or negatively.

(Table 3

Summary of contraceptive methods available in Nairobi province and number of _female_
adolescent users interviewed (KDHS)

AGE	NOT USING	PILL	IUD	INJ	DIAPH FOAM	CON	FEM STER	PER ABST	WITH DR	OTH
10-14	25	5	4	2	0	0	2	3	0	0
15-19	141	22	16	6	3	1	10	7	1	4
20-24	64	20	15	2	1	1	7	3	1	0
TOTAL NO. OF USER	230	47	25	10	4	2	19	13	2	4

230 out of 362 female adolescents in Nairobi were recorded as not using any form of
contraceptive. This is a big number of non - users. This could be due to the fact that
unmarried adolescents are excluded from the official family planning programs and find it
difficult to obtain safe and effective contraception or abortion services. Access to free or
inexpensive contraceptive supplies is limited to married adolescents only. Abortion on the
other hand is illegal in Kenya and is not considered as one of the contraceptive methods to
be avaited to interested clients.

The pill seems to be the most used contraceptive method followed by the IUD
especially by the adolescents aged between 15 and 24 years. However the number of users
of these methods of contraceptives is very low. There is little or no use of contraceptives by
adolescents aged between 10 - 14 (Reg. Fig 1.)

Young unmarried girls who have irregular intercourse may use the pill ineffectively
hence the low number of pill users in the age group 10 - 14. Generally non - use of
contraceptives may enhance fertility through early age at first birth. The major problem
associated with oral contraceptive use by adolescents has been inconsistent use partially
related to the inconvenience of daily pill - taking (population Reports series J. Number 10,
July 1976).

According to KDHS data analysis the IUD, Injections, Diaphram, condom and jellies

are not popular among adolescents in Nairobi province probably due to the preparation and inconveniences involved in using them.

The general no - use of contraceptives by a big number of adolescents in Nairobi could be due to lack of information or unavailability of contraceptives to unmarried adolescents. Those that might be married show little use since they may just be starting their families.

The IUD, injections and the like are unpopular because for example, obtaining them by younger adolescents aged 10 - 15 involves planning for sex and is therefore unacceptable to unmarried young adolescents. This increases the risk of pregnancy to this age group and may indicates chances of higher fertility if caution is not taken.
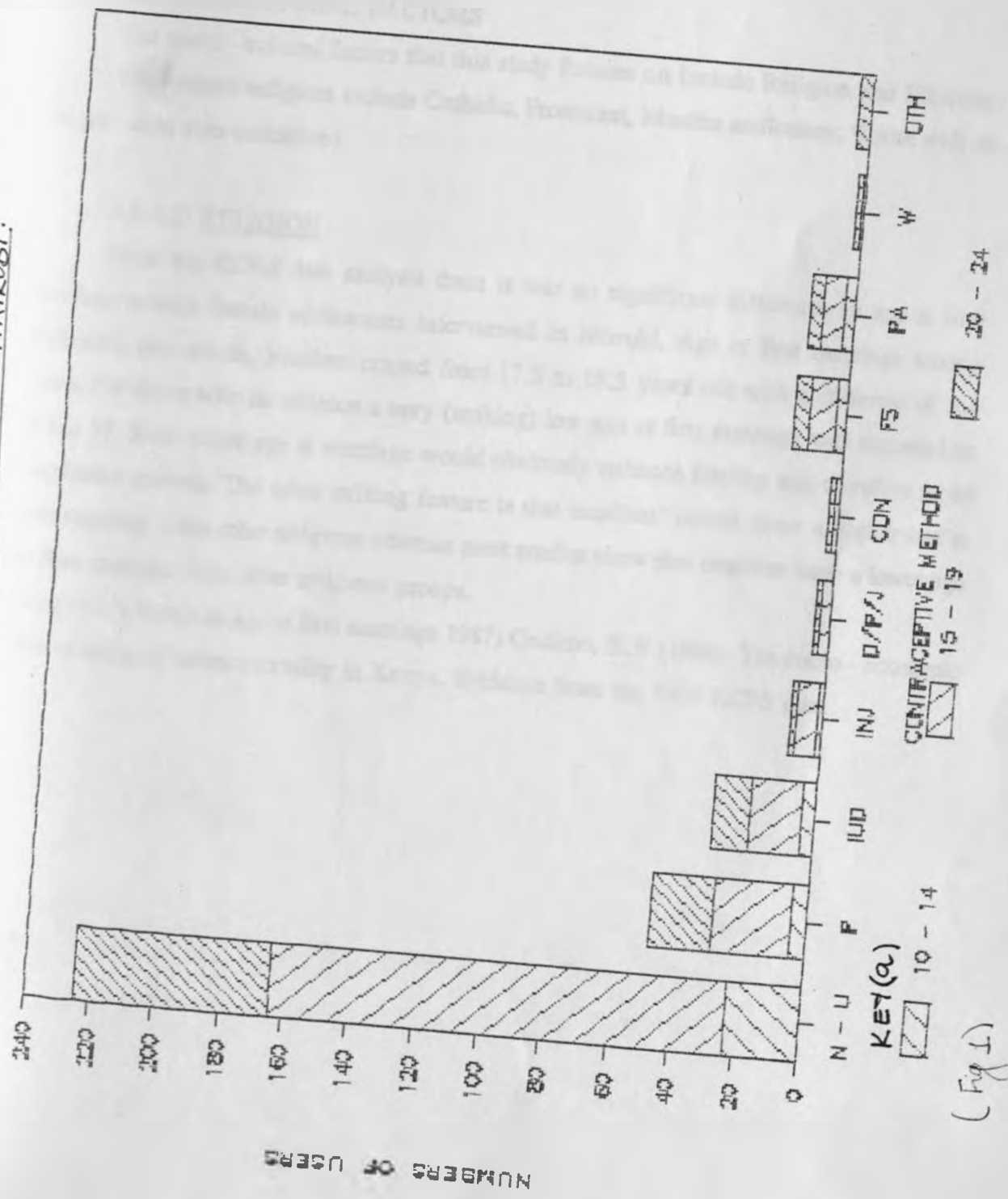
Figure 1

Compound Bar chart Showing Contraceptive use by adolescents in Nairobi aged 10 -
24

(insert bar)

BAR CHART SHOWING CONTRACEPTIVE
BY ADD FEMALE ADOLESCENTS IN NAIROBI.

NUMBERS OF USERS

Y-axis: 240, 220, 200, 180, 160, 140, 120, 100, 80, 60, 40, 20, 0

X-axis (CONTRACEPTIVE METHOD): N-U P IUD INJ D/P/J CON FS PA W OTH

KEY(a): 10 - 14   15 - 19   20 - 24

(Fig 1)

3. Population Age at first marriage 1987) Oucho, J.C. (1988: Fertility ... in natural fertility in Kenya, evidence from the 1989 KDHS.

The findings show little or no use of contraceptives by adolescents in Nairobi involved in using them. For example, obtaining an IUD especially by the younger adolescents aged between 10 - 15 involves planning for sex and may therefore be unacceptable to unmarried adolescents. If caution is not taken the result would be to enhance birth due to non - use of contraceptives.

4.2.4   SOCIO - CULTURAL FACTORS

The socio - cultural factors that this study focuses on include Religion and Ethnicity.

The various religions include Catholic, Protestant, Muslim and others. Those with no religion were also considered

4.2.4 (i) RELIGION

From the KDHS data analysis there is was no significant difference in age at first marriage among female adolescents interviewed in Nairobi. Age at first marriage among Catholics, protestants, Muslims ranged from 17.5 to 18.5 years old with a different of 1.4 years. For those with no religion a very (striking) low age at first marriage was recorded as at age 13. Such a low age at marriage would obviously enhance fertility and therefore rapid population growth. The other striking feature is that muslims' record show a higher age at first marriage them other religions whereas most studies show that muslims have a lower age at first marriage than other religious groups.

(Ang'awa's thesis an age at first marriage 1987) Ondimo, K.N (1988). The socio - economic determinants of infant mortality in Kenya. Evidence from the 1984 KCPS data

Table 4

Summary of mean age at first marriage by various religions

RELIGION	MEAN AT FIRST MARRIAGE
CATHOLIC	17.9
PROTESTANT	18.3
MUSLIM	18.9
OTHER	17.5
NO RELIGION	13

Higher age at marriage can lead to fertility decline especially if it is combined with contraceptive use and birth - spacing. Whereas low age at first marriage will contribute to higher fertility since most of the reproductive years are spent in childbearing and rearing.

Figure 2

Bar Graph showing Religion and Age at first marriage
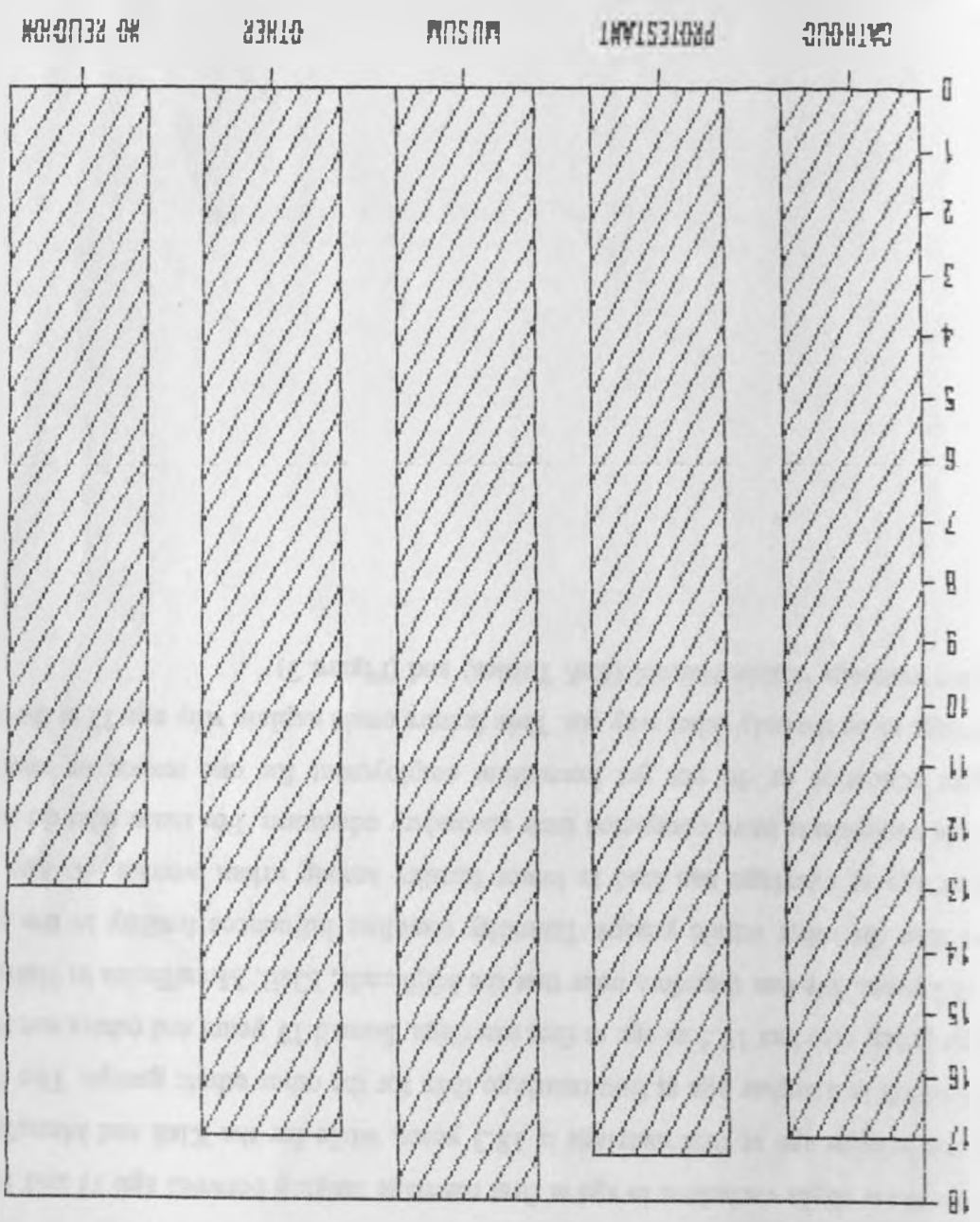
(insert figure)

(fig 2)

RELIGION

| NO RELIGION | OTHER | MUSLIM | PROTESTANT | CATHOLIC |

AGE AT FIRST MARRIAGE

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

BAR GRAPH SHOWING RELIGION BY AGE AT
FIRST MARRIAGE FOR FEMALE ADOLESCENTS
IN NAIROBI

(figure 2)

ETHNICITY

The analysis on the effect of ethnicity on age at first marriage also indicates slight variations. The various ethnic groups shown in the KDHS data include the Kamba, Kalenjin, Kikuyu, Luhya, Kisii, Luo, Meru and Embu. The Kamba, Kalenjin, Luhya and Luo ethnic groups show slight variations in age at first marriage ranging between age 17 and 17.8 years. For the Kikuyu age at first marriage is 18.3 years, while for the Kisii and Meru/Embu it is 19.5 which is a higher age at first marriage than for the other ethnic groups. The Mijikenda ethnic group also has 19.5 as age at first marriage, Somali 17 years and others not mentioned at 18.2 years. We can therefore infer that the Mijikenda, Kisii, Meru/Embu in Nairobi marry later than the other ethnic groups. Ethnicity therefore influences fertility in the sense that higher age at marriage can lead to lower fertility among urban women. At age 17, most female adolescents have completed their secondary education. For those who do not pursue higher education or do not get immediate employment for one reason or another, find marriage to be the only other way out. This feature could explain why age 17 is the mean age at first marriage within Nairobi (Ref. Tables) and (Figure 3)

(Table 5)

Summary showing mean age at first marriage for the various ethnic groups in Nairobi

ETHNICITY	AGE AT FIRST MARRIAGE
KAMBA	17.8
KALENJIN	17
KIKUYU	18.3
LUHYA	17.6
KISII	19.5
LUO	17.4
MERU/EMBU	19.5
MIJIKENDA	19.5
SOMALI	17
OTHER	18.17

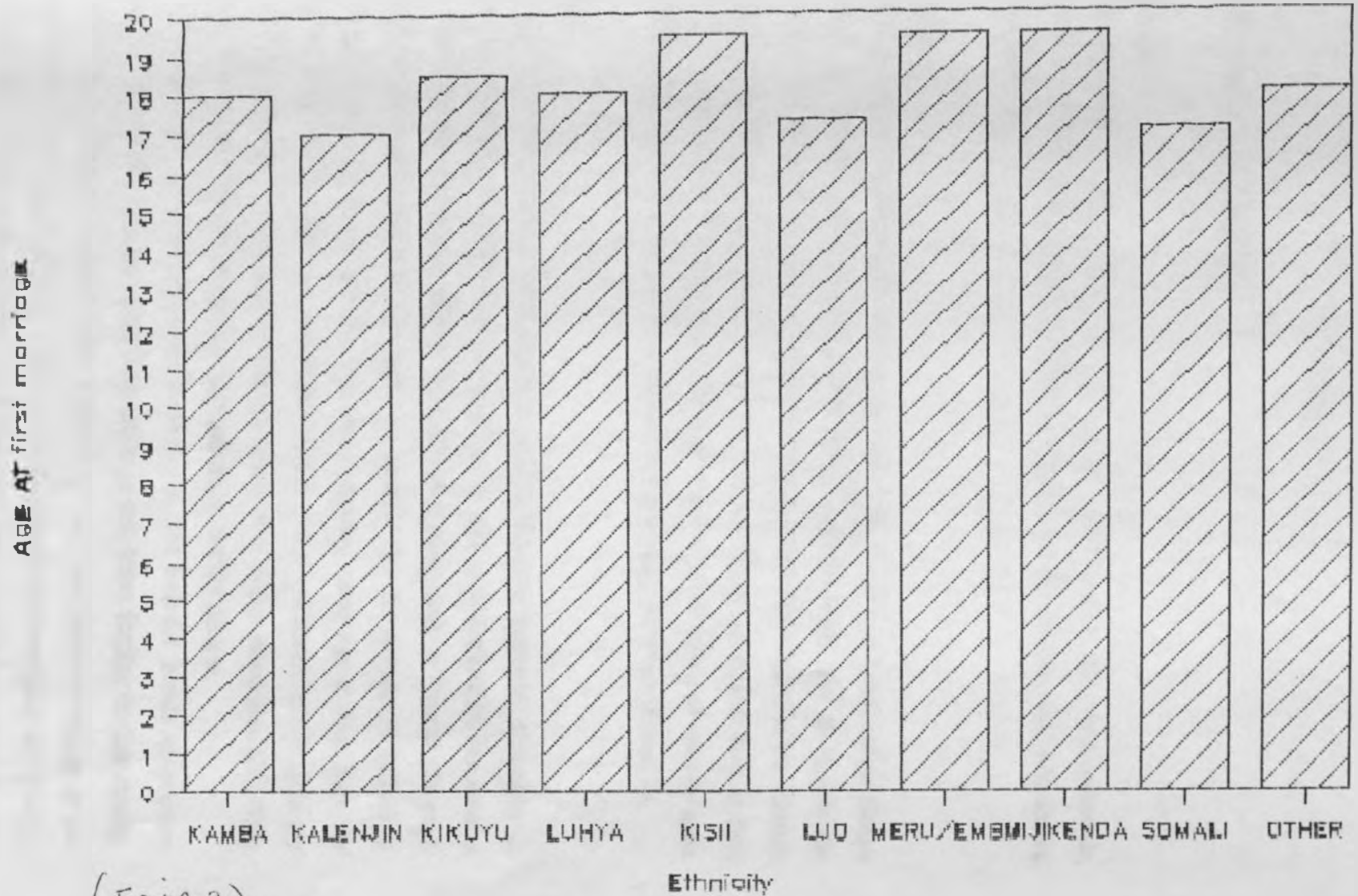Age at first marriage by ethnicity ranges between age 17 and 19.5

Figure 3

Bar graph Showing Ethnicity and mean age for various ethnic groups in Nairobi

(insert bar chart)

Figure 3

BAR GRAPH SHOWING ETHNICITY BY MEAN AGE AT FIRST MARRIAGE FOR FEMALE ADOLESCENTS IN NAIROBI.

(Figure 3)

CHAPTER 5

SUMMARY AND CONCLUSION

5.1 Introduction

The objective of this study was to state and explain how the socio-economic, Demographic and socio - cultural factors influence fertility within a community, with special reference to Nairobi.

5.1 Methodology

The data analysis was based on secondary data. The study was based on the Kenya Demographic and Health Survey of 1989. Desenptive Statistics were used to explain the variables of interest. Frequencies obtained were used to work out distributions as per variable such as number of adolescents at each educational level and mean age at first birth or first marriage. Cross - tabulation and bar graphs were used to depict the influence of variable upon a certain feature for instance use of contraceptives by female aged between 10 and 24.

5.3 Findings

According to the KDHS of 1989 onset of childbearing is an important demographic indicator postponement of first births, reflecting a rise in age at first marriage has made a large contribution to overall fertility decline in urban areas particularly in Nairobi. Through data analysis it was established that the mean age at first birth for women in Nairobi at highest education level is above age 16. For further details, mean age at first birth for adolescents by level of education was as follows. Those with no education (16.8), primary education (17.4), secondary education (19.01) and those with higher education (22). This shows that a rise in age at first marriage and can influence fertility decline.

Nairobi province, being an urban area mean age at first birth for female adolescents is (18.13). This further indicates late age at first marriage and hence fertility decline results.

Determining the level of contraceptive methods and services offered to females in the reproductive years was a major survey objective of the Kenya Demographic and Health Survey. Knowledge of contraceptive methods and of sources from which they can be obtained are preconditions for their use. The KDHS (1989) shows various sources but Government

institutions are perceived as the primary source of contraceptive services for most methods in Nairobi province. The pill was the most commonly used method among users. Other known and used methods are the IUD and injections. Female sterilization and Periodic Abstinence is also practical by a small proportion of the female adolescents interviewed during the survey. The methods that are not popular include Diaphram/Foam/Jellies, condom and withdrawal (Ref. table 3) and (Fig. 1). The adolescents aged 10 - 14 practice little or no contraceptive use. A very small proportion use methods such as Diaphram, Foam, withdrawal and condom. There is a slight increase in usage of contraceptives by those aged 15 - 19 and 20 - 24. However usage is generally low, probably because some of these adolescents are just. starting their families. Or this could be due to unavailability of contraceptive services' policy. This places these adolescents at higher risk of pregnancy which would end up in increasing fertility.

Religion as a socio - cultural factor influences fertility. In Nairobi there was a striking record of age 13 as mean age at first birth for those female adolescents with no religion. This very low age at first marriage varies greatly from the mean age at first marriage for catholics . (17.9), protestants (18.3), muslim(18.9) and other religion (17.5). The higher age recorded for muslims is also striking since we often expect muslims to have the lowest age at first marriage, as has been shown by various studies. Probably urban environment has had an eroding impact on their cultural values on low age at marriage. Low age at first marriage is an indicator of rising fertility while higher age at first marriage would lead to fertility decline with low number of births due to lesser years spent in child reproduction and rearing. This would be further enhanced by contraceptive use and birth spacing.

Various ethnic groups were interviewed during the KDHS of 1989 (Ref. table 5). The Kamba, Kalenjin, Luhya, Luo and Somali recorded a mean age at first marriage to be 17. The Kikuyu, age 18, the Kisii, Meru/Embu and Mijikenda recorded a higher age (19.5). Generally, urban women marry later than their rural counterparts (A.B.C Ocholla Ayayo and J.A.O. Osieno 1989) and therefore they have a higher age at first birth (Table 4), lower fertility.

Therefore,

1.   Highest level of education among adolescents for instance no education, primary education, secondary or Higher Education can determine mean age at first birth in a given community.

2.   Contraceptive use plays an important role in influencing age at first birth and

therefore population growth.

3.   Place and type of residence, as an environmental factor can determine fertility behaviour.

4.   Religion and ethnicity influences age at first marriage and hence fertility.

All these factors work in combination to influence adolescent fertility in any community.

5.4   LIMITATIONS

As has been noted earlier on, not much has been done in the study of adolescent fertility. The KDHS (1989) does not explain in detail how certain variables influence adolescent fertility. Some important variables were not taken into consideration such as age at menarche, age at first sexual intercourse or coital frequency among female adolescent aged 10 - 24. Women's occupation was also not recorded. These are some of the important socio - economic, socio - cultural and Demographic factors that can influence adolescent fertility.

Due to limitations of time we had to do a study based on secondary data (KDHS 1989). So it was not possible to venture into areas that were left out by KDHS (1989).

However this can be a starting point for future research.

5.5   Recommendation

The following are recommendations to help in the direction of further research, based on the findings by this study.

(I)   There is need for sex education of family life education to both in - school and out of school adolescents towards responsible adulthood.

(II)   Population education is also necessary to while communities in all the provinces of Kenya to enlighten them on population dynamics and development.

(III)   There is need to provide adolescents with appropriate contraceptive and reproductive health for them.

(IV)   Appropriate counselling services should be provided to both in - school and out of school adolescents.

(V)   There is need to establish interventionist pregnances that would help in educating and training the school drop out adolescent for appropriate employment.

5.5.1 Policy

It would be very encouraging for the institute of population studies to support collection of primary data to fill in gaps on important variables that the KDHS 1989 left out. This would help enrich knowledge on the interrelationships between the socio - economic, socio - cultural and Demographic factors that influence adolescent fertility in all the various of Kenya. This would help policy makers to compile various demographic factors determining adolescent fertility in Kenya.

5.5.2 FURTHER RESEARCH

Further research in the area of the determinants and characteristics of adolescent fertility is indeed necessary. Further research on missing variables in the KDHS (1989) would help in compiling additional information so that more effective and practical policies can be proposed and recommended to help in other regions in Kenya.

Studies at divisional levels are still lacking generally. So it would be important to probe deeper at locational levels so that a true picture about each duration is reflected, as far as adolescent fertility is concerned.

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Fig 4)   KENYA: PROVINCIAL AND DISTRICT BOUNDARIES
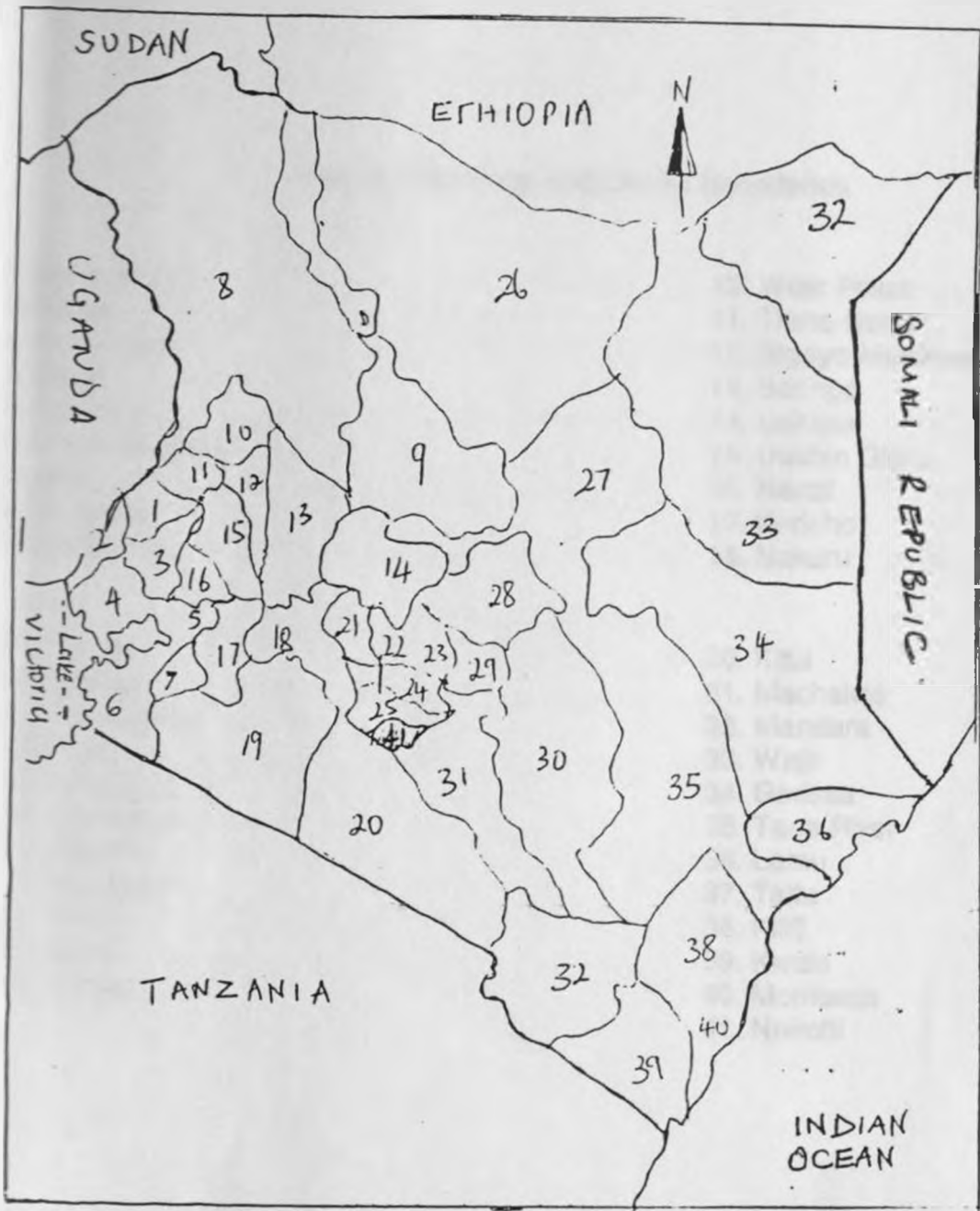
(Figure 4)

4/1 Nairobi Area.

Kenya; Provincial and District Boundaries

1. Bungoma
2. Busia
3. Kakamega
4. Siaya
5. Kisumu
6. South Nyanza
7. Kisii
8. Turkana
9. Samburu

10. West Pokot
11. Trans-Nzioa
12. Elgeyo-Marakwet
13. Baringo
14. Laikipia
15. Uashin Gishu
16. Nandi
17. Kericho
18. Nakuru

19. Narok
20. Kajiado
21. Nyandarua
22. Nyeri
23. Kirinyaga
24. Murang'a
25. Kiambu
26. Marsabit
27. Isiolo
28. Meru
29. Embu

30. Kitui
31. Machakos
32. Mandera
33. Wajir
34. Garissa
35. Tana River
36. Lamu
37. Taita
38. Kilifi
39. Kwale
40. Mombasa
41. Nairobi

Nairobi is one of the 41 districts of Kenya. It is an urban district which covers 684 Sq. Km. of the total land area of Kenya (580,367) or 0.1% of the total area of Kenya.

The growth of Nairobi

Immigration from rural areas has caused Nairobi to grow very rapidly. The built-up area had become so large by 1964 that the boundary had to be placed farther out. The city is now about 700 Sq. Km. in area compared to 90 Sq. Km. before 1964. Estimated of population growth show that Nairobi will become a very large city indeed by the year 2000. In 1969, the population was 478,000. By 1979 it had more than doubled to 827,775. By 1990, it was about 1,500,000 and with the high growth rate of 3.3% the population expected to be at 2,500,000 by the year 2000.

L.T. 50

(Fig 5.)

NAIROBI CITY AND REGION
from W.T.W. Morgan

From W·T·W· Morgan.
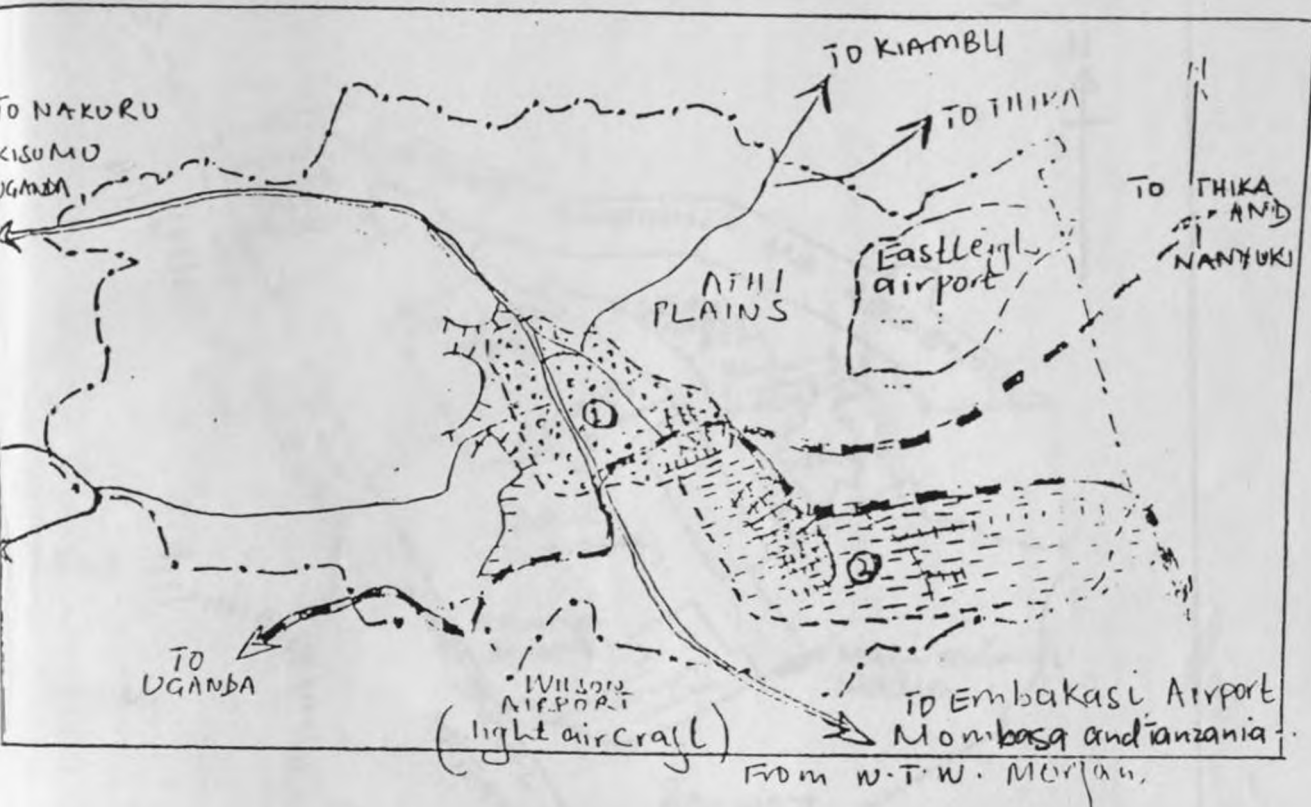
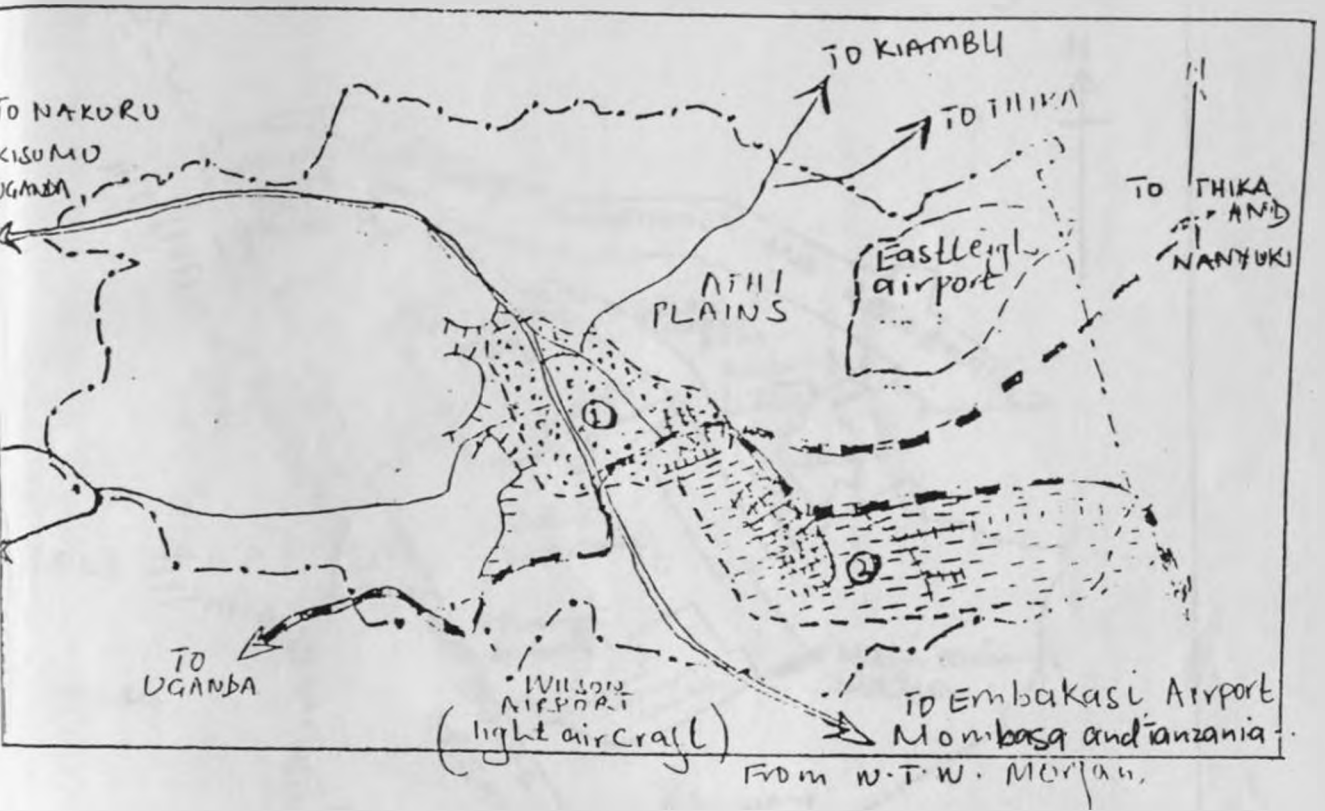| Symbol	Description
①	The Commercial cultural and Public core of Nairobi
②	Industrial area

— — — Main roads

— ·—·— Railways

—·—··— old city boundary

(Figure 5)

Private housing has been built on most of the land inside the old city boundary except for (1) and (2).

(Fig 5.)

From W.T.W. Morgan.

①	The Commercial cultural and public core of Nairobi
②	Industrial area

———— Main roads

— — — Railways

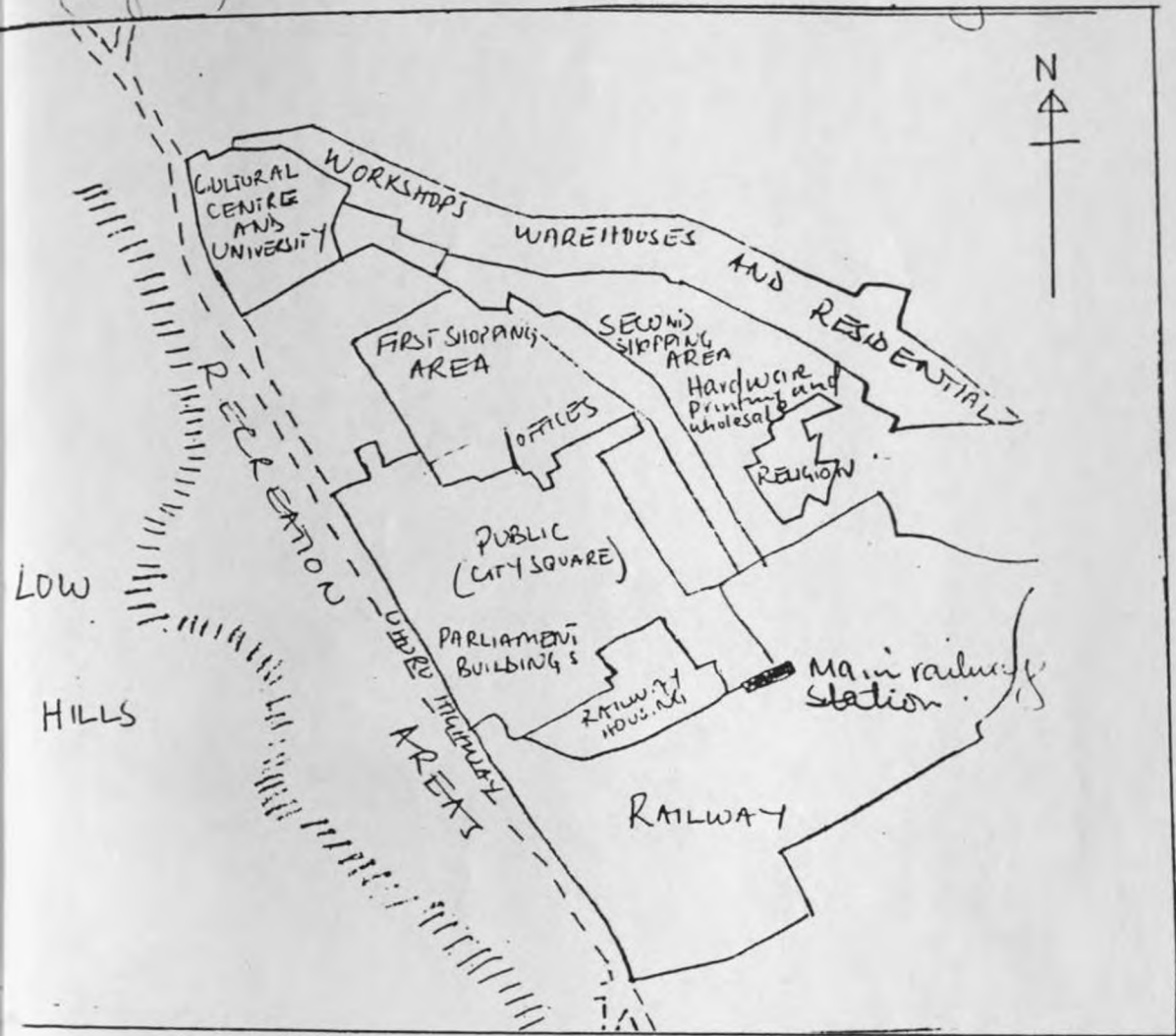—··—··— old city boundary

(Figure 5)

Private housing has been built on most of the land inside the old city boundary except for (1) and (2).

NAIROBI CITY AND REGION
from W.T.W. Morgan

THE ENLARGED COMMERCIAL CULTURAL AND PUBLIC CORE OF NAIROBI

Figure 6.