SEXUAL DEBUT AMONG YOUNG WOMEN IN KENYA AGED 15-24 YEARS /)

BY IRENE A. MUHUNZU REG. NO. Q50/P/1840/2006



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DECLARATION

This project is my original work and to the best of my knowledge it has not been presented for a Degree award in any other University.

CANDIDATE: IRENE A. MUHUNZU

SIGNATURE:

This project is submitted for the award of a Master of Arts Degree in Population Studies with our approval as University Supervisors:

MR. ANDREW MUTUKU

DATE

SIGNATURE

22/11/10

MR. GEORGE ODIPO

SIGNATURE

DATE

22-11-2-010

DEDICATION

I dedicate this piece of work first to God almighty for divine guidance and for his grace that has been sufficient. To my dear husband Kenneth, and my lovely daughters Polly. Gilly and Vicky who have been my source of inspiration and strength for allowing me to stay on my own most of the times while I worked on this project. To my dad and mum my sister Concil for their continuous support, prayers, encouragement and motivation during my years of study. To my mentors Isaac and Esther for the faith they had in me that I can break all limits and succeed.

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ABSTRACT

This study set out to investigate the socio-economic factors closely associated with adolescent age at first sex by using the Kenya Demographic and Health Survey 2008/9. The main objective of the study is to explore if there is any association between education, religion, economic status, exposure to mass media and sexual debut among adolescents aged 15-24 years. The dependent variable age at first sex was used to measure sexual debut and the independent variables included; education, religion, household wealth quintile, exposure to mass media. Another key independent variable that was taken into account was place of residence. The study sample is 3511 adolescent women aged 15-24 years obtained from the overall survey sample of 8,444 women aged 15-49 years. This was analysed using life table survival analysis to compute median age at first sex and bivariate and multivariate analysis using Cox hazard regression to establish factors associated with early sexual debut. Descriptive analysis shows that 61.9% of the 3511 adolescents aged 15-24 were already sexually experienced as at the time of the survey. The median age at first sex debut was 16.88 years. The median ages at first sex supports previous studies that, rural residence; Nyanza region; no education; lower wealth quintile; exposure to mass media influence early sexual debut. Results of bivariate and multivariate analysis do not support these earlier studies but were consistent with recent studies. Variables showing a significant bivariate association with early sexual debut were: primary and at least secondary education, middle and upper wealth quintile and non-exposure to mass media. Variables showing a significant bivariate associated with delayed sexual debut were: rural residence, Central and Coast regions, Protestants and other Christians. In the multivariate survival analyses, variables significantly associated with early sexual debut were: primary and at least secondary education, middle wealth quintile, Rift Valley and North Eastern region and variables associated with delayed onset of sexual activity were: no religion and Muslim. Both bivariate and multivariate depict Education, wealth quintile and region to be significantly associated with early sexual debut. The findings suggest that there is need to address adolescent reproductive health needs in school and conduct further qualitative research to get insights about the change in pattern in sexual activity among adolescents and the dynamics in regional variation.

CHAPTER 1: INTRODUCTION

1.1 Background

1.1 Background World Health Organization (WHO) defines adolescence as period between years and United Nations (UN) considers adolescents as persons aged According to the 1999 census, young people so defined constitute about 36% According to the 1999 census, young people as a population. This proportion has major social, demographical and economic i population. This proportion has major social, demographical and economic i population. According to the Kenya Demographic Health Survey (KDHS 2008) 11 people aged 15-24 years have had sex before the age of 15.

Findings reveal that young women who initiate sex at very young ages Experienced some sort of pressure to have unwanted sexual encounters du educational or economic factors. These studies suggest that adverse economic 500 no education, coercion, peer pressure to obtain luxury items are reasons for activity among youth. Statistics show that 56% of young women exchange sex money. Where some form of payment is received for sex, young people may by negotiate condom or contraceptive use, leaving them at greater isk of unintended pregnancy. Further studies show that Women with at least some school education begin sexual activity at least 3 years later than those with no Results further reveal that poor women initiate sexual activity 2 years articler who are wealthy and young people in rural areas are likely to have eatier se than those in urban areas (NCAPD and CSA, 2004).

The breakdown in traditional family systems, urbanization and influence of m are some of the factors contributing to increased sexual activity amongouth. systems of preparing, training and initiating young people in adult 13 disintegrated, and traditional values that once regulated sexual behavior unmarried youth have broken down. The youth are living in times whatadition structures have changed and with them the modes of communication with la1 and education. As young people become adults they seek information and clu in a sexual life from a variety of sources. Much of that information is income income 105

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ple

misleading. Young people often get their information from their peers who may be ignorant of the topic or mass media which may provide sensational and inaccurate information (Mckaig et al., Rani and Lule, 2004; Bruce, 2002; UNESCO, 2001; USAID, 1996).

Early sexual activity poses major health risks for young women. Recent studies show that sexual activity among Kenyan young women begins early and it is usually unprotected, giving rise to early pregnancy and child-bearing, unsafe abortions, school dropout, reproduction tract infections (RTIs) including STIs and HIV/AIDS and economic hardships (2003 KDHS, CSA 2004)). Girls who report first sexual intercourse during their early teen years have much higher rates of fertility, morbidity and mortality as a result of teenage pregnancy, early childbearing, abortion, STIs and HIV infection than girls who delay sexual onset until older adolescence. (MOH, 2005; Barnett and Schueller, 2000; NCAPD/MOH, 2003; Erulkar et al., UNESCO, 2001).

1.2 Problem Statement

National concern about number of teen pregnancy and increase in sexually transmitted diseases among adolescents has resulted in increased studies enumerating predictors of early sexual intercourse. However, we know little about the comparative impact of individual predictors of early initiation by age of adolescents. This study used data obtained from the latest 2008 KDHS to establish the socio-economic factors that have been cited in the literature to be closely associated with the onset of early sexual activity among young Kenyan women aged 15-24 years in order to identify opportunities for intervention so as to delay sexual debut and reduce negative reproductive health outcomes.

Early sexual initiation exposes young adolescents to more sexual partners and longer period of sexual activity. Young women who engage in early sexual debut are likely to get married early. Early marriage is associated with large family size. A woman who starts sexual activity early in the absence of contraceptives has a greater probability of having many children and closely spaced births. Studies have shown that closely spaced births and higher parity births are some of the main causes of maternal and child

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morbidity and mortality (CSA 2004; Rani and Lule, 2004; Bruce, 2002). Early initiation therefore leads to high fertility levels amongst the young people which contribute to the overall fertility of the nation. This may be the underlying cause of fertility stall in Kenya. The youth are future potential parents and if this fertility is not controlled will lead to an alarming high population.

Early sexual initiation often results to early pregnancy and child-bearing that is likely to cause maternal and child morbidity and mortality. Adolescents are physiologically immature and are twice as likely as older women to die of pregnancy-related causes. They are likely to give birth to low birth weight babies who are at higher risks of illness and death. The 2008/9 KDHS findings show that 15% of young girls aged 15-19 had a child and 3% of the same age group were pregnant. Early pregnancy and child bearing poses serious health risks to the mother and child and limits her education, economic opportunities and empowerment (2003 KDHS, 2008 KDHS).

Early sexual debut leads to unwanted pregnancy, one of the main reasons for unsafe abortion in young women and a major contributor to maternal mortality. Early sexual debut is also a key factor contributing to infection and spread of HIV/AIDS that leads to increases in morbidity and mortality in young people.

These serious reproductive health outcomes of early sexual activity among young females undermines the government's efforts of meeting MDG4 (reduce infant and child mortality rates by two-thirds, 1990-2015) and MDG5 (reduce maternal mortality ratios by three quarters, 1990-2015) and calls for urgent need to address adolescent sexual and reproductive health.

1.3 Research Questions

The study seeks to answer the following question:

1. What socio-economic factors influence early sexual debut in young women aged 15-24 years?

1.4 Objectives of the Study

The main objective of the study is to examine the socio-economic factors that influence early sexual debut among young women aged 15-24.

1.5 Rationale for Study

There is need to understand the critical factors that influence early initiation of sexual activity among young women in order to correct and prevent negative reproductive health outcomes. During past decades, young people and their health needs have been subject of greater attention worldwide. 1994 International Conference on Population and Development (ICPD) endorsed the rights of adolescents and young people to obtain the highest levels of health care. In response, more health policies and services in Kenya are becoming "youth friendly", and trained to be more sensitive to young people's needs. Despite these gains, access to reproductive health knowledge, information and provision of reproductive health care for young people is still limited. Studies show that young people are initiating sexual activity at very early ages and are frequently not provided with specialized reproductive health information, counselling and services.

Many studies have homogenized youth, some not making distinctions between boys and girls or taking account of differing circumstances. This has been seen as one of the greatest shortcomings in the field of Adolescent and Youth Reproductive Health (Bruce, 2002; Rani and Lule, 2004; Barnett and Schueller, 2000). Young people have specific reproductive health needs based on age, sex, education, their environment and socioeconomic situation etc. Their situation and needs vary widely because the youth are not a homogenous group.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

The review covers published literature from 1996 to 2005 and it includes pertinent literature like African Journal of Reproductive Health, Family Planning Perspectives and Studies in Family Planning. The electronic database included: Pubmed, Popline, AIM and JSTOR. Websites of particular relevance: Family Health International (FHI), Pathfinder International, UNFPA, UNESCO, USAID and WHO. The review is divided into 4 main sections: Demographic implication of Adolescent and Youth Reproductive Health. Adolescent and Youth Reproductive Health information and service, Sexual behaviour of unmarried youth and Programme response to Adolescent and Youth Reproductive health problems.

2.2 Review of Literature

2.2.1 Demographic Implication of Sexual Activity among Youth

According to the 1999 census, youth constitute about 36% of Kenya's population. This proportion has major social, demographical and economic implications (Kenpop. 2005; MOH/DRH, 2003; NCAPD and MOH/DRH, 2005). Studies show that there is increased early initiation of sexual activity among young people According to 2003 KDHS, 8 out of 10 young people have had sex before age of 20, with median age at first sexual intercourse of 17 years.

Early initiation of sexual activity gives rise to early pregnancy and child-bearing, unsafe abortions, school dropout, reproduction tract infections (RTIs) including STIs and HIV/AIDS. Studies in Kenya show that 4 in every 10 girls and 5 in every 10 boys aged 15-19 are sexually active and begin childbearing before age 20. The studies also indicate that 4% at age 15 and 46% at age 19 are childbearing teenagers (KDHS 2003). Early initiation of childbearing lengthens the reproductive period and subsequent increases in fertility. Young people who begin to have sex earlier than others of their age are more likely to be infected with HIV.

Fertility levels among young people in Kenya have remained high despite declines experienced among other age groups. Studies also reveal that by age 19, almost half of the youth have began childbearing and among all pregnant women, 23 percent are adolescents. Adolescent girls face considerable health risks during pregnancy and childbirth, accounting for 15% of the Global Burden of Disease (GBD) for maternal conditions and 13% of all maternal deaths (WHO 2002; UNFPA, 1997). Young woman under age 17 has not reached physical maturity and may suffer prolonged labour or obstructed delivery, which can result in haemorrhage, infections, fistula or death of mother or child. Young women below 17 years are more likely than women ages 20 and older to experience premature labour, spontaneous abortion, and stillbirth or give birth to low birth weight baby and, the risk of death having a child birth is 2 to 4 times higher (2003 KDHS). Risk of death during childbirth is 2 to 4 times higher among mothers aged 17 or younger than among mothers aged 20 years or older. Early childbearing is also dangerous to health of mother and child (MOH, 2005; Barnett and Schueller, 2000; NCAPD/MOH, 2003; Erulkar et al., UNESCO, 2001).

2.2.2 Transition from traditional structures to present day societies

The rise in incidence of sexual activity among youth is blamed on the breakdown of family systems, urbanization and influence of mass media. Young people are faced with contradictions in religion, culture, moral values, and modernity. The contradictory environment for the Kenyan youth today is aggravated as they live in a society undergoing rapid socio-cultural and economic transition (MOH/DRH, 2005; Creel and Perry, 2002; Barnett and Schueller, 2000; Singh, 1998; Were, 1996). Demographic Transition theory is used to explain how major forces have led to the breakdown of traditional family structures to present day family structure. The Demographic Transition theory refers to changes in fertility and mortality of a society, from a situation where fertility and mortality are high and uncontrolled, and the economy technologically less developed, to a situation where fertility and mortality are low and controlled, and the economy technologically more developed.

Based on the experiences of the advanced countries, notably, Europe and North America, the theory accounts for the demographic transition as being a result of two major forces ing simultaneously. First, the rapid industrialization and urbanization resulted in urban migration, created a majority wage-earning working class in urban centres in 1 jmited housing and other social amenities that made it necessary for families to opt maller family sizes as a strategy of coping with the difficult living conditions. for ord, the advancement in medical technologies was responsible for people's better conditions and consequent declines in mortality. Incidentally, such scientific weries also involved more effective ad convenient birth control techniques, hence difficult advancement of small family sizes (Weeks, 1999).

2.2.3 Socio-economic and socio-demographic factors influencing onset of sexual activity among Young People

Recent findings show that socio-economic status is positively associated with onset of activity among young people. Studies suggest that no education, coercion, peer pressure to obtain luxury items, adverse economic conditions and expectation of gifts and noney are reasons for early sexual activity among young people. Globally, research suggests that young women who initiate sex at very young ages may have experienced some sort of pressure to have sex against their will and that young people are under pressure to be sexually active because of their economic vulnerability. Statistics show that 56% of young women exchange sex for money and women with at least some secondary school education begin sexual activity at least 3 years later than those with no education. For young women receiving payment, the power imbalance in the relationship may make it difficult to refuse sex, or negotiate condom or contraceptive use. Results further reveal that poor women initiate sexual activity 2 years earlier than those who are wealthy and young people in rural areas are likely to have earlier sexual debut than those in urban areas (NCAPD and CSA, 2004).

A fe^w relatively small-scale studies analyze socio-demographic factors associated with early sexual activity. Nzyuko et al.'s (1997) study of young women and men ages 15-19 surveyed at three truck stops in Kenya suggests that factors such as age, not living with relatives, belonging to a larger family, being out of school, not getting along with parents, put young people at a higher risk of engaging in sexual relations in exchange of gifts or occurring simultaneously. First, the rapid industrialization and urbanization resulted in rural-urban migration, created a majority wage-earning working class in urban centres with limited housing and other social amenities that made it necessary for families to opt for smaller family sizes as a strategy of coping with the difficult living conditions. Second, the advancement in medical technologies was responsible for people's better health conditions and consequent declines in mortality. Incidentally, such scientific discoveries also involved more effective ad convenient birth control techniques, hence the adoption and maintenance of small family sizes (Weeks, 1999).

2.2.3 Socio-economic and socio-demographic factors influencing onset of sexual activity among Young People

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A few relatively small-scale studies analyze socio-demographic factors associated with early sexual activity. Nzyuko et al.'s (1997) study of young women and men ages 15-19 surveyed at three truck stops in Kenya suggests that factors such as age, not living with relatives, belonging to a larger family, being out of school, not getting along with parents, put young people at a higher risk of engaging in sexual relations in exchange of gifts or money. Other studies found that those not associated with a church begin to have sex earlier than others. (Hallett et al. 1980)

2.2.4 Lack of Specific Reproductive Health Information and Services

Young people have specific reproductive health needs based on their age, sex, marital status and socio-economic situation. Knowing about such factors can help providers be more responsive to young people's reproductive health needs. The paper notes that a key factor in the successful management of sexuality by youth is providing appropriate and adequate adolescent and youth reproductive health information and services. Research findings show that young people are not making responsible decisions on sexual health issues which have immediate or serious repercussions on their health. This is attributed to the fact that they are denied useful information which could help them lead responsible lives.

Further countries experience; show that policy makers, community members, parents and teachers are reluctant to confront issues of youth sexuality because of opposition from conservative groups. Young people often get their information from their peers who may be ignorant of the topic or mass media which may provide sensational and inaccurate information (Mckaig et al., Rani and Lule, 2004; Bruce, 2002; UNESCO, 2001; USAID, 1996; Singh, 1998; Rani and Lule, 2004; USAID, 1996; Berja, 1999). A number of sexually active teenagers engage in unprotected sex due to ignorance. They are ignorant of body changes, about STIs symptoms and where to seek care. Common myths about youth sexuality also predispose young people in engaging in early sexual activity. Some of these myths include; "you cannot get pregnant the first time", "engaging in sex reduces menstrual pains" and "not having sex before age 20 closes up the birth canal".

Some studies in adolescent and youth reproductive health in Sub-Saharan Africa show that there is persistent myth in most communities that sex education leads to promiscuity. Young people are reluctant to discus RH issues; fearing knowledge will be interpreted as promiscuity. No study has presented evidence that sex education leads to earlier or increased sexual activity. Studies have indicated that sex education leads to either delay in or decrease in overall sexual activity (Were, 1996; Singh, 1998; Creel and Perry, 2003; UNESCO, 2001; Kenpop, 2005).

International Planned Parenthood Federation Africa Region (IPPFAR) strategic plan, Vision 2000, states – "young people are increasingly sexually active without proper access to sexual health information, education and services. Because most societies are still reluctant to address these issues, institutional barriers continue to obstruct the provision of effective programmes that could not only prevent the rising incidence of teen pregnancy, abortion and STDs, but could also help young people to realize their sexuality in a positive and responsible manner". (IPPFAR, Africa Link, 1995).

Experiences of countries engaged in planning and implementing adolescent and youth reproductive sexual health in areas of advocacy and IEC reveal that, one; programmes limit their focus on biological, population and development and family life education issues, second; teaching materials used are often not suited to the sensitive nature of adolescent and youth sexual reproductive health issues and third; planners and implementers are usually held back from trying out innovative approaches (Berja, 1999; Lule, 1999; Mckaig et al., 1996)

2.2.5 Programme Response to Adolescents and Youth Reproductive Health Problems

The ICPD 1994 plan of action urged governments to make reproductive health services available, accessible, acceptable and affordable to young people in order to meet the need to increase access to RH information and service for the youth so as to delay their sexual debut, limit the number of sexual partners, and encourage contraceptive use for those who are sexually active (NCAPD and MOPND, 2004).

National guidelines in line with the recently developed Adolescent and Youth Reproductive Health and Development Policy 2003 and National Youth Policy 2004 which aim at improving well-being and quality of life of Kenya's young people have developed models through which reproductive health services can be made accessible and available to young people. A number of adolescent/youth Reproduction Health programs have also been implemented by government and NGOs. Strategies and approaches range from in-school education through co-curricular, or community support from out of school sector, peer group counselling, youth camps, competitions and campaigns, development of IEC materials and interactive internet discussion forums. Some of these strategies have worked and some have failed. (MOH, 2005; NCAPD and MOPND, 2004; ARH&D Policy, 2003; NCAPD and MOH, 2005; KenPop News, 2005: NCAPD and MOH-DRH, 2005, USAID,1996; UNFPA, 1997). Data on impact of these activity should be fully documented because it contributes to improving their design, ensure sustainability and expansion and also builds a receptive climate for investment.

A number of recent studies show that adolescent and youth reproductive health programmatic models have been limited. Programming has centred on a small set of intervention models including youth centres, peer education and youth friendly services. However, little attention has been paid in the in-built assumptions surrounding these models. For example, while peer education is a very popular programme model, it assumes that young people have peers in the first place. Many young people, especially, girls, report that they have no friends and are therefore least likely to be reached by peer education. Youth centres assume that young people have the time to visit the centre, that they feel enough to travel there and that they feel comfortable in a mixed sex environment that is often dominated by older boys. These conditions are not met for the majority of girls, especially in poor and/or traditional setting (Berja, 1999; Creel and Perry, 2003; Erulkar et al., 2004).

Some studies show that older adolescents are more likely to use adolescent and youth programmes than younger adolescents, a tendency which may, in part, reflect that some programmes do not target younger adolescents. Programmes are also reaching boys to a far greater extent than girls. Boys in younger age group were still more likely to use programmes compared to girls in the older age group (Erulkar et al., 2004).

Research on young people is however, still evolving. Recent studies focus on a holistic approach to the development of young people to equip them with skills and attitudes that encourage their active participation in society. (Rani and Lule, 2004; UNESCO, 2001:

Creel and Perry, 2002; Barnett and Schueller, 2000; Mckaig et al., 1996). Over the past years it has become more difficult and challenging to have a comprehensive sexual and reproductive health of young people. This situation is worsened by the slow implementation of policy and legislation in the area of Reproductive Health. Declining investment in Reproductive Health and Family Planning programs and advocacy has further compounded this problem (NCAPD and MOPND, 2004). Unless drastic measures are taken to reverse these trends, it will be extremely difficult to meet related Millennium Development Goals; taking into account that teenage pregnancy, unsafe abortion rates and HIV prevalent rates which contribute to high levels of mortality and morbidity among young people remain unacceptably high.

2.3 Conceptual Framework

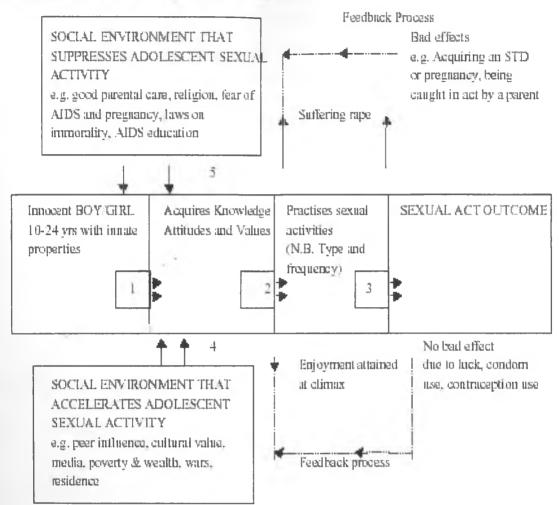
Most models of sexual activity among young people that have been previously published suggest two basic components, biological and sociological models. The conceptual framework adopted is the sociological model of Twa-Twa (1994) which focuses on the role of social environment in sexual activity among young people. He borrowed a lot from the sociological model of Peterson and Taylor (1980) and that of Hofferth and Hayes (1987).

The sociological model proposes that sexual motivation is generated by social processes. The social environment plays an important role in sexuality among young people though socialization, verbal and sign communication, modelling, sanctioning and internalization of norms and values. From the model the social environment has two main opposed forces: one component accelerates sexual activity while the other suppresses or reduces it. These accelerating factors of the model predominate over the suppressing factors during adolescence. The central axis of the model is the individual with his or her innate bio-physiological properties (namely genes, hormones, primary and secondary se characteristics) - their role in sexuality is kept in the background as constant factors since it is not part of our study.

Figure 1: The Sociological model of adolescent sexual behaviour

Figure 1

The sociological model of adolescent sexual behaviour



Process 1: Acquisition of sexual knowledge, attitudes and values

Process 2: Initiation of sexual behaviour and practices; and subsequent maintenance of sexual practices

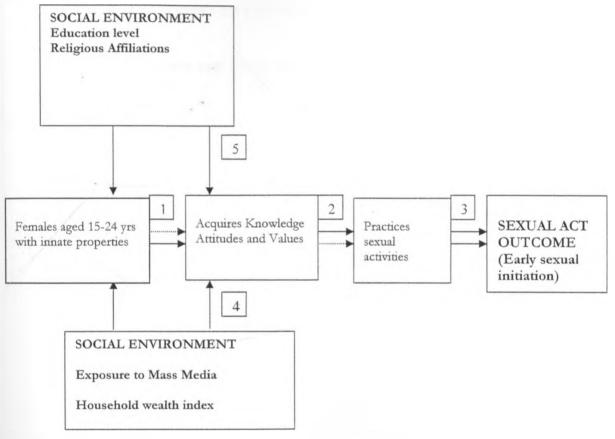
- Process 3: Development of consequences such as HIV/STDs, pregnancy, or no consequences. This also provides a feedback within the individual (6 and 7) to give in or not to society's demands for sex.
- Process 4: Feedback mechanism through social factors that accelerate adolescent sexuality.

Process 5: Feedback mechanism through social factors that reduce or suppress adolescent sexual activity. Source: Twa-Twa (1994)

2.4 Operational Framework

Using Twa-Twa sociological model of sexual behaviour among adolescents the following conceptual framework was developed to illustrate factors in the social environment that influence delay or early sexual debut among female adolescents. The framework depicts that education and religious affiliation delay sexual debut while exposure to mass media and upper wealth index influence early sexual debut.

Figure 2: Sexual behaviour among young people



Source: Twa-Twa (1994)

Process 1: Acquisition of sexual knowledge, attitudes and values

- Process 2: Initiation of sexual behaviour and practices; and subsequent maintenance of sexual practices
- Process 3: Development of consequences such as HIV/STDs, pregnancy
- Process 4: Feedback mechanism through social factors that accelerate adolescent Sexuality
- Process 5: Feedback mechanism through social factors that reduce or suppress adolescent sexual activity

2.4.1 Operational Hypotheses

- 1. Adolescents with primary education or at least secondary education are likely to delay sexual debut compared to adolescents with no education
- 2. Adolescents affiliated to a certain religion are more likely to delay sexual debut than adolescents with no religion
- 3. Young women aged 15-24 years exposed to mass media start sexual initiation earlier than adolescents not exposed to mass media
- 4. Poor young women start sexual debut earlier than rich young women aged 15-24 years



CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter presents source of data and methods utilised for data analysis. The description and measurement of dependent and independent variables used in the study are given.

3.2 Data Source

The study obtained data from the latest 2008 KDHS. The KDHS survey covered a national representative sample of 8,444 women aged 15-49 years. This study focuses on 3511 adolescent women aged 15-24 years who include single and ever-married women as the unit of analysis.

3.3 Methods of Data Analysis

Both descriptive and analytical methods were used, utilizing the Statistical Package for Social Science (SPSS) version 17. Life table survival analysis was used to determine age at first sexual intercourse and the median survival time for women aged 15-24 who have had sexual intercourse by socio-economic characteristics. Age at first sexual debut may be interpreted as survival time from a virgin state to a non-virgin state.

The dependent variable age at first sexual debut is a time dependent variable and to assess the covariates on the timing of first sexual debut among the study population, hazard Cox regression model is used. The results are presented as risk ratios, which represent the relative likelihood of a female adolescent with specific characteristic of having sexual intercourse in comparison to a female adolescent who would be in the appropriate reference group.

The risk ratio of the reference group or category is one (1.00). If the risk ratio of a given category is greater than 1.00, this indicates greater risk of having sexual intercourse, and when the risk ratio is less than 1.00, it indicates a lower risk of having sexual intercourse compared to the reference group. A variable will be reported as having a significant

effect, if its effect on the age at first sex is statistically significant at least at the 5 percent level of significance.

3.4 Variable Description and Measurements

The main dependent variable used in the analysis to measure early sexual debut is age at first sex, measured in completed years. The independent variables include level of education, religion, exposure to mass media and household wealth index.

Variables:		Description and Measurement:			
1. Age at first	sex	Dependent Variable Age at first sexual debut			
2. Level of Ec	lucation	<i>Independent Variable</i> <i>Measured in terms of primary, secondary, at least secondary</i> <i>education</i>			
3. Religion		Independent Variable Refers to the type of religion- Roman Catholic, Protestant & other Christian, Muslim or no religion			
4. Exposure t Media	o Mass	<i>Independent Variable</i> <i>Listens to radio or watch television or reads newspaper either</i> <i>at least once a week or less than once a week or almost every</i> <i>day or not at all</i>			
5. Househola	wealth index	Independent Variable Refers to wealth index either low, middle or higher			

Table 1: Definition of study variables

CHAPTER 4: FACTORS INFLUENCING SEXUAL DEBUT AMONG YOUNG WOMEN IN KENYA

4.1 Introduction

The following chapter presents results of the descriptive statistics, survival life table analysis, bivariate and multivariate analysis based on all female adolescents aged 15-24 years.

4.2 Background Characteristics of Study Population

The descriptive statistics show that 61.9% of the 3511 adolescents aged 15-24 were already sexually experienced as at the time of the survey.

The analysis in table 1 shows that the percentage population of rural female adolescent (68.6%) was more than twice that of urban female adolescents (31.4%). More than half had primary education (54.9%), a third at least secondary education (34.7%) and 10.4 percent of the adolescents were not educated. Results show majority belonged to a certain religion with only 1.9% belonging to no religion. A significant proportion of the young females (85.7%) were not exposed to mass media.

Characteristics	Frequency	Percent
Type of place of Residence		
Urban	1103	31.4
Rural	2406	68.6
Region		
Nairobi	371	10.6
Central	351	10.0
Coast	487	13.9
Eastern	431	12.3
Nyanza	605	17.2
Rift Valley	550	15.7
Western	461	13.1
Northeastern	253	7.2
Education level		
None	- 365	10.4
Primary	1926	54.9
At least secondary	1218	34.7
Religion		
Roman Catholic	717	20.4
Protestant/other christian	2136	60.9
Muslim	576	16.4
No religion	68	1.9
Wealth Index		
Poor	1231	35.1
Medium	615	17.5
Rich	1663	47.4
Exposure to mass media		
Exposed	495	14.1
Not exposed	3008	85.7
Total	3503	99.8
Missing System	6	.2
Total	3509	100.0

Table 2: Percent distribution of study population of young women aged 15-24 yearsby socio-economic characteristics, 2008/9 KDHS

4.3 Life table survival analysis

The life table survival analysis was used to estimate median age at first sex. The results are presented in table 2. The median age at first sexual intercourse was 16.88 years, this is the age at which half the population of female adolescents have already had their first sexual experience. The youngest age at first sexual experience is 8 years with majority reported in rural. Results on median ages at first sex show that adolescents living in rural

areas initiate sexual activity earlier than those living in urban area. Median age at first sex is lower in Nyanza compared to Nairobi indicating that adolescents in Nyanza start sexual activity 2 years earlier than adolescents in Nairobi. Adolescents with no education are also likely to initiate sexual activity 2 years earlier than those with at least secondary education. The Roman Catholic adolescents have higher median age at first sex which signifies that they delay sexual debut compared to adolescents with no religion. The poor female adolescents start sex at an earlier age compared to the rich. Those who are exposed to mass media initiate sexual activity earlier than those not exposed. Notably, the results of the median ages at first sex support previous studies done by Twa-Twa (1997), Singh (1998), Were (1996), Hofferth (1987), Sani and Lule (2004) that no education, rural residence, no religion, low wealth index and exposure to mass media initiate early sexual debut in young women.

Variable	Median Survival Time
Type of place of residence	
Urban	17.58
Rural	16.59
Region	
Nairobi	18.44
Central	18.16
Coast	16.79
Eastern	17.27
Nyanza	16.03
Rift Valley	16.53
Western	16.69
Northeastern	16.68
Level of Education	
None	16.01
Primary	16.40
At least secondary	18.20
Roman Catholic	17.09
Protestant/other christian	16.93
Muslim	16.64
No religion	15.29
Wealth Index	
Poor	16.19
Medium	16.88
Rich	17.49
Exposure to Mass Media	
Exposed	16.30
Not exposed	16.95

Table 3: Survival life table analysis of median ages at first sex

4.4 Factors Influencing Sexual Debut among Adolescents

In this section bivariate analysis was carried out first, then multivariate analysis using Cox hazard regression. The results obtained by fitting the Cox hazard regression model are presented in table 3. The hazard rates shown in the table indicate the relative risk of a given outcome per unit increase in a specified independent variable.

4.4.1 Bivariate Analysis

Bivariate analysis results using Cox Hazard regression show that rural adolescents are at a lower risk of engaging in early sex compared to urban by 77.1%. This was not supported by previous studies but recent studies (Ikamari and Towett, 2007) confirm that rural adolescents are less likely than urban to initiate sexual activity. Additionally, adolescents with primary and at least secondary education have significant higher risks of engaging in early sexual debut by 87.1% and 77.2% compared to adolescents with no education. Bivariate results show that adolescents in the middle and upper wealth quintile are at a higher risk of early sexual debut by 57.8% and 19.2% compared to those in the lower wealth quintile. This again does not support previous studies that reveal that poor women are likely to start engaging in early sex (Twa-Twa (1997), Singh (1998), Were (1996), Hofferth (1987), Sani and Lule (2004)). Young female adolescents that are not exposed to mass media according to bivariate results are at a higher risk of engaging in sexual debut at 26.1% than those that are exposed. This finding also does not agree with the studies which indicate that adolescents exposed to mass media engage in early sex.

4.4.2 Multivariate Analysis

Multivariate analysis shows that the effect of education on early sexual debut is statistically significant. Female adolescents with primary and at least secondary education have an unexpectedly higher risk of engaging in sexual activity earlier than those with no education at 78.9% and 72.4% respectively. This does not support studies conducted in Kenya and Africa in general, that indicates no education is associated with early sexual debut (NCAPD/MOH, 2003; Erulkar et al., UNESCO, 2001).

Religion and. Muslim adolescents and adolescents with no religion are at a lower risk of engaging in early sex compared to Roman Catholics by significant 74.8% and 72.3%. Wealth index has a weak effect on early sexual debut; women in middle wealth quintile

have 18.5% higher risks of engaging in early sexual debut than women in the lower wealth quintile.

BIVARIATE ANALYSIS			MULTIVARIATE ANALYSIS				
Variables	В	SE	Exp(B)	Variables	В	SE	Exp(B)
Place of residence				Place of residence			<u></u>
Urban				Urban			
Rural	-0.260	0.046	0.771***	Rural	-0.026	0.068	0.975
Region				Region			
Nairobi				Nairobi			
Central	-0.467	0.113	0.627***	Central	0.010	0.151	1.010
Coast	-0.423	0.119	0.655***	Coast	-0.093	0.152	0.911
Eastern	-0.040	0.108	0.961	Eastern	0.156	0.128	1.168
Nyanza	-0.189	0.114	0.828	Nyanza	0.005	0.135	1.005
Rift Valley	0.196	0.103	1.217	Rift Valley	0.454	0.137	1.575**
Western	-0.014	0.106	0.986	Western	0.194	0.138	1.214
North Eastern	0.031	0.109	1.032	North Eastern	0.273	0.140	1.314*
Level of Education				Level of education			
No education				No education			
Primary	0.626	0.073	1.871***	Primary	0.582	0.105	1.789***
At least secondary	0.572	0.049	1.772***	At least secondary	0.485	0.053	1.624***
Religion				Religion			
Roman Catholic				Roman Catholic			
Protestant & other Christian	-0.637	0.139	0.529***	Protestant & other Christian	-0.296	0.154	0.744
Muslim	-0.615	0.133	0.541***	Muslim	-0.291	0.148	0.748*
No religion	-0.507	0.142	0.603***	No religion	-0.324	0.154	0.723*
Wealth index				Wealth index			
Low				Low			
Middle	0.456	0.048	1.578***	Middle	0.169	0.068	1.185**
Upper	0.175	0.062	1.192**	Upper	-0.006	0.072	0.994
Exposure to mass media				Exposure to mass media			
No exposure mass media	0.232	0.062	1.261***	No exposure mass media	-0.016	0.076	0.984

Table 4: Cox Hazard regression results of the risk of first sexual debut among young women aged 15-24 years, 2008/9 KDHS

NB: Significance: ***p < 0.000

**p < 0.01

*p < 0.05

4.5 Discussions on Study Findings

Using data from the 2008/9 KDHS, the study set out to establish the effect of socioeconomic factors on early sexual initiation amongst young female adolescents aged 15-24 years. The analysis reveal that 61.9 percent of the 3511 adolescents aged 15-24 were already sexually experienced. Sexual initiation in young female adolescents starts very early. The median age at first sexual intercourse is 16.88 years and the youngest age at first sexual experience is 8 years. Life table survival analysis show that education and religious affiliations are likely to delay sexual debut among young women but exposure to mass media, rural residence and high household economic status are likely to accelerate early sexual activity. Studies in Kenya and other African countries confirm the same results (Twa-Twa (1997), Singh (1998), Were (1996), Hofferth (1987), Sani and Lule (2004)). A study by NCAPD and CSA revealed that poor women initiate sexual activity 2-3 years earlier than those who are wealthy and young people in rural areas are likely to have earlier sexual debut than those in urban areas. The life table analysis revealed that those who profess no religion have their sexual debut at an earlier age as compared to those who profess to a certain religion. These results agree with the results of Hallet et al., (1980) who found that those not associated with a church begin to have sex earlier than others.

Bivariate analysis was carried out for each and every independent variable on age at first sex. Significant bivariate association with lower risks of engaging in early sexual debut was evident among adolescents in rural, Coast and Central region, protestant/other Christian, Muslim and non-religious. This indicates that adolescents in rural were 77.1% less likely to engage in early sex compared to urban adolescents. Adolescents in Coast and Central were 65.5% and 62.2% less likely to initiate sexual activity compared to adolescents in Nairobi. The probable explanation this is that adolescents in urban and Nairobi are have more access to internet and mobile phones than adolescents in rural and other regions that expose them to explicit sexual messages and pictures that influence early sexual initiation. Adolescents in Coast are less likely to engage in early sexual debut because of their strict Islamic faith. Adolescents with no religion, Muslim and Protestant/Other Christians were less likely to engage in early sexual debut compared to Roman Catholics by 60.3%, 54.1% and 52.9% respectively. Although these findings do

not support earlier studies by Twa-Twa (1997), Singh (1998) and Hofferth (1987) that rural residence and no religion are closely associated with early sexual debut among adolescents, recent studies by Ikamari and Towett, 2007 do confirm that rural adolescents are less likely than urban to initiate sexual activity.

Bivariate results show that female adolescents in the middle and upper wealth quintile are at a higher risk of early sexual debut compared to those in the lower wealth quintile. The possible explanation is that adolescents in the upper and middle wealth quintile whether in school or not have access to money and can afford to go to social joints that are characterized with high sexual activities. This also means that the stigma that was once associated with premarital sex and pregnancy is less severe in the middle and upper wealth quintile. Bivariate analysis further show that young female adolescents that are not exposed to mass media are at a statistically significant higher risk of engaging in sexual debut than those that are exposed to mass media. This is not consistent with other studies and the plausible reason is either, those who are exposed to mass media acquire more knowledge on sexuality and are likely to make informed decisions, or adolescents are more attached to the internet than to regular media stations.

Multivariate analysis includes all the explanatory variables on adolescent's age at first sex. Female adolescents with primary and at least secondary education have an unexpectedly higher risk of engaging in early sexual activity compared to those with no education at78.9% and 62.4%. This result is unexpected because previous studies show that no education is associated with early initiation of sexual debut. Studies done by CSA and NCAPD reveal that, adolescents with at least secondary education begin sexual activity 3 times later than those with no education. The possible reason for the changing pattern in adolescent sexual initiation is that, adolescent sexual and reproductive health issues are not adequately addressed in schools to prevent early sexual activity among adolescents who are heavily exposed to internet. In the analysis, adolescents in Rift Valley and North Eastern have higher risks of early sexual debut that is statistically significant at 57.5% and 31.4% compared to Nairobi. Multivariate results reveal that Muslim adolescents (74.8%) and adolescents with no religion (72.3%) are significantly likely to delay sexual activity compared to Roman Catholic adolescents. There is a weak

association between protestant or other Christian region and delay in sexual debut. The findings suggest that religion has undoubtedly strong influence in delaying sexual debut among young women.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary and conclusions of the study and provides recommendations for policy, program and further research.

5.2 Summary

The study set to investigate the socio-economic factors that influence early sexual debut among adolescents by use of the latest 2008/9 KDHS. Method of data analysis were: descriptive statistics, survival life table analysis, bivariate and multivariate analysis using Cox Hazard regression. The median age at first sex was 16.88 years. Bivaraite variables statistically associated with early sexual debut were: primary and at least secondary education, middle and upper wealth quintile and non-exposure to mass media and multivariate variables associated with early sexual initiation were: primary and at least secondary education, middle wealth quintile, Rift Valley and North Eastern region. These findings do not support the widely acknowledged importance of education in delaying early initiation of sexual activity. This implies that adolescent sexual reproductive health is not adequately addressed in schools. Adolescents in the middle and upper wealth quintile have a higher risk of engaging in early sexual activity probably because they give in easily to peer-pressure and can afford competitive acts that subject them to early sexual debut. The adolescents are also more exposed to the internet and have access to mobile phones than the lower middle wealth quintile. Religion is likely a measure of social norms and values that govern behaviour and expectations for young people especially for females. Results show that Muslim adolescents and Protestant/other Christians have a fair effect in delaying early sexual debut.

5.2 Conclusion

Survival life table analysis of median ages at first sex confirms earlier studies that no education, exposure to mass media and no religion are associated with early sexual debut. However, bivariate and multivariate analysis using the latest 2008/9 KDHS confirms a change in pattern in sexual initiation among young women in Kenya which is also supported by recent studies, that primary education, at least secondary education, upper

wealth quintile, rural residence and no non-exposure to mass media are significantly associated with early sexual debut among young women. This implies that schools are missing out on important opportunities for providing young people with adequate information on sexuality. Young women in the upper wealth quintile are under peerpressure to engage in early sexual activity and are heavily influenced by internet compared to their counterparts in lower wealth quintiles.

5.3 Recommendations

Based on the study findings the following recommendations are given for policy, program, further studies and regional studies.

5.3.1 Policy

Revise the current Adolescent/Youth Sexual Reproductive Health policy to strengthen programmatic action for addressing factors associated with the new pattern of early sexual activity among young women. The Ministry of Health (MOPHS) in Conjunction with Ministry of Education recently released new guidelines for providing reproductive health information and services to young people in schools; they should enhance the circulation of these guidelines. Increased policy dialogue with policy makers and decision makers to support and allocate resources to adolescent sexual reproductive health. Findings show that religion plays a significant role in delaying early sexual debut. Faithbased advocacy with religious leaders to support adolescent sexual health is necessary.

5.3.2 Program

These results imply there is clear need to improve current reproductive health programme practices in the management of youth sexuality. The youth need to be educated and informed about the need to delay the onset of sexual activity.

Results show that young adolescents start sexual activity at an early age of 8 years. Youth programmes should target young adolescents in both primary and secondary schools with adequate and comprehensive reproductive health information and services.

Findings show that mass media does not influence early sexual debut. Youth programs can use TV, radio, and other mass media campaigns, including popular theater and other

culturally-appropriate means that appeal to youth to pass messages on avoiding early sexual activity.

5.3.3 Recommendations for further research

There is need for further research to get more insights about the change in pattern of sexual activity among young women aged 15-24 years by conducting qualitative research. This will assist policy makers and program mangers to effectively correct and protect negative reproductive outcomes of early sexual activity.

5.3.4 Recommendations for regional studies

Study findings show that adolescents in urban area are more likely to start sexual debut compared to adolescents in rural. Conversely, previous studies indicate that adolescents in rural start sexual activity earlier than adolescents in urban area, hence, a need to conduct regional studies to understand the dynamics at the regional level.

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