A COMPARATIVE ANALYSIS OF YOUTH CONTRACEPTIVE NON-USE IN KENYA AND GHANA

BY:

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This project is submitted in partial fulfillment of a Master of Arts Degree in Population Studies at the Population Studies and Research Institute (PSRI), University of Nairobi

October 2006

DECLARATION

This Research Project is my original work and has not been presented for a Degree award in any other University.

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DEDICATION

To my parents, my wife, Elizabeth and brother Stephen. Thank you for your support and unfailing love

ACKNOWLEDGEMENT

I am deeply grateful to my supervisors the late Prof. ABC Ocholla Ayayo and Dr. Anne Khasakhala for their invaluable guidance, assistance and encouragement; they made this research undertaking a truly memorable experience. My gratitude also goes to the Population Studies and Research Institute (PSRI) academic staff for their intellectual support.

More thanks go to all colleagues Wilson, Moses, Isaac, Judith, Samuel, Japheth, Henry, Eva and Lenny for their inspirations, encouragement, moral support, experiences and ideas they shared with me. I am grateful also to the University of Nairobi for granting me a scholarship that enabled me to take a full time course at the University. To my wife Liz, I say thank you for the concern and understanding you have extended to me when I needed it most.

Finally, I would like to express my heartfelt appreciation to my father Leonard and mother Mary for their moral and material support.

God Bless!

ABSTRACT

Information on youth sexual behavior has significant policy implication in designing and implementing family planning and HIV/aids programs. The study therefore, set out to investigate the determinants of contraceptive non-use among sexually active youth aged 15-24 years in Kenya and Ghana. Specifically, the study sought to determine the major demographic, socio-economic and cultural factors affecting non-use with or without unmet need among youth in the two countries.

The study is organized into five chapters. Chapter one entails general introduction, problem statement, research questions, objectives, justification and limitation of the study. Chapter two; literature review and theoretical framework, Chapter three entails data and methods while chapter four and five comprise of multivariate analysis and research implications respectively. The study population consisted of 2132 and 1254 sexually active women aged 15-24 years, sampled in the KDHS and GDHS, 2003. The study variables were highest level of education, age, marital status, place of residence, media exposure, religion, region of residence and ethnicity while the dependent variable was contraceptive non-use.

Preliminary analysis included frequencies and cross tabulation. Chi-square test was also conducted to establish the statistical significance of the association among variables at 95 percent confidence interval while main analysis involved binary logistic regression. In both countries, the study revealed that there was a strong relationship between contraceptive non-use and the category of female youth who reported that they were aged 15-19, living in the rural areas, not educated and not exposed to mass media. Marital status and religion were only significant in Kenya and Ghana respectively. All the six hypotheses tested in the study were confirmed except the hypothesis that married youth are more likely to use contraception than unmarried youth that was rejected in Ghana.

The major conclusion derived from the study findings is that although levels of exposure to family planning were very high among the young women across the two countries, various socio-cultural, socio-economic and demographic factors influenced the youth

contraceptive non-use. The main policy implication of this study is that concerted efforts should be made to improve the youth educational attainment and literacy levels, raise secondary school completion rates for girls and narrow social and gender biased differential in access to raise age at first marriage and shape young women's attitudes towards reproductive health opinions and values, thereby creating favorable atmosphere, hence acceptance of family planning methods.

There is gap between knowledge and practice. Studies indicate that adolescent have acquired knowledge and awareness on reproductive health including contraceptive use and the dangers of sexually transmitted diseases including HIV/AIDS. However, many youth continue to practice unsafe sex and remain vulnerable to sexually transmitted diseases including HIV/AIDS. Thus, the study recommends further qualitative research

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ABBREVIATIONS

AIDS	Acquired immune deficiency syndrome
ARH & D	Adolescent reproductive health and development policy
ASFR	Age specific fertility rate
CBS	Central bureau of statistics
GDP	Gross domestic product
GSS	Ghana statistical service
GYHS	Ghana youth health survey
HIV	Human immune virus
K.D.H.S	Kenya demographic and health survey
M.O.H	Ministry of health
MI	Micro-International
NCPD	National council for population and development
TFR	Total fertility rate
UNAIDS	Joint United Nations programme for HIV/AIDS.
UNFPA	United Nations fund for population analysis

CHAPTER ONE: INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

Currently over 27 percent of the world's population consists of young people between the ages of 10-24 (UNFPA, 2006). In 2000, adolescents and young people between 10 and 24 constituted 29 percent of the population in developing countries compared to 20 percent in developed countries (UNFPA, 2005). In many parts of the developing world, the transition to adulthood is fraught with many dangers (Weiss et.al, 1996). In Africa, this transition is made even more difficult by political instability and growing insecurity, high HIV/AIDS prevalence rates, economic decline and increasing poverty and marginalization that characterize many countries in the region (Muganda-Oyando et al. 2002).

In recognition of the detrimental effects of high population growth on the country's development process, Kenya and Ghana's governments were among those countries demonstrating early support for population activities and, starting in the 1960's Ghana served as the testing ground for a number of innovative delivery strategies. Despite this, Kenya and Ghana's population still remains as the fastest growing in the world with average growth rates of about 2.2 and 2.3 percent respectively (Population Reference Bureau; 2005). Such rapidly growing populations place considerable constraints on socio-economic goals (NCPD, 1989).

Adolescent fertility has been linked to these greater population growth rates (Menker 1980; Senderowitz, 1985; Wulf and Singh, 1991; Kiragu, 1998). According to DHS, fertility rates among youth aged 15-24 have remained high in these countries despite declines experienced among other age groups. Despite general fertility decline in Ghana, teenage fertility still accounted for about 10 percent of total fertility in 1998 (GYHS, 1998). Infact, the 1998 Ghana Demographic and Health Survey showed that 14 percent of 15-19 year old females were pregnant or ever had a child. In Kenya births to these young women account for 12 percent of the total births in any single year and 52 percent of these births are unintended (KDHS, 1993; Ayayo 2001; M.O.H, 2001).

Studies in both developed and developing countries have consistently indicated that adolescents are poor contraceptors or non-contraceptors (Mensch, et al., 1998; Moore and Roosenthal, 1993). A study in Canada (Cf. Moore and Roosenthal, 1993) found that only 34 percent of high school students used contraception every time they had sex while 27 percent never did so. In Kenya, among all women aged 15-19 only 8 percent were using contraception in 1998 (NCPD, CBS and MI, 1998) compared to 18 percent of the same age group in Ghana in 1998 (GDHS). While in other sub –Saharan countries, the numbers are as low as 2 percent in Rwanda, Niger and Senegal (Blank and Way; 1998).

Although about two-thirds of 15-19 year olds in Ghana approve of family planning, most sexually active teenagers do not use contraceptives. Among sexually active adolescents in this age group, 80 percent of females and 63 percent of male currently do not use any method (Awusabo et al., 2004). In Kenya, sexual activity before marriage among single women aged 15-19 has been increasing with contraceptive non-use remaining over 75 percent (CBS; 1998).

Studies have shown that there exists a gap between the initiation of sexual activity and the initiation of contraceptive use, with the latter lagging behind, especially among young adults (Gupta 2000). This lag has been linked to poor reproductive health outcome among youth, such as higher prevalence of unplanned pregnancies and their attendant higher risks of clandestine abortions and higher rates of maternal and child morbidity and mortality compared to adults (Rogo et al., 1999; Aggarwal and Mati, 1989).

Adolescent reproductive health is receiving increased attention in these countries. In Ghana, nearly one half (45 percent) of the population is under age 15; those aged 15-24 represents another 20 percent (Scott M. et al., 2000). Teenage pregnancy, in particular, is a prominent social and health issue. Comparatively, Kenyan population consists of 34 percent young people aged 10-24 years while those between ages of 10-19 make up 25 percent (NCPD/CBS, MI 1999). These women and girls under 20 still account for

17 percent of all births in the least developed countries and for 14 million births worldwide each year. One woman in three in developing countries gives birth before age 20, ranging regionally from 8 percent in East Asia to 55 percent in West Africa (UNFPA, 2005).

According to 1998 GDHS, the ASFR for adolescents 15-19 was 119 in 1993 and 90 in 1998. Furthermore, clear differences exist between the ASFR for married and unmarried young people age 19 in Ghana. For example, the ASFR for married women age 19 was 241; for unmarried women age 19, it was 49 (GSS, 1998). Comparatively, ASFR for 15-19 in Kenya was 110 per 1000 in 1993 and 111 per 1000 in 1998; for the 20-24 age group it was 257 per 1000 and 248 per 1000 in 1993 and 1998, respectively (UNFPA; 2003).

1.2 Problem Statement

Anecdotal evidence suggests that pre-marital sex is widespread among young people in Ghana. Adolescents are becoming sexually experienced prior to marriage (Scott M. et al., 2000). Age at first sex was found to be as early as 10 in a study conducted by Nabila and Fayorsey (1996) of adolescents in Accra and Kumasi. Consequently among young females aged 15-19 years, 38 percent are sexually experienced (GSS,1998). UNAIDS (2005) also estimates that those aged 15-24 accounts for 6 percent and 9 percent of reported AIDS cases in males and females respectively. According to Agyei et al., (2000), approximately one-third (32 percent) of women aged 19 have also started childbearing in Ghana and more revealing is that nearly one-half (48 percent) of births to women under age 20 are reported as either mistimed or unwanted.

In Kenya, there is also growing concern about teenage childbearing. The percentage of births to unmarried teenagers is increasing and more than 50 percent of childbearing before the age of 20 involves a premarital conception (Mensch et al., 1998). Moreover, it is estimated that about 20 percent of all reported AIDS patients are young people aged 15-24 years and 80-90 percent of all these infections are due to sexual contacts

and according to CBS (1998), 44 percent of these girls aged 15-19 years have had sexual intercourse and 19 percent are sexually active.

Although government, private and Non Governmental Organizations sectors provide reproductive health services, most are not designed to take into account the special needs of young people. Where the services exist, providers still lack capacity to deal effectively with adolescent reproductive health issues and the range of services provided is also limited, Muganda-Oyando et al., (2001). Consequently, the majority of adolescents are hesitant to use them. Furthermore, in sub- Saharan Africa, the married adolescents are likely not to use modern methods of family planning as they may be under pressure to have children quickly and may also experience provider's bias especially against methods that are thought to impair future fertility (Njau & Rodney 2000). In Kenya, 30 percent of sexually active unmarried adolescent women aged 15-19 reported using a method as compared to only 18 percent of the currently married ones in the same age group (NCPD/CBS, MI, 2001).

The alarming widespread patterns of youth childbearing, maternal mortality, unsafe abortion complications and vulnerability to HIV/AIDS have serious social, economic, and demographic effects for these countries. They have serious implications for the inequalities suffered by girls and women in education and employment. In addition, they profoundly affect levels of socio and economic development in the region as a whole (Kopoka, 1998).

Despite the high fertility levels and early sexuality initiation, not many young people are taking precaution that would enable them prevent the consequences of sexual activity (NCPD/ CBS, MI 2001). Studies carried out in sub-Saharan Africa indicate that contraceptive use among adolescents remains low. Unfortunately these studies have documented premarital sexual activity, fertility and contraceptive use but do not however describe the environment in which this behavior occurs (Mensch et al: 1998).

Given that adolescence and youth is associated with particularly high probability of non- use with an unmet need of family planning, a comparative understanding of the characteristics of contraceptive non-users among youth in specific settings and specific factors associated with non-use is important in meeting their family planning needs and regional experiential learning.

1.3 Major Issues of Problem Statement

i) The high reproductive health problems among adolescents in these countries may be attributed to lack of access to information and services, perceived hostility of service providers, and inadequate policies and information.

ii) Although the decline in the Age Specific Fertility Rate for adolescents mirrors the decline observed in the overall level of fertility, certain socio-cultural, biological, economic and demographic factors still continue to pose challenges in addressing the reproductive health needs of young people

iii) Sexual activity among young people in these countries begins early. It is moreover, often characterized by serial monogamy and despite this multiplicity of partners, sexual activity is usually unprotected, giving rise to early pregnancy and unsafe abortion, school dropout, Sexually Transmitted Infections including HIV/AIDS, and economic hardship.

1.4 Key Research Questions

i) What are the characteristics of youth not using contraceptives in Kenya and Ghana?

ii) What major socio-economic, demographic and socio-cultural differences between Kenya and Ghana make contraceptive use different or same?

1.5 Objectives

1.5.1 General Objective

The aim of this study was to identify and compare the factors associated with contraceptive non-use among youth in Kenya and Ghana.

1.5.2 Specific Objectives

i) To identify the characteristics of youth not using contraceptives in Kenya and Ghana.

ii) To identify major socio-economic, demographic and socio-cultural factors associated with contraceptive non-use among youth in Kenya and Ghana.

iii) To make recommendations for policy implementation

1.6 Justification of the Study

The large number of adolescents and their increasing reproductive health problems calls for action from nations. It is estimated that in 2010, there will be more 10 to 24 year olds in the world than ever before (UNFPA, 2003: McCauley and Salter, 1995; ARH& D, 2003). A multipronged approach that involves abstinence, faithfulness and condom use is urgently needed. This study recognizes that successful prevention programs among the youth are ones that equip them with the knowledge, skills and attitudes to delay sex and to prevent infection once they become sexually active. Research in their reproductive health is thus a worthwhile investment for future growth and development of these two countries.

There is need also to investigate the determinants and differentials of contraceptive non-use in these countries even when both governments have implemented comprehensive reproductive health and development policies on the adolescents and youth, yet still they are engaging in premarital sexual activities which have made maternal and child mortality rates unacceptably high. Ghana and Kenya selected for their similarities and differences in their demographic profiles as well as different levels of contraception.

Because the two countries have similar policies and programs regarding adolescent reproductive health and development, children's act, HIV/AIDS and sustainable development; a comparative study of this nature can spot certain best practices that can be used by policy makers for regional experiential learning.

Most International comparisons of contraceptive use focus on the activities of some married women because the customs governing marriage and the formation of marriage like unions vary from country to country. Unfortunately, very few comparative studies on how all youth populations in developing countries make decisions about reproductive behavior have not been undertaken even where such customs are similar. Yet it is acknowledged that their reasons for being unable to adopt safe practices reflect socio-economic and cultural environments universal to most societies. These include rapid and uneven physical, psychological, and social growth and development and the onset of sexual activity that is often combined with a lack of knowledge and skills with which to make healthy choices (Ferguson, 1996).

1.7 Scope and Limitation of the Study

The study focuses on the socio-economic, socio-cultural, and demographic factors, which influence contraceptive non-use among sexually active female youth in Kenya and Ghana. The sample size consisted of 2132 and 1254 female youth in Kenya Ghana respectively. Given the sample size and the fact that the study is based on secondary data, the analysis cannot be very exhaustive. Secondary data may have certain biases based on the sample size and sampling errors. The analysis can thus, be affected by those biases or errors that were noted during data collection of KDHS and GDHS of which the author has no control over. Data from the Demographic and Health Surveys are indispensable for many reasons, but they are limited in many ways that hamper research on youth as they lack critical information on the background and context of sexual and reproductive behavior among youth.

CHAPTERTWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Developing World

Various studies have been done, identifying socio-economic and demographic factors associated with use and non-use of contraceptives in Sub-Saharan Africa. According to Njau & Rodney et al., (2000) married adolescents are likely not to use modern methods of family planning as they may be under pressure to have children quickly and may also experience provider's bias especially against methods that are thought to impair future fertility.

Magnani et al., (2001) undertook a study in Peru to identify key risk and protective factors for early sexual activity and unprotected sex among secondary schools students in 9 large cities in Peru. The results indicated that behaviors among Peruvian youth are influenced in important ways by many factors like region of residence, family economic position, peer behaviors, self-esteem and family structure. Contraceptive non-use among youth is expected to be influenced by such measures.

Nair and Smith (1984) in a comparative study on reasons for non-use of contraception in three Asian and three Latin American countries found age of the women, number of living children, health reasons and ever use of family planning methods as the most powerful factors affecting non-use of contraceptives.

Modern contraceptive use is generally higher in urban than in rural areas. In Zimbabwe, the range between urban and rural areas is 18percent in favour of urban regions. In an analysis of 12 countries covered in the 1989 DHS, modern contraceptive use was higher in urban and peri-urban regions in Botswana, Burundi, Liberia, Sudan, Nigeria, Senegal, Togo, Uganda, and Zimbabwe, all who report over 25 percent CPR than the national average of 2.5 percent. Urbanization is associated with greater exposure to family planning and health services. The effect could however be attenuated in countries or regions where community based distribution is strongly developed in rural areas as is the case in Zimbabwe (Jolly and Brass, 1993).

Westolf and Bankole (1995) analyzed unmet need for contraception among married, never married and formerly married women for 27 countries in which 14 were from Sub-Saharan Africa. The surveys were conducted between 1990 and 1994. They found unmet need to vary according to age, number of children, place of residence, level of education and proper use of contraception. In addition, factors contributing to non-use of contraception among women included fear of side effects of contraceptives practice, religious opposition, lack of knowledge about methods, opposition from partners, supply reasons (availability and cost of contraception), ambivalence about further childbearing and sub-fecundity.

Studies carried out in 1990's in Guatemala, India and Nepal singled out principal causes of non-use as lack of knowledge, fear of side effects and social and familial disapproval (especially partners) (Bongaarts and Bruce, 1995). While according to Nazar-Benifelspacher et al., (1999), lack of education remained an important predictor of non-use of contraceptives among women in the broader region of Chiapas in Mexico, although availability of family planning services regulated the direct effect of schooling on contraceptive practice.

The woman's partner is one of many socially significant actors who might discourage or oppose a woman who wishes to use contraception, but clearly in most settings the partner is by far identified as a major reason for non-use in studies conducted in the Philippines (Casterline et al., 1997). Joesoef et al., (1981) in a study in Metropolitan Indonesia where attention was on five cities; Jarkata, Semarang, Surbaya, Ujung Padang and Medan, husband's approval was found to be the strongest determinant of contraceptive use followed by the number of living children and wife's education. While in rural Ghana, the Danfa family planning project revealed that half of the fertility reduction might have been due to husband's involvement in family planning (Joesoef et al., 1988 c.f Lamptey, 1978).

Previous studies in Kenya have also identified a number of socio-economic and demographic factors such as educational attainment, socio-economic status, and place

of residence, number of living children and availability/accessibility of services as important in the use or non-use of contraceptives in Sub-Saharan Africa (Kiragu and Zabin, 1995; Kyalo 1996). While according to Magadi et al., (2001), the proportion of the unmarried and sexually active non-users aged 15-24 in Kenya is increasing. Her findings from the study, Contraceptive Use Dynamics in Kenya further indicate that lack of knowledge of family planning methods and sources is a more significant barrier for use among younger women than for older women.

According to Muhenje (2002), contraceptive non-use among the ever sexually active women aged 15-24 is very high in Kenya and that a big gap between knowledge of contraception and actual contraceptive use exists. According to CBS et al., (2004), unmet need is higher among women younger than 35 years and declines thereafter. It's also higher in rural (27 percent) than urban (17 percent). Unmet need for spacing declines with age, while that for limiting increases.

While the probability of non-use with an unmet need for family planning consistently declines with age; use of contraceptives increases then decreases with age Magadi et al., (2001). Njogu (1991) also pointed out a curvilinear relationship between current contraceptive use and age. Couples are expected to practice contraception less when fecundity is low which is largely at the oldest and younger ages. The decline in contraceptive practice at older ages is also a consequence of diminished coital frequency at older ages In particular; adolescents aged 15-24 are associated with a considerably high chance of non-use with unmet need for family planning.

Koome (2001) found education, religion, and ethnicity to be significantly associated with adolescent's ever use of contraception. The study also found family planning communication to be significantly associated with knowledge of family planning methods, approval of family planning, intention to use family planning in future and ever use of contraception even after controlling for social, economic and demographic factors which influence non-use of contraception among youth.

Khasiani (1985) in a survey of schoolgirls in Nairobi found that although many young people were engaging in sex at tender ages, few of them were using contraceptives. Ikhamari (1985) also found contraceptive non-use to increase with travel time. The percentage of non-users increased from a low of 5.7 percent among the women who took less than 60 minutes to reach the nearest source of contraceptive services to 24 percent among those who indicated that they took at least 60 minutes or more.

2.2 Sub-Saharan Africa

Sub-Saharan Africa is now the only major region of the world in which substantial segments of the population are characterized by high rates of fertility. No doubt, averaged over the region as a whole, fertility is now distinctly lower than two or three decades ago (Cohen, 1998; Feyisetan, 1999), with the total fertility rate declining from 6.7 in 1960-65 to 5.5 in 1995-2000, according to United Nations estimates (UN, 1999). Some of the sub-regions within Africa are characterized by even higher rates; 6.2 in Middle Africa, and 5.8 in Eastern Africa.

In a series of influential articles published in the late 1980s, and early 1990s Caldwell et al., (1992) argue that the obstacles to the adoption of modern contraception are different from the obstacles confronted earlier in other regions, Asia in particular. Among the key obstacles are central features of the kinship system that structure the roles of women and children and that weaken the conjugal bond related to land-tenure arrangements that serve to reinforce the effects of the kinship system, and underlying religious beliefs that also reinforce familial attitudes and behaviors that are strongly pro-natalist.

Demographers expected that in sub-Saharan Africa, in contrast to other major regions, the first adopters of modern contraception were expected to be older women seeking to terminate childbearing, as was the case in Europe and Asia (Knodel, 1997), but rather young, unmarried women using contraception for birth spacing purposes and to avert unwanted births (Feyisetan and Casterline, 2000). In specifying the forces behind reproductive change in Africa, Caldwell (1988) stress the same constellation of factors that have been invoked elsewhere, from historical Europe to East Asia; improvement in

child survival, Increased participation in formal schooling, urbanization, and the diffusion of modern Western Culture. A number of analysts have observed that the first declines in sub-Saharan Africa have occurred in those countries, (Kenya, Zimbabwe, Botswana) that are most privileged in this combination of conditions, in particular lower infant and child mortality and higher levels of female schooling (Van de Walle and Foster, 1990;Caldwell et al., 1992;Kirk and Pillet, 1998).

2.2.1 Ghana

According to the 2000 Census of Population and Housing in Ghana, the population was 18,912,079 over a land area of 230,000 square kilometres. Young people aged 10-24 accounted for 31 percent of the total population. This proportion of young people in the total population has remained fairly constant over the last three decades. The main religious groups in Ghana are Christians (67 percent), Muslims (17 percent), and Traditionalists (9 percent). As of 2000, 44 percent lived in urban areas.

Ghana is a multiethnic country with over 50 ethnic groups. The main ethnic groups are the Akan, who account for nearly half of the population (49 percent), the Mole-Dagbani (17 percent) the Ewe (13 percent), and the Ga-Adangbe (8 percent) (GSS, 2002). One major difference among the ethnic groups is that the Akan practice a matrilineal system of inheritance while the others are Patrilineal.Ethnic background has some effects on some aspects of adolescent reproductive health, since practices such as initiation rites and marriage systems vary by ethnic affiliation, although inter-ethnic marriages are breaking down some of these affiliations (Awusebo-Asare, 2001).

Ghana's population policy was formulated and adopted in 1969 and was revised in 1994 to ensure systematic integration of population issues in all areas of development planning. Its demographic transition seems to have stalled in the last 3 years even though contraceptive use has continued to rise. Nevertheless, with a current TFR of 4.4, Ghana's fertility rate is one of the lowest in sub-Saharan Africa.

In reinforcing the commitment of the Government to the integration of young people into the national development process, the Ghanaian government launched the National Youth Policy (1999), Adolescent Reproductive Health Policy (2000) and National HIV/AIDS and STI Policy (2001). In 2000, the estimated HIV/AIDS prevalence rate among 15-24 year olds in Ghana was 3.4 percent and the median prevalence rate for the adult population increased from 2.3 percent in 2000 to 3.4 percent in 2002.

In general, Ghana remains a relatively conservative country where discussion of sexual issues, abortion and adolescent use of contraceptives are still widely taboo. An adolescent reproductive health policy is in place, but in practice many organizations emphasize abstinence until marriage. This is despite demand from an estimated 22 percent to 27 percent of young people who want to use family planning but do not because they cannot easily obtain contraceptive services.

2.2.2 Kenya

The Republic of Kenya covers 582,000 square kilometres. Approximately 80 percent of Kenya is arid or semi arid. Only 20 percent is arable. Agriculture is the mainstay of Kenya's economy, accounting for 26 percent of the GDP; manufacturing accounts for about 14 percent. The country is divided into 8 provinces and 75 districts. The country is multi-ethnic with 43 ethno-linguistic groups. Christianity and Islam are the major religions. Kenya's population is mainly rural; according to 1999 census, only 20 percent of Kenya's population was urban.

Kenya has experienced a phenomenal demographic transition over the last few decades, population increased from 5.4million in 1948 to 16.2 million in 1979, and thence to 28.7 million in 1999. It's projected to reach 36.5 million by 2010 and 39.7 million by 2015. The annual growth rate has declined from 2.6 in 1999 to 2.2 percent in 2005 (Population Reference Bureau, 2005). But according to CBS et al., (2003) the documented fertility appears to have stalled. The TFR of 4.9 children per woman for the three-year period preceding the survey (mid-2000 to mid –2003) is almost identical to the rate of 5.0 derived from the 1999 Population and Housing Census.

The KDHS data indicates that 34 percent of the Kenyan population consists of young people aged 10-24 years while those between the ages of 10-19 make up 25 percent (NCPD, 1999). It is estimated that about 20 percent of all reported AIDS patients are young people aged 15-24 years. Sexual contacts account for 80-90 percent of all infections, while the rest is due to exposure to infected blood and Mother-to –Child Transmission (ARH & D, 2003).

In 2003, the government launched the Adolescent Reproductive Health and Development policy (ARH &D), the policy responds to concerns about adolescents raised in the National Population Policy for Sustainable Development, the National Reproductive Health Strategy, the Children's Act (2001), and other National and International Declarations and Convections on the health and development of adolescents and youth.

Table 1: Selected Demographic Variables on Kenya and Ghana.

Indicator/Variable	Ghana	Kenya
Total population (2005) (In millions)	21.4	32.4
Population aged 10-24 years (2006)(in millions)	7.5	12.2
Percentage of total population aged 10-24 years	33	35
Secondary school enrolment (Gross) (2004), females	38	32
Primary school enrolment (Gross)	78	95
Percentage illiterate (>15 years)	34	21
Percentage ever married 15-19 years; females	14	20
Percentage of unmarried teens 15-19 who had ever had sex (females)	31	29
Percentage giving birth at age 18 years	15	23
Total fertility	4.4	4.9
Percentage of women aged 15-24 with comprehensive knowledge about HIV	38	34
Contraceptive prevalence rate	22	39

United Nations (2004), UNAIDS (2003) and Population Reference Bureau (2006).

2.3 Determinants of Contraceptive Non-Use

Addressing the contraception needs of adolescents is one of the major challenges facing family programmes worldwide (Blank and Way 1998). Adolescence is the time when young women start to engage in sexual activities and are exposed to the risk of pregnancy (Muganda-Oyando et al., 2003; 2004). This is more of a problem in developing countries especially in sub Saharan Africa. There is a high level of knowledge about contraceptive in such countries. However, serious questions exist about the depth and application of their knowledge (Pathfinder International, 1999).

It has been argued that for contraception to take place knowledge, information, motivation, personal and interpersonal skills, and a positive self-concept must be present (Gage, 1998; Jorgensen, 1993; Omwanda, 1996). These qualities are often absent in adolescent due to their lack of social, emotional and psychological maturity.

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

2.3.1 Place of Residence

There are many ways in which place of residence may influence adolescent contraceptive behaviors including access to mass media channels (Koome, 2001). Adolescents in urban areas may have easier access to contraceptive methods given the infrastructure facilities in place. They are also likely to be more educated and knowledgeable about contraception given the higher levels of exposure to mass media

implying they are more likely to use contraceptive method than their rural counterparts (NCPD, CBS, 1998).

2.3.2 Education

Higher education is associated with greater contraception and therefore low levels on non-use of family planning. Education is expected to improve an adolescent's knowledge. Education offers the youth the opportunity to loosen parental control (Caldwell et al., 1998) hence it may be associated with premarital sex among adolescents.

Abdullah et al., (1998) in a contraceptive study of contraceptive use in the common wealth Caribbean countries, found a positive relationship between a woman level of education and contraceptive use. Mazrui (1981) in a study in Poland also found that contraception increased with a woman's level of education. He established a higher contraceptive use among married women with 75 percent of women with secondary school and above using, compared to 56 percent intermediary level women and only 42 percent of women with elementary level education used.

According to Castro and Wamucii (1994) female education exerts a more powerful influence on contraceptive behavior than any other. The effect of a woman's education on contraception was found to be quasi-linear and that likelihood of using contraceptives rises monotonically with increased education.

2.3.3 Region of Residence

Socio – economic endowment of the regions in Kenya and Ghana can possibly impact on adolescent contraceptive behavior by limiting access to contraceptive knowledge and availability of contraceptives. Regional variations in contraceptive prevalence may reflect cross-cultural differences between the ethnic groups or reflect difference in service availability and accessibility. Rural-urban differences in contraception have been observed so consistently over time and space that they have become accepted and even expected. Levels of contraceptive use are also considerably lower in less

urbanized regions. Urbanization is associated with greater exposure to family planning and health services, the effect could however be attenuated in countries or regions where community based distribution is strongly developed as in the case of Zimbabwe.

2.3.4 Ethnicity

Cultural norms and expectations differ by ethnic grouping hence in the analysis of variations in reproductive behavior; ethnicity is considered a powerful explanatory variable. As an example, in Brazil and Guatemala virginity is highly valued while among the Maasai of Tanzania a virgin bride is an embarrassment to the family (Radhakrishna et al., 1997). In cultures where early marriage is the norm, girls are married off soon after puberty and the young brides are not likely to use contraception because they are under pressure from the society to give birth to prove their fullness as women (Mensch et al., 1998). Variations in contraceptive use by ethnicity can indicate the extent of programme effort that should be expended in creating demand for contraception depending on ethnic background (APHRC, 1998).

2.3.5 Religion

Although research shows minimum opposition to contraception on religious grounds, religious affiliations remain an important cultural aspect in understanding fertility regulation worldwide (Osiro, 2001). Most religions propagate values of restraint hence religious adolescents regardless of religious denomination are least likely to experience early sexual initiation (Moore and Rosenthal, 1993) Jorgensen (1993) further argues that religious adolescents who become sexually active are less likely to use contraception because to employ contraception in a premeditated manner would be admitting to themselves and their partners that they are planning something wrong within the context of their religious value system.

The 1993 KDHS cited religion as one obstacle to contraceptive use both in female and male surveys, with 8 percent and 5 percent respectively, reporting it as a barrier to contraceptive use (NCPD et al., 1994). Strong religious disapproval of premarital sex

and contraceptive use by religious domains may lead to late age at sexual initiation but low level of contraception use among the sexually active youth.

2.3.6 Age

According to the population reports (1981) the extent of contraceptive non-use varies with age usually reaching a peak in the 30's and increasing thereafter. At 20's most women are adding to their families, after 40 years, many women consider themselves infecund. In Nigeria, studies show that the highest contraceptive prevalence rate is among the currently married women in the 35-39 age groups at 8.6 percent. Age 15-19 had the lowest prevalence rate at 1.3 percent (PC and IRD, 1992). In Thailand, experience of contraception was relatively low among the young and older age groups and women in the 25-34-age category had the lowest proportion of non-users (Clelland et al., 1979).

Among married couples in South India, of the total women under aged between 15-50 years two-thirds were not using some method of family planning (Caldwell et al., 1984). In Nigeria, Weiss and Udo (1981), found out that women aged 21years had the highest non-use rates. Age determines exposure to sexual intercourse and even marriage; therefore increased exposure to sexual activity increases the risk to pregnancy. In contrast, a study by Kiragu (1991) among Kenyan adolescent, found no significant association between age and contraceptive use. But according to the 1993 KDHS, the highest contraceptive prevalence rate was among the 30-34 age groups at 38.2percent followed by the 25-29 age groups at 37.5 percent. The lowest prevalence rate was amongst those aged 15-19 at 5.7 percent.

In cultures where early marriage is the norm, girls are married off soon after puberty and the young brides are not likely to use contraception because they are under pressure from the society to give birth to prove their fullness as women (Mensch et al., 1998). Variations in contraceptive use by ethnicity can indicate the extent of programme effort

that should be expended in creating demand for contraception depending on ethnic background (APHRC, 1998).

2.3.7 Exposure to Mass Media

Youth today are exposed to a wide range of sex behaviors on different mass media. Young people hence know what sex is and how it is enacted at very earlier ages (Moore & Rosenthal, 1993). According to Awusebo et al, (2004) among 15-19 year olds in Ghana, 76 percent of women and 88 percent of men are aware of at least one modern family planning method with condom being the most frequently cited method.

Exposure to mass media reduces significantly the probability of non-use of family planning. Youth who have heard of family planning messages on radio are therefore likely to have low levels of non-use.

2.3.8 Marital Status

There has been an increase in age at marriage even though there are still many girls marrying in their teens. Mensch et al; (1998) argues that those who marry early are likely to come from societies with high fertility norms and hence married adolescents may not engage in contraception because of society's pressure on the young wife to give birth and prove her fecundity. According to CBS (1998), contraceptive use was found to be higher among sexually active unmarried adolescent women aged 15-19 with 30 percent reporting using a method as compared to only 18 percent of the currently married ones in the same age group.

Unmarried sexually active adolescents are likely to be attending school and so they are more highly motivated to delay childbearing in order to attain educational goals (Caldwell et al., 1998). Their higher educational attainment relative to the married is likely to ensure they have more knowledge on reproduction and contraception

2.4 Summary of Literature Review

The most direct evidence that contraceptive non-use is real is the high incidence of pregnancies reported as unplanned among adolescents. Reducing the level of unwanted births has important social, health, and demographic consequences caused by varied social, cultural, economic and demographic factors, which this study will also attempt to address.

A few theoretical approaches have incorporated some variables considered in this study. The frameworks show socio-economic, socio-cultural, and demographic factors; otherwise referred to as indirect variables, working through biological and behavioral factors, also known as direct or intermediate variables to affect fertility.

2.5 Theoretical Framework

In Davis and Blake framework developed in 1956. 11 variables, which influence fertility directly, were identified. These were; -age at first sexual intercourse, frequency of intercourse, permanent celibacy, broken unions by divorce, separation or desertion and unions broken by death of husband, voluntary abstinence, involuntary abstinence, fecundity or infecundity as affected by voluntary causes or non-use of contraceptive methods, foetal mortality from involuntary causes and foetal mortality from voluntary causes.

A framework, which has been widely used, is the Bongaarts framework, which was developed in 1978. In this framework a smaller set of eight intermediate or proximate determinant factors of fertility were identified. These factors were reclassified into the broad categories of biological and behavioral variables.

1. Exposure Factors
    i. Proportion Married

2. Deliberate Marital Fertility Control Factors
    i. Contraceptive

ii. Induced Abortion

3. Natural marital fertility factors
   i. Lactation infecundability
   ii. Frequency of intercourse
   iii. Sterility
   iv. Spontaneous intrauterine mortality
   v. Duration of the fertile period

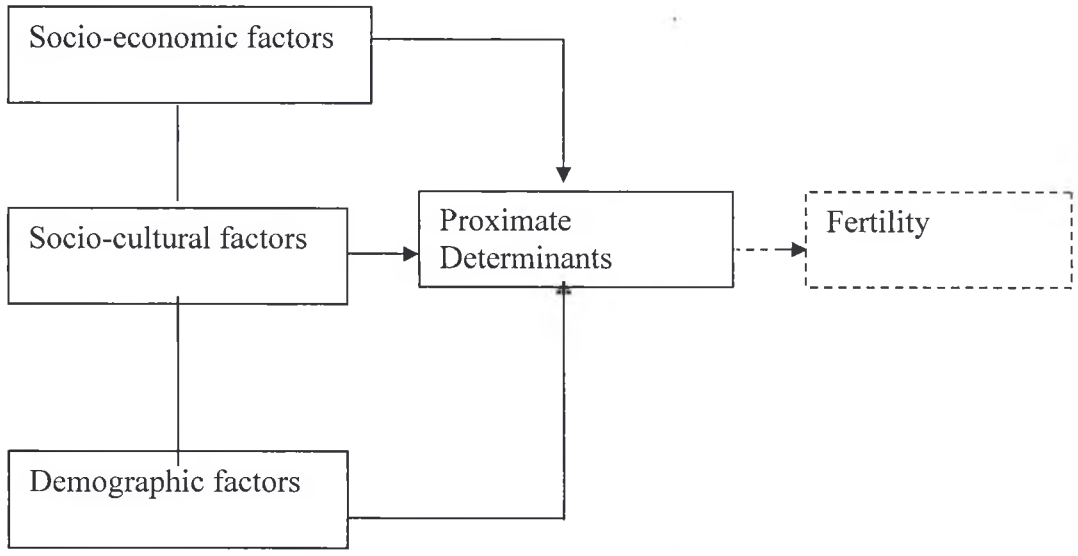
Variations in any of them cause changes in fertility. The intermediate variables are assumed to determine the degree of risk of exposure throughout the different stages of biological reproductive cycle designated as intercourse conception, and gestation. The intermediate variables are the only factors through which socio-economic and demographic conditions can affect contraceptive non-use.

According to the framework, the influence of socio-economic, socio-cultural, demographic and environmental factors on fertility is through the proximate determinant factors viz; -proportion married, contraception, induced abortion and post partum infecundability, which are the most important variables according to Bongarts (1978) Contraceptive use is one of the proximate determinants, which influence fertility. The level of non-acceptance of the same determines the level of contraceptive non-use of a society. Thus it can be argued that socio-economic, socio-cultural and demographic factors affect the level of contraceptive non-use.

2.5.1 Theoretical Framework Explaining Non-Use of Contraception among Youth in Kenya and Ghana

Although contraceptives non-use is primarily determined by personal factors it is also modified and promoted by socio-cultural, socio-economic and demographic factors prevailing in a given society.

Figure 1: Theoretical Framework



Adopted and modified from (1978) Bongaarts model on determinants of fertility

2.5.2 Conceptual Hypotheses

i. Socio-economic factors are likely to affect non-use of contraception among youth in Kenya and Ghana.

ii. Socio-cultural factors are likely to affect non-use of contraception among youth in Kenya and Ghana.

iii. Demographic factors are likely to affect non-use of contraception among youth in Kenya and Ghana.

2.5.3 Definition of Key Concepts

i. Socio-economic factors refer to the prevailing conditions of communal relevance.

ii. Socio-cultural factors refer to youth religious affiliations, region of residence and marital status.

iii. Demographic factors refer to the biological characteristics of the female youth that have effects on non-use of contraceptives.

iv. Proximate determinants refer to intervening variables through which background factors act to influence fertility. .

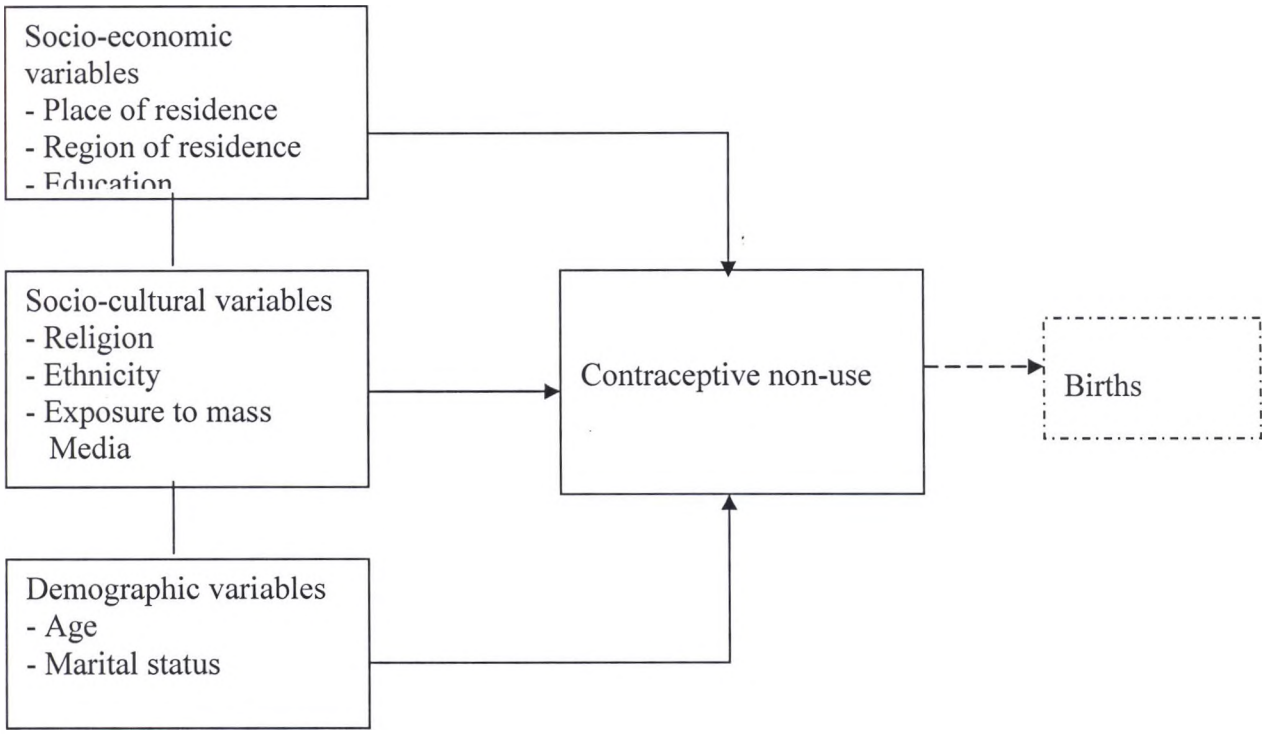
v. Non-users of contraceptives refer to all the youth who were not using any modern method of family planning with or without ultimate needs at the time of the interview n Kenya and Ghana.

vi. The world health organization defines youth as the age between 15-24 years while Center for Disease Control defines youth as age between 13-19.For this study, youth is taken as 15-24 years,

2.5.4 Operational Framework

From the conceptual framework above, the following operational model explaining non-use of contraception among youth was developed.

Figure 2: Operational model explaining non-use of family planning among youth



Adopted & modified from Bongaarts (1978)

2.5.5 Operational Hypotheses

i. Different ethnic communities have different levels of contraceptive non-use.

ii. The current age of the youth is likely to influence contraceptive non-use.

iii. Youth not exposed to the mass media are more likely to be non-users of contraceptives than exposed.

iv. Married youth are less likely to use contraception than unmarried youth.

v. Youth with low levels of education are more likely to be non-users of contraceptives than youth with higher levels of education.

vi. Rural youth are more likely to be non-users of contraception than urban youths.

2.5.6 Variable Definitions and their Measurements

Independent Variables

Educational level represents the highest level of formal schooling attained by the respondent. Was analyzed in 3 categories; no education, primary education and secondary +.

Place of residence refers to the place where the respondent was at the time of the interview, was categorized as rural and urban.

Region of residence refers to the province where the respondent was at the time of the interview. Was categorized as; -(Kenya): Nairobi, Central, Coast, Eastern, Nyanza, Rift Valley, Western, and North-Eastern. (Ghana): Western, Great Accra: Volta, Eastern, Ashanti, Brong- Ahafo, Northern and others (Upper East, Upper West and Central).

Religion refers to the religious group to which the respondent was affiliated to at the time of the survey. Was categorized as, Catholic, Protestant/other Christian, Muslim/No religion/other.

Ethnicity refers to the ethnic group that the respondent belonged to. Was categorized as (Kenya) Embu/Meru, Kalenjin, Kamba, Kikuyu, Kisii, Luhya, Luo, mijikenda, Somali, and Others. While (Ghana) had Akan, Ga/Dangme, Ewe, Mole-Dagbani and Others.

Age refers to the number of completed years lived by the respondent and was grouped into 15-19 and 20-24 years.

Marital status refers to the state of union that persons were involved in at the time of the interview. 2 categories were included in this study; never married and ever married

Exposure to mass media refers to the respondent having been exposed to or heard family planning message on radio, television and print media. This variable was computed into exposed and not exposed.

Dependent variable

In this study, this variable referred to the proportion of youth who were sexually active and had not used any method of contraception at the time of the survey irrespective of their unmet need status. The variable had two main categories; non-use and use respectively.

CHAPTER THREE: DATA AND METHODOLOGY

3.1 Data Source

The study draws data from the 2004 KDHS and GDHS, the fourth such survey to be conducted in both countries. The KDHS is a nationally representative survey of 7881 women age 15-49 years and 3407 men aged 15-54 years. National Council for Population and Development and the Central Bureau of Statistics (CBS) carried out the KDHS, with technical assistance from macro-international incorporated of Claverton Maryland (USA). USAID/Nairobi and DFID/UK provided financial assistance.

On the other hand, the GDHS was a nationally representative survey of 5,691 women age 15-49 and 5,015 men age 15-59 from 6,251 households covering 412 sample points throughout Ghana. Ghana Statistical Service (GSS) in collaboration with the Noguchi Memorial Institute for Medical Research (NMIMR) and the Ghana Health Service implemented the 2003 GDHS. Technical assistance was provided by ORC macro through the MEASURE DHS programme while financial support was provided by the U.S Agency for International Development (USAID) and the Government of Ghana.

3.2 Sampling Design

The 2003 KDHS covered the entire country including the 7 sparsely populated northern districts. A two stage stratified sampling approach was utilized and the first stage involved sampling of clusters and the second stage involved selecting of households within sampled points from a list compiled during a KDHS household listing exercise.

In Ghana, a representative probability sample of about 6,600 households was selected nationwide. The 2003 GDHS used a two-stage stratified sample design. At the first stage of sampling, 412 sample points or EAs were selected, each with probability proportional to size, based on the number of households. The second stage of selection involved systematic sampling of households from the list. The sample selected per EA varied by region depending on the population size.

3.3 Data Quality

Non-sampling errors and sampling errors are two types of errors that affect estimates from sample surveys. Non-sampling errors may result from shortcomings in data collection and data processing, such as data entry errors, failure to interview the right household or misinterpretation of the questions. Non-sampling errors are difficult to avoid and to evaluate statistically.

Sampling errors are a measure of the variability between all possible samples. The degree of variability although not known, can be estimated from the survey results. A sampling error can be measured in terms of the standard error for a particular statistic, which is the square of the root of variance. The standard error can be used to calculate confidence intervals within which the true value of the population can reasonably be assumed to fall. Overall, the GDHS & KDHS data is of relatively high quality for the analysis of contraceptive non-use. The general standard errors for most estimates for the country as a whole are small except for the estimates of very small proportions (NCPD et al 1999).

3.4 Data Analysis

3.4.1 Descriptive Statistics

Frequencies will be used to determine the distribution of the study population based on background variables. Cross tabulations with Chi-square test will be used in this study to test the association between independent variables (age, religion, type of place of residence, region of residence and marital status) and contraceptive non-use.

3.4.2 Multivariate Logistic Regression Analysis

Standard logistic regression was applied to assess the effect of factors said to be associated with contraceptive non-use. Logistic regression analysis was chosen because the dependent variable (contraceptive non-use) is dichotomous. Furthermore the use of a dichotomous dependent variable in logistic regression analysis refocuses the analysis from examining in general the determinants of contraceptive non-use versus use. The

explanatory variables under study are also categorical, calling for the application of logistic regression model.

The Logistic Regression Model

The logistic regression model is specified as: -

$$Px = 1 / (1 + Exp - (\beta_0 + \beta_1 x_1 + \text{--------} + \beta_p x_p) -$$

Where,

Px= The probability of an event occurring

B= Coefficients estimated

X= Independent variables

The implication of this equation is that the probability, Px, of the occurrence of the contraceptive non-use depends on the independent variables x_1, x_2 ----- x_p (age, region of residence, marital status, religion e.t.c).

Two models were run, one for each country to identify variables significant in the study in both countries. Using the exponentiated beta obtained comparisons were then made between the two countries.

CHAPTER FOUR: DISTRIBUTION AND DIFFERENTIALS OF CONTRACEPTIVE NON-USE

4.1 Introduction

This chapter presents results of bivariate and multivariate analysis. Univariate analysis involved carrying out frequency distribution while bivariate analysis involved cross-tabulation and chi-square tests.

4.2 Characteristics of the study population

The distribution of respondents by age shows that majority of the sampled female youth in Kenya were aged 15-19 years (52.9 percent) while 20-24 were 47.1 percent. In Ghana, youth aged 20-24 were majority (66.3 percent) while adolescents aged 15-19 years comprised of 33.7 percent. Variation by place of residence showed the same distribution in both countries. In Kenya, 64.5 percent of the respondents were living in rural areas, with only 35.5 percent residing in urban areas while 60.5percent and 39.5percent of the youth in Ghana lived in rural and urban areas respectively.

Great variations by region of residence were observed in both countries. For instance the distribution shows that only 3.7 percent were residing in North Eastern province while 15.9 percent lived in Central province, this exceeded Nairobi by only 0.4 percent. While Rift valley, Nyanza, Coast and Western had 14.7 percent, 13.3 percent and 12.1 percent respectively. In Ghana, 16.9 percent lived in Ashanti while only 9.5 percent lived in Western. Brong-Ahafo, Greater Accra, Northern and Eastern had 13.4 percent, 12.3 Percent, and 9.7 percent of the residents respectively, while other regions contributed the greatest percentage of 19.5 percent.

The results also indicated that majority of the women in Kenya had primary level of education (58.9 percent) while in Ghana majority had secondary education and above (53.2 percent). In Kenya, 9.9 percent had no education while those secondary education and above were 31.2 percent. In Ghana, youth with no education were 23.6 percent exceeding those with primary education with 8.4 percent.

The distribution of youth by religious affiliations indicated that the dominant religious groups constituted protestants in both Kenya and Ghana with about 61.2 percent and 59.3 percent respectively, followed by the Catholics, with those in the Muslim, other and no religion categories combined comprising the least percentage in both countries. In Kenya, the majority of the sampled youth were Kikuyu (25 percent) while in Ghana, the Akan were about 46.1percent and Mole/Dagbani, and Ewe was 17.9percent and 12 percent respectively.

The distribution of the youth by marital status showed that more female youth were never married in Kenya (60.5 percent) while majority of the youth (60.4 percent) were married in Ghana. With regards to mass media exposure, majority in Kenya (87.1 percent) and Ghana (90.5 percent) had listened to the radio, read newspapers, magazines and watched television as source of information of family planning with only 12.9 percent and 9.5 percent in both countries being not exposed to such sources respectively.

Table 4.2 Distribution of youth by background characteristics in Ghana, GDHS, 2003.

Variable	No. of cases	Percent (%)
Age		
15-19	423	33.7
20-24	831	66.3
Region of residence		
Western	119	9.5
Great Accra	154	12.3
Volta	105	8.4
Eastern	122	9.7
Ashanti	212	16.9
Brong Ahafo	168	13.4
Northern	130	10.4
Other	244	19.5
Place of residence		
Urban	495	39.5
Rural	759	60.5
Level of education		
No education	296	23.6
Primary education	291	23.2
Secondary education +	667	53.2
Religion		
Roman Catholics	218	17.4
Protestants/other Christians	744	59.3
Muslim/no religion/others	292	23.3
Ethnicity		
Akan	578	46.1
Ga/dangme	89	7.1
Ewe	152	12.1
Mole-dagbani	225	17.9
Others	210	16.7
Marital status		
Never married	497	39.6
Ever married	757	50.4
Exposure to mass media		
No	119	9.5
Yes	1135	90.5
Total	**1254**	**100**

4.3 Differentials in Contraceptive Non-Use by Background Characteristics in Kenya and Ghana.

This section examines the relationship between non-use and each of the variables, which are hypothesized to influence it. According to tables 4.1 and 4.2, the proportion of non-users is highest among youth age 15-19 than aged 20-24 in both countries. Non-users consisted of 86.2 percent in Kenya among 15-19 age group in Kenya and 51.3 percent in Ghana whereas 55.2 percent and 41.0 Percent of youths aged 20-24 was not using any methods in Kenya and Ghana respectively. This pattern by age is not surprising given the expected increased exposure of youth aged 20-24 years, some of whom may be in marital unions or having sexual partners and thus more likely to be in child bearing period. Keraka's (1991) explanation for the low contraception in this young reproductive age group is that they are still in school and a majority are still not married hence have little exposure to the risk of pregnancy.

In Kenya, the proportion of non-users in the rural areas was 74.8 percent compared to about 65.9 percent in the urban areas. Same distribution was shown in Ghana with non-users being 52.3 percent and 32.5 percent in rural and urban areas respectively though low according to Kenyan standards. Ocholla Ayayo (1991:157) notes that family planning services have not been properly coordinated to reach majority of the population and the programme has not fully penetrated to the rural areas where there are far too few clinics to cater for the whole population. The finding may also reflect the greater accessibility and availability of family planning services and methods in urban areas. Urbanization according to Jolly and Brass (1993) is associated with greater exposure to family planning and health services.

Religion also turned out to be significantly associated to contraceptive non-use. Among the religious groups, youth affiliated to Muslim /no religion / other religions tended to exhibit a higher probability of non –use in both countries with about 85.4 percent and 63.4 percent in Kenya and Ghana respectively. Protestants /other Christians recorded the lowest (38.7 percent) in Ghana than in Kenya (68.8 percent), Roman Catholics also

showed a lower proportion in Ghana (39.0 percent) compared to (70.9 percent) level of non –use in Kenya.

Religion makes one recognize a supernatural power especially of God, which requires obedience and worship. Recognition of such powers has an effect on a person's conduct and mental attitude, making one live by set down religious laws. This explains the pro-life stand emphasized in the Catholic doctrine, which enhances the biblical teaching to its followers to multiply and fill the earth. This leads to low contraceptive use among Catholics as compared to other religious groups. The Muslims too see abortion and contraception as a violation of the principle of Islam; they think contraception is an attempt to impose the decadent western values to the Muslim world (Osiro, 2001).

Non-use of family planning also steadily declines with increasing educational attainment.

As shown in the tables 4.1 and 4.2, youth with no education exhibited very high levels of non-use, 92.9 percent and 73.3 percent in Kenya and Ghana respectively. These declined to 69.7 percent and 46.0 percent respectively in the two countries. Youths with secondary education and above showed high level of non-use in Kenya (68.4 percent) than in Ghana (31.0 percent). Educational attainment is thus significantly associated with contraceptive non-use among youth in both countries.

Education offers the youth with the opportunity to loosen parental control Caldwell, et al., (1998) hence it may be associated with premarital sex among adolescents. On the other hand, education increases one's knowledge of means of controlling fertility largely as result of access to many communication channels. In addition, education gives the woman power in decision making, which leads to effective contraceptives use. Moore and Rosenthal (1993) argue that clear education goals and high academic achievement are related to lower rates of premarital sex for both boys and girls. The association is mediated by a number of factors, for instance, the high achieving student is likely to place high value on achievement, to be more goal oriented, and able to plan for the future.

Regions showed sharp variations with respect to levels of non-use, North Eastern as expected showed the highest level of non-use {97.4 percent} while Central had the lowest (63.8 percent). Other regions showed slight variations amongst their levels, Nyanza {75.0 percent}, Rift Valley (71.9 percent), Western (70.5 percent), and Eastern (67.7 percent). In Ghana, youth from Northern region had the highest probability of non-use of family planning (79.2 percent) followed by other regions (Central, Upper East and West) (55.3 percent) and Western (43.7 percent), respectively. On the other hand, Eastern (40.2 percent), Brong Ahafo (39.3 percent), Ashanti (35.4 percent), Great Accra (30.5 percent) and Volta (29.5 percent) had the lowest level of non-use.

These variations coincide with differentials reported in the KDHS and GDHS; 2003.Total Fertility Rate was lowest in Nairobi province (2.7 children per woman) and highest in North Eastern province (7.0 children per woman). Fertility in Central province was relatively low (3.4 children per woman) compared with Nyanza (5.6) per woman, Rift Valley (5.8 children per woman) and Western (5.8 children per woman). In Ghana, Total Fertility Rate was highest in the Northern region (7.0 children per woman) and lowest in Greater Accra (2.9 children per woman).

The differences in contraceptive non-use among women of different ethnic groups showed that Somali had the highest levels of non-use in Kenya compared to 67.1 percent of the highest group in Ghana among Mole-Dagbani. Embu /Meru recorded the lowest (64.5 percent) level of non-use in Kenya while the Ewe had the lowest level (34.0 percent) among all the ethnic groups studied.

Past studies have shown that culture acts through ethnicity in that; there are customs within certain tribes that make it difficult for couples within these communities to regulate their fertility. These findings therefore support the view that low contraceptive use is rooted in traditional norms, beliefs and values about family as a seasoned institution of procreation. Using a sub-sample of ever married women from the 1993 GDHS, a study by Addai (1999) examining differences in contraceptive use in six cultural groups, Ga-Dangme, Twi, Akans, Ewe, Guan/others and Mole/Dagbani found that contraceptive use varied by ethnicity. The highest use was among the Ewe (26

Table 4.3: Differentials of contraceptive non-use by background characteristics in Kenya, KDHS 2003.

Variable	Non-Users	Percent (%)	Users	Percent (%)
Age				
15-19	972	86.2	155	13.8
20-24	555	55.2	450	44.8
x^2=251.562, df =1 & sig.=.000				
Marital Status				
Never married	1098	85.2	191	14.8
Ever married	429	50.9	414	49.1
X^2=294.900, df =1 & sig.=. 000				
Level of education				
No education	197	92.9	15	7.1
Primary education	875	69.7	380	30.3
Secondary education +	455	68.4	210	31.6
X^2=52.918, df =2 & sig.=. 000				
Place of residence				
Rural	1029	74.8	258	25.2
Urban	498	65.9	347	34.1
X^2=19.054, df =1 & sig. =. 000				
Region of residence				
Nairobi	215	65.0	116	35.0
Central	217	63.8	123	36.2
Coast	231	82.5	49	17.5
Eastern	168	67.7	80	32.3
Nyanza	213	75.0	71	25.0
Western	225	71.9	88	28.1
Rift Valley	182	70.5	76	29.5
North eastern	76	97.4	2	2.6
X^2=62.878, df =7 & sig. =. 000				
Religion				
Roman Catholic	377	70.9	155	29.1
Protestants/other Christians	898	68.8	407	31.2
Muslim/other religions	252	85.4	43	14.6
X^2=32.867, df =2 & sig. =. 000				
Ethnicity				
Embu/Meru	78	64.5	43	35.5
Kalenjin	112	72.7	42	27.3
Kamba	126	66.0	65	34.0
Kikuyu	358	66.7	179	33.3
Kisii	93	65	50	35.0
Luhya	227	68.8	103	31.2
Luo	166	72.8	62	27.2
Mijikenda	145	84.3	27	15.7
Somali	119	96.7	4	3.3
Others	103	77.4	30	22.6
X^2=71.181, df =9 & sig. =. 000				
Exposure to Mass Media				
No	244	89.1	30	10.9
Yes	128	69.1	575	30.9
X^2=46.987, df =1 & sig. =. 000				
TOTAL YOUTH =2132				

Table 4.4: Differentials of youth contraceptive non-use by background characteristics, GDHS, 2003.

Variable	Non-Users	Percent (%)	Users	Perent (%)
Age				
15-19	217	51.3	206	48.7
20-24	341	41.0	490	59.0
χ^2=11,960, df =1 & sig. =. 001				
Marital Status				
Never married	188	37.8	309	62.2
Ever married	370	48.9	387	51.1
X^2=14,834, df =1& sig. =. 000				
Level of education				
No education	217	73.3	79	26.7
Primary education	134	46.0	157	54.0
Secondary education +	207	31.0	460	69.0
X^2=148,736, df =2 7 & sig. =. 000				
Place of residence				
Rural	397	52.3	334	47.7
Urban	161	32.5	362	67.5
X^2=47.465, df =1 & sig. =. 000				
Region of residence				
Western	52	34.7	67	56.3
Great Accra	47	30.5	107	69.0
Volta	31	29.5	74	70.5
Eastern	49	40.2	73	59.8
Ashanti	75	35.4	137	64.6
Brong Ahafo	66	39.3	102	60.7
Northern	103	79.2	27	20.8
Others	135	55.3	109	44.7
X^2=106.752, df =7 & sig. =. 000				
Religion				
Roman Catholic	85	39.0	133	61.0
Protestants/other Christians	288	38.7	456	61.3
Muslims/other religions	185	63.4	107	36.6
X^2=54.817, df =2 & sig. =. 000				
Ethnicity				
Akan	208	36.0	370	64.0
Ga/Dangme	40	44.9	49	55.1
Ewe	52	34.2	100	65.8
Mole-Dagbani	151	67.1	74	32.9
Others	107	51.0	103	49.0
X^2=73.605, df =4 & sig. =. 000				
Exposure to Mass Media				
No	83	69.7	36	30.3
Yes	475	41.9	660	58.1
X^2=32.942, df =1 & sig. =. 000				
TOTAL YOUTH = 1254				

4.1 Factors Influencing Youth Contraceptive Non-Use in Kenya and Ghana

Table 4.5: Multivariate Analysis of Youth Contraceptive Non-Use, KDHS, 2003

Variable	β	S.E	EXP. (β
Age			
20-24 (RC)	1.000	1.000	1.000
15-19	1.001	0.125	2.721***
Marital Status			
Ever married (RC)	1.000	1.000	1.000
Never married	1.839	0.133	6.290***
Level of education			
Secondary education +(RC)	1.000	1.000	1.000
No education	1.406	0.350	4.081***
Primary education	0.134	0.135	1.144
Place of residence			
Rural (RC)	1.000	1.000	1.000
Urban	-0.512	0.155	0.599***
Region of residence			
Nairobi (RC)	1.000	1.000	1.000
Central	-0.784	0.253	0.457**
Coast	0.323	0.318	1.382
Eastern	-0.384	0.311	0.681
Nyanza	0.497	0.285	1.643*
Western	0.099	0.257	1.104
Rift Valley	-0.107	0.272	0.899
North Eastern	-0.117	1.106	0.890
Religion			
Muslim/other religions (RC)	1.000	1.000	1.000
Roman Catholic	0.080	0.289	1.083
Protestants/other Christians	-0.013	0.271	0.987
Ethnicity			
Others (RC)	1.000	1.000	1.000
Embu/Meru	-0.054	0.394	0.948
Kalenjin	-0.051	0.355	0.950
Kamba	-0.160	0.346	0.852
Kikuyu	0.240	0.308	1.271
Kisii	-0.785	0.372	0.456*
Luhya	-0.020	0.309	0.980
Luo	0.222	0.327	1.249
Mijikenda	0.576	0.417	1.779
Somali	1.998	0.852	7.372**
Exposure to Mass Media			
Yes (RC)	1.000	1.000	1.000
No	0.784	0.240	2.191***
Constant			0.505
-2 Log of likelihood			1926.044
R^2			0.251

Key: Significance-***p<0.01, **p<0.05, *p<0.1.

Table 4.6: Multivariate Analysis of Youth Contraceptive Non-Use, GDHS, 2003

Variable	β	S.E	Exp. (β)
Age			
20-24(RC)	1.000	1.000	1.000
15-19	0.478	0.141	1.613***
Marital Status			
Ever married (RC)	1.000	1.000	1.000
Never married	0.088	0.150	1.092
Level of education			
Secondary education +(RC)	1.000	1.000	1.000
No education	1.263	0.188	3.538***
Primary education	0.428	0.155	1.533***
Place of residence			
Rural (RC)	1.000	1.000	1.000
Urban	-0.417	0.144	0.659***
Region of residence			
Others (RC)	1.000	1.000	1.000
Western	-0.029	0.259	0.972
Great Accra	-0.572	0.288	0.564**
Volta	-0.703	0.333	0.495**
Eastern	-0.235	0.272	0.791
Ashanti	-0.268	0.227	0.765
Brong Ahafo	-0.309	0.229	0.734
Northern	0.586	0.277	1.797**
Religion			
Muslim/other religions (RC)	1.000	1.000	1.000
Roman Catholic	-0.483	0.222	0.617**
Protestants/other Christians	-0.203	0.211	0.816
Ethnicity	1.000	1.000	1.000
Others (RC)	0.071	0.231	1.073
Akan Ga/Dangme	0.531	0.333	1.701
Ewe	0.222	0.297	1.248
Mole/Dagbani	0.417	0.232	1.518*
Exposure to Mass Media			
Yes (RC)	1.000	1.000	1.000
No	0.469	0.235	1.598**
Constant			0.618
-2 Log of Likelihood			1495.402
R^2			0.166

Key: Significance- ***p<0.01, **p<0.05, *p<0.1.

4.3.1 Demographic factors and contraceptive non-use among the youth

Two demographic factors were used in the analysis of the factors influencing contraceptive non-use among the youth. The results showed that an increase in leads to significant decrease in contraceptive non-use in both countries. The effect of age on contraceptive non-use seemed to be stronger in Kenya than Ghana. In Kenya, adolescents aged 15-19 were 2.7 times more likely not to use contraceptives compared to youth aged 20-24, while in Ghana, youth aged 15-19 were 1.6 times more likely not to use contraceptives compared to those aged 20-24.These findings are not unique. Several scholars have found similar results. For example, Wess and Udo (1981) in their study of the Nigerian population showed that women aged 21 and below have the highest drop out rates in contraception. Keraka's (1991) explanation for the low contraception in this young reproductive age group is that they are still in school and a majority are still not married hence have little exposure to the risk of pregnancy. These findings are also in support of the Demographic health surveys of Indonesia, 1994 (PC & IRD 1996) and 1986, Brazil (PC & IRD, 1998), which did show that an increase in age leads to an increase in contraceptive use.

In Kenya, marital status remained to be the most significant variable that determines youth contraceptive non-use. Contrary to expectation youth who reported that they had never been married were 6.3 times more likely not to use any contraceptive methods compared to youth who reported to have been married. Youth who are married are more likely to have given birth and thus more exposed to various sources and methods of contraception particularly when they attend antenatal clinics. Studies have also attributed this low level of contraception among unmarried and school going youth and adolescents in Kenya to lack of access to needed Reproductive Health information and services, perceived hostility of service providers who at any rate lack the appropriate skills to deal with ARH problems, and a policy structure that is inadequate for the needs of young people (Muganda -Oyando et al., 2004).

4.3.2 Socio-economic factors and contraceptive non-use among the youth

As expected, education remained a significant determinant of youth contraceptive non-use across the countries. In both countries increase in educational attainment decreases contraceptive non-use. In Kenya, youth with no education were 4.1 times more likely not to use contraceptives compared to those with at least secondary education and above. The same picture was also depicted by youth in Ghana though showing lower likelihood than Kenyan standards. Youth with no education were 3.5 times more likely not to use contraceptives compared to those with at least secondary education and above while youth with at least primary education were 1.5 times more likely not to use contraceptives compared to those with at least secondary education and above.

Various studies have findings similar to the above. For example Ojakaa (1984) found that a decrease in the number of years spent in school led to an increase in the non-use of contraceptives. Likewise KDHS 1993 and KCPS 1983-84 revealed that the percentage of women not using contraceptives decreases with the increase in the woman's level of education (NCPD 1989, 1994). Education is known to promote cognitive development and attitudinal change, exposing one to new ideas and alternative lifestyles which make one to question traditional norms and practices. In addition, education opens up economic opportunities and provides a vehicle for social mobility (Osiro, 2001).

Type of place of residence was also a predictor of youth contraceptive non-use in both countries. As expected, youth in urban areas were 0.6 and 0.7 times less likely to be non-users of contraception in Kenya and Ghana respectively, compared to their rural counterparts across the two countries. In Ghana, a study conducted by Tawiah (1988) revealed that urban women were two times more likely to be using contraceptives than their rural counterparts. The greatest contraceptive use was among women living in Greater Accra, the urbanized region of Ghana.

In support of these findings also is a study by Ikamari (1986; 77), which showed that urban life is more supportive or permissive of non-traditional behaviors than the rural

areas. Ocholla Ayayo (1991:157) also noted that family planning services have not been properly coordinated to reach majority of the population and programme has not fully penetrated to the rural areas where there are far too few clinics to cater for the whole population. The finding may also reflect the greater accessibility and availability of family planning services and methods in urban areas.

4.3.3 Socio-cultural factors and contraceptive non-use among the youth

Ethnicity also turned out to be a significant determinant of youth contraceptive non-use across the two countries. In Kenya, Somali youth were associated with a higher likelihood of contraceptive non-use. As indicated, they were about 7.3 times more likely not to use any contraceptives compared to youth in other ethnic groups. On the other hand, the risk was lowest among Kisii youth in Kenya. They were 0.4 times less likely to be contraceptive non-users compared to female youth in other ethnic groups. In Ghana, the Mole-Dagbani youth were 1.5 times more likely not to contracept compared to youth from other ethnic groups. Other studies have reported the same increase in the current contraceptive acceptance rate in Kisii.This is evidenced too by its 1993, District Development Plan, which gave a prevalence rate of 60percent-65 percent between 1993-1996 period. This positive change is attributed to factors like creation of awareness of family planning methods through literacy classes in the region.

Past studies have shown that culture acts through ethnicity in that; there are customs within certain tribes that make it difficult for couples within these communities to regulate their fertility. These findings therefore support the view that low contraceptive use is rooted in traditional norms, beliefs and values about family as a seasoned institution of procreation. Using a sub-sample of ever married women from the 1993 GDHS, a study by Addai (1999) examining differences in contraceptive use in six cultural groups, Ga-Dangme, Twi, Akans, Ewe, Guan/others and Mole/Dagbani found that contraceptive use varied by ethnicity. The highest use was among the Ewe (26percent) compared to 11percent among the Guan and 10percent among the Mole-Dagbani.

As expected, youth exposure to mass media remained a significant determinant of youth contraceptive non-use in the two countries. In Kenya, youth not exposed to any source of information on family planning were 2.2 times more likely not to contracept compared to those youth exposed to such information. While in Ghana, youths not exposed to such sources of contraceptive information were 1.6 times more likely not to use any contraceptive methods. In support of the results are studies done in Latin America, Asia, Egypt, Nigeria, Ghana and Zimbabwe, which confirm that radio, television and prints have become increasingly popular as means of educating the public about Reproductive Health issues.

A study in Zimbabwe by Yonder et al., (1996) using comparisons both over time and from cross sectional studies also revealed that those who reported or did not report listening to the broadcast programmes found that listeners were more likely to use contraceptives than non-listeners. Another rigorous study by Rogers and others (1999) in Tanzania that used an experimental design and multiple measure of effects also found that exposure to mass media family planning messages had a strong effect on approval of contraception.

On the other hand, religion remained to be a significant determinant of youth contraceptive non-use in Ghana but was insignificant in Kenya. In Ghana, youths affiliated to Roman Catholic were 0.6 times less likely to be contraceptive non-users compared to youth affiliated to Muslim/other religions. Past studies have shown that religion remains an important aspect in determining contraception in both developed and developing countries.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the study

The main objective of this study was to determine and compare by testing six hypotheses, the socio-economic, socio-cultural and demographic factors that influence youth contraceptive non-use using data from KDHS and GDHS, 2003. In order to achieve this objective, a theoretical framework was developed and applied to determine the variables, which were included in the analysis as discussed in chapter four. The analysis was then undertaken at two levels. The first established using cross tabulations the relationship between each of the independent variables and the dependent variable while the second level involved regressing all background variables on contraceptive non-use in the two countries.

5.2 Summary of the Main Findings and Conclusions

The various determinants, which were taken into account, were the socio-economic, socio-cultural and demographic factors. The findings discussed in this section are based on the results of the cross tabulations and logistic regression methods of data analysis, which were used to test the hypotheses of the study. The results showed that there are wide variations in contraceptive non-use by socio-economic, socio-cultural and demographic factors within and between Kenya and Ghana.

Six hypotheses derived from the literature review and the theoretical framework was tested as discussed in chapter four. The first hypothesis was that different ethnic communities have different levels of youth contraceptive non-use. The hypothesis was confirmed. According to the results of the cross tabulations, youth contraceptive non-use was highest among Somali 96.7 percent and lowest among Akamba 66.0 percent while in Ghana, youth contraceptive non-use was highest among the Mole-Dagbani (67.1 percent) and lowest among the Ewe (34.2 percent). This was further confirmed by the logistic regression. According to these results, ethnicity was one of the significant variables explaining youth contraceptive non-use.

The findings of the study supported the hypothesis that the higher the level of the youth's educational attainment, the lower the level of contraceptive non-use. The cross tabulation of non-use by education showed that those youth who reported to have no education had the highest levels of non-use in both countries by 92.9 percent and 73.3 percent in Kenya and Ghana respectively. The regression results also showed that education was a very significant variable in both countries in determining non-use of contraceptives.

The results of the analysis confirmed that the probability of a youth being a non-user of contraceptives by living in the rural areas is significantly higher as opposed to their urban counterparts. According to the results of cross tabulation, 74.8 percent and 52.3 percent rural youths were non-users in Kenya and Ghana respectively, while 65.9percent and 32.5 percent were non-users in urban areas respectively. According to logistic regression results, living in the rural areas was one of the significant variables explaining non-use of contraceptives in both countries.

They hypothesis on the relationship between age and contraceptive non-use was also significant at all the levels of analysis. 86.2 percent and 51.3 percent of youth's age 15-19 were non-users in Kenya and Ghana respectively while 58.2 percent in Kenya and 41.0 percent of youths age 20-24 were non-users. Age also remained to be one of the significant variables influencing contraceptive non-use in the two countries at multivariate analysis level.

The findings of the study also supported the hypothesis that youth not exposed to mass media, as sources of information on family planning are more likely to be non-users of contraceptives. At cross tabulation analysis, 89.1 percent and 69.7 percent of youths not exposed to mass media were non-users in Kenya and Ghana respectively. While among the exposed youths only 69.1 percent and 41.9 percent of youths were non-users in Kenya and Ghana respectively. The results were also confirmed by logistic regression.

There was a great variation between the two countries based on the influence of religious affiliations. In Kenya, the hypothesis on the relationships between contraceptives non-use and religion was rejected but remained significant in Ghana. The cross tabulations results showed that youths affiliated to Muslim/no religion/other religions are more likely to be non-users 85.4 percent compared to 70.9 percent among Roman Catholics and 68.8percent among Protestants/other Christians.

In Ghana, the hypothesis on the relation between contraceptive non-use and marital status was rejected but remained to be the most significant variable in Kenya. Cross-tabulations in Ghana showed that in Ghana 37.8 percent of never married youths are non-users while 48.9 percent of the ever married youths were not using contraceptives.

It can be concluded that low levels of education, rural residence, age and exposure to mass media are strong predictors of contraceptive non-use among youths. In both countries, educated youths are more likely than uneducated youth to use contraceptives and the magnitude increases with higher levels of educational attainment. Urban residence is positively associated with contraceptive use, which is probably a reflection of the urban advantage in the geographic placement of services.

5.3 Policy Implications

While efforts encouraging sexual abstinence until marriage should be lauded, the policy regarding provision of sexual and reproductive health services for adolescents need to be thoroughly monitored. Many service providers are still apprehensive about serving young people, in part because of perceived cultural prohibitions against it. Consequently, many young people secure it from friends, the media, and peers, a precarious and unreliable alternative. Adolescents should therefore receive health care without being discriminated against because of their status.

Concerted efforts should be made to increase the level of exposure to family planning messages among adolescents through campaigns that are tailored specially for

adolescents. In Ghana where health education is part of school programmes, it usually covers topics such as sexual and reproductive health, family planning and HIV/AIDS prevention (GYRS, 1998). It is therefore recommended that school based dissemination of family planning information in the context of family life education should be revamped in Kenya since knowledge and skills without access to services are worthless (Bandura, 1992).

Considerable efforts should be made to improve the youth educational levels. There is need in both countries to expand their educational attainment and literacy levels, raise secondary school completion rates for girls and narrow social and gender biased differentials in access to schooling. Access to education is likely to shape women's attitudes towards reproductive health opinions and values, thereby creating favorable atmosphere, hence acceptance of family planning methods.

In Kenya programmes that target youth must be designed to take into account their special needs, combine both information and services and include the input of the youth for whom they are ostensibly intended. They must be of high quality, accessible, and affordable and must offer a comprehensive package that encourages youth to seek services. Above all they must be implemented with the support of the communities within which they are undertaken.

5.4 Research Implications

There is gap between knowledge and practice. Studies indicate that adolescent have acquired knowledge and awareness on reproductive health including contraceptive use and the dangers of sexually transmitted diseases including HIV/AIDS. However, many adolescents continue to practice unsafe sex and remain vulnerable to sexually transmitted diseases including HIV/AIDS. Thus, the study recommends further qualitative research that will help answer the question why sexually active adolescents do not contracept in both countries yet their level of exposure to such remains high.

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