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MULTIPLE SEXUAL PARTNERSHIPS IN GHANA
EVIDENCE FROM 2003 GHANA DEMOGRAHIC AND HEALTH SURVEY (GDHS, 2003)

BY

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ACCEPTANCE

Accepted by the faculty of Social Studies, University of Ghana, Legon, in partial fulfillment of the requirements for the degree of M.A. (Population Studied).

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DECLARATION

I hereby declare that except for the reference other people's work which has been duly acknowledged, this is the result of my own research and it has neither in part or in whole been presented for another degree.

Signed.....

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Date....30 - 11 - 2009.

DEDICATION

I dedicated this work to my wife Rebecca Tetteh who has been very supportive and understanding throughout the period of my study.

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ABSTRACT

The objective of the study was to examine the magnitude and determinants of multiple sexual partnerships with regard to men's sexual behaviour in Ghana and the implication for public policy.

The study employed data from the 2003 Ghana Demographic and Health Survey (GDHS, 2003) to examine the relationships between some selected socio-economic and demographic factors and sexual partnerships in Ghana. Nine independent variables formed the socio-economic characteristics of respondents. These were: age, marital status, occupation, religion, place of residence, region, wealth, age at first sex and education. The levels of sexual partnerships by background characteristics wee shown in the study. Both bivariate and multivariate analyses were employed to identify the most important factors determining sexual partnerships in Ghana. For the multivariate analysis, the logistic regression model was used.

The study revealed that multiple sexual partnerships exists, and that about 15% of men aged 15 to 59 years are engaging in multiple sexual partnerships in Ghana. This sexual behaviour varies with socio-economic status of respondents. The study further shows that the most influencing factors of this behaviour are: occupational and educational status of respondents, place of residence and age at first sex. For example, bivariate analysis indicated that age at first sex has an inverse relationship with multiple sexual partnerships. It was also found that men in urban communities and those with high level of education are more likely to have more than one sexual partner than men in rural localities

and those without any formal education respectively. These results were also substantiated by the multivariate or logistic analysis.

The study made several recommendations including the importance of making sex education as part of the school curricular from basic to Junior High School level and the setting up of recreational and communities centers across the country. At these centers, indoor and outdoor games as well as counseling sections on issues about sex and the importance of family planning should form part of the programs for the youth. Older men in our communities were also called upon to show excellent examples for the youth to follow, especially married men who must realize the importance of faithfulness and respect for their wives, the people they love.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

"There would be no global AIDS pandemic were it not for multiple sexual partnerships and that more should be done to encourage people to reduce their number of sexual partners" according to an "education and debate" article written by officials from several organizations and published in April 10, 2004 issue of BMJ, BBC News report (BBC News, 4/8). Shelton and co (2004), write that the "key to preventing the spread of HIV, especially in epidemics driven mainly by heterosexual transmission, is through changing sexual behaviour. A study by Adisegon and Wenjuan (2004), reported that multiple sexual partnerships (defined as two or more sexual partnerships that overlap in time) mediate the association between early sexual debut and sexually transmitted infection among adolescent and young adult males in Africa.

According to Childs and Williams (2007), at any given time about 10% of men the world over are engaging in multiple sexual partnerships with women. Within a culture, men and women are not necessarily held to the same standards. For example, a man may or may not be considered promiscuous for engaging in sexual activity with someone he was not married to, even in cultures where a woman would be considered promiscuous for the same behaviour. According to Mihausen and Harold (1999), men are "allowed" to have multiple partners while women are penalized by sexual double standards. Gender roles for heterosexual interactions appear to sanction men's sexual risk-taking especially the pursuit of multiple sexual partnerships (O'Sullivan, 2006).

Demographic and Health surveys in Africa have suggested that there is some association between men's socio-economic status and their sexual risk-taking behaviour. For example the 2004 Demographic and Health Survey (DHS) in Cameroon revealed a higher prevalence of HIV in the richest and most educated people than their poorest and least educated compatriots. Studies by Djambain (2004), indicated that socio-economic factors play some role in individual sexual risk taking behaviour in sub-Saharan Africa. A socio-demographic study in Ghana and Kenya by Awusabo-Asare and Annim (2008), revealed some relationship between wealth status and sexual risk-taking behaviour in the two countries.The 2006 Multiple Indicator Cluster Survey in Ghana (MICS, 2006) reported that the proportion of men who had sex with more than one partner 12 months prior to the survey was highest (20.2%) within the age group 20-24 years and lowest (7.2%) within the 45-49 age group. According to this survey, multiple sexual partnership increases with the wealth level of men.

Sexual and reproductive health, especially of the youth has become a topical issue and major concern to most governments. There are many issues that undermine the human resource and development of young men and this include sound reproductive health in terms of safe and responsible sexual behaviour. The sexual behavior of men should be a concern because they make reproductive decisions and influence the sexual activity of their female counterparts (Ricter, 1996; Jewkes, 1997). Women often cannot control how many children they should have, though they are the ones exposed to the risk of pregnancy and childbirth.

According to Banuako (1975), premarital sex which resulted in pregnancy was considered a criminal offense in the past. Offenders were punished and the sanctions ranged from ritual cleansing to ostracism of the couple. Premarital sex is not uncommon in Ghana.

It is high, particularly among males. According to Anarfi (1999), by age 18 years, about 59.5% of Ghanaian men have experienced premarital sex. About two-thirds of male respondents in the study reported to have had two or more premarital sexual partners in their life time. According to most of the respondents, they indulged in premarital sex either for pleasure or in order to emulate their siblings and peer pressures to fulfill what they termed a man's role.

Extra marital sex is also a common feature in men's sexual behaviour. Some men indulge in extramarital sex when they are dissatisfied with their wives' behaviour, in particular their lack of sexual cooperation. Others do it when their wives are practicing postpartum abstinence or when they are away (Childs and Williams, 2007).

Research has shown that multiple sexual partnerships involving Ghanaian men vary across the 10 regions of the country as well as the age, education and wealth status of men. For example, according to MICS (2006), the percentage of men who had sex with two or more sexual partners in the last 12 months prior to the survey was 21.3% (maximum) for Central region and 8% (minimum) for Volta region. This multiple sexual partnership was higher within the age group 20-24 (20.2%) and lower within the 44-49 age group (7.2%). The survey also reported that the proportion of men having more than one sexual partner was high for men living in urban areas and for those with at least secondary level of education.

According to Dudgeon and Inhorn (2004), men's sexual behaviours (including their use of barrier contraceptives) have major implications for the transmission of STIs, including

bacterial, viral, and parasitic agents that can lead to acute and chronic conditions in both men and women, as well as pregnancy-associated diseases that affect the well-being of offspring. High prevalence of HIV in both West and East Africa has influenced men to seek sex with virgins in an attempt to avoid exposure (Silberschmidt and Rasch, 2001; Smith, 1999). In so doing, men (including HIV-positive men unaware of their HIV-status) may expose adolescent and even prepubescent girls to STIs through unprotected sex that may have damaging reproductive health consequences on their victims.

Multiple sexual partnerships involving Ghanaian young men are associated with a high risk of exposure to sexually transmitted infections (STIs) especially HIV/AIDS, unwanted pregnancy with female counterparts, abortions among other social problems. However, the use of condoms, which could help to check the above problems, is not encouraging (MOH, 2001).

1.2 Statement of the Problem

In Sub-Saharan Africa, hetero-sexual intercourse with more than one partner is associated with higher risk of exposure to sexually transmitted infections (STIs) and acts as a major transmission route of HIV/AIDS infection (Kalichman, et al, 2007).

In Ghana, a considerable number of people suffer from sexually transmitted infections (STIs), and many have multiple sexual partners but do not use condoms to protect themselves (MOH, 2001). According to the National Sentinel survey in 2006, the prevalence of syphilis among sexually active men, 15-24 years was 5.5% and HIV prevalence 2.5%. Men's risky sexual behaviour poses a growing health burden to the population (GSS and Macro International Inc, 2004). The use of contraception to help fight the above problems is

not encouraging. In Ghana, despite almost universal knowledge and benefits of condom use, less than half of young men (46%) aged 15-24 years used condoms during their first sexual intercourse (GSS et al, 2003). Potential consequences of men's uncontrolled and high risk sexual behaviour include impregnating school girls with possible result of terminating girl's education, failed abortion or complications in abortion, single parenting, child neglect, street children, and child delinquency among others.

Not much has been achieved in terms of goals of the Ghana Family Planning Program (GFPP) in getting the young people especially those who are sexually active to practice safe sex life, control fertility and avoid contracting reproductive and sexually transmitted infections. Awareness has been created in the practice of safe sex, benefit and use of condoms, young men avoiding premarital and unprotected sex etc., but these efforts have not been complemented with equal involvements of men in family planning and this limits the effectiveness of Family Planning Programme in Ghana.

Most reproductive health programmes aimed at ensuring people have satisfying and safe sex life and to overcome such problems as mentioned above are predominantly focused on women leaving the men who however, normatively controlled reproductive decisions in Ghana (Ampofo, 2000), and this is a problem. Men's dominance over reproductive decisions has been hypothesized to be the force delaying the onset of fertility decline in Africa (Caldwell et al. 1992; Knitz, 1999).

1.3 Rationale for the Study

In recent times, sexuality, which includes sexual behaviour of men, has become an important area of research and development interest in response to concern about reproductive health, notably the spread of HIV/AIDS and concern about fertility control and global population growth (Ulim, 1992). The study of multiple sexual partnerships by men in Ghana is important, timely and reasonable for a number of reasons. The youth of today are exposed to sex earlier than formally through the internet, where strip and sex shows, marketing of women and children in commercial sex have captured the attention of young men. The problems connected with men's risky or unsafe sexual behaviour especially that of the youth are of national concern.

Male sexual behaviour have been less studied but holds the key to effective fertility control programs since it has implications on their female partners' sexual and reproductive health. Men are active players in the reproductive health context, influencing female decisions. Thus, they play a pivotal role in achieving fertility goals, including sound reproductive and sexual health and reduction in HIV transmission. Women's ability or inability to protect themselves against sexually transmitted infections (STIs), unwanted pregnancy and unwelcome sexual acts usually depend on the decisions of their male partners. Hence, understanding what influences men exploration of multiple sexual partnerships and how these affect their socio-economic and demographic development would add to the existing knowledge that will be useful to the youth in understanding themselves better and to policy makers in effective policy planning.

The study will contribute to the general knowledge and understanding concerning multiple sexual partnerships and help to improve research efforts in the study of men's

sexual behavior in Ghana. Since the data was collected countrywide, it will provide a wide spectrum of base line information for the nation. Social researchers could utilize the findings of the study as baseline information to further delve into other related areas that will furnish current information on the subject which will be of great significance.

It is also expected that this study will aid heads of institutions, community leaders, government agencies etc. in finding relevant answers and solutions to several questions and problems that involve the sexual behaviour of men in Ghanaian communities. It will also help the government and non-governmental organizations (NGOs) in embarking on program interventions on men's sexual and reproductive health issues in the communities.

1.4 Objectives of the Study

Main Objectives:

The general objective of the study is to investigate the magnitude and determinants of multiple sexual partnerships with particular reference to men's sexual behaviour in Ghanaian communities.

Specific Objectives:

i. To estimate the levels of multiple sexual partnerships in Ghana.

ii. To identify the relationship between selected demographic and socio-economic characteristics of men that influences multiple sexual partnerships.

iii. To make suggestions and recommendation based on the findings of the study to the public and policy makers for informed policy formulation.

1.4 Literature Review

This section reviews related studies, which contribute to the general knowledge and understanding of men's sexual behaviour with particular reference to multiple sexual partnerships in Ghanaian communities.

A national survey in the United States of America in 2005 reported that 90% of men aged 18-44 years considered themselves to be heterosexual, 2.3% homosexual 1.8 bisexual and 3.9% others (Mosher, Chandra and Jones, 2005).

Socio-behavioral studies in Africa have indicated that multiple sexual partnerships are a common occurrence in the region. A study on multiple sexual partners and the spread of HIV/AIDS in Africa by Timberg in 2007 indicates that nearly one in three or 33% of sexually active men in Botswana reported having multiple concurrent sex partners, as did 14 percent of women, in a 2003 survey paid for by the U.S. government. Among men younger than 25 years, the rate was 44 percent.

According to Treas and Giesen, (2005), infidelity by men is common. Thousands of women around Africa are in relationships with men who are unfaithful, and they (men) do so because the majority have been raised to believe that infidelity is acceptable, and in fact often encouraged. Infidelity, they reported, is influenced by many social and demographic factors. A study on 'Sexual Risk Behaviour among men with multiple, concurrent female sexual partner' by Chopra et al, in 2008 reported that People living in urban, informal settings are particularly at risk of HIV infection (Shisana et al., 2005) as a result of men having high levels of sexual partner turnover and concurrency (i.e. more than one sexual partner during the same period of time), especially in situations where males are five or more years older than their female sexual partners, (Jewkes et al., 2006; WCDOH, 2001). According to this study, men reported a range of 2-39 sexual partners in the three months prior to the survey, with an average of six and a median of five. 98% reported having concurrent sexual relationships during the same period. Most men (83.3%) indicated that

their friends would approve if they had sex with women who were not their steady partners or wives and 86.1% indicated that their friends would approve if they changed girlfriends often.

While there are societal and cultural norms for what is considered to be appropriate in sexual behaviour, a man's sexual behaviour is associated with a number of socio-economic and demographic factors including age, marital status, education, wealth or occupation, place and region of residence. These socio-demographic and economic factors play some role in influencing men's sexual behaviour including the number of sexual partners a man has. Findings from a study of "Men's Exploration of Multiple Sexual Partners" by Kumar Das et al (2008) in the United States of America show that male resource attainment positively influences their preference for multiple partners,

A research in Cameroon indicated that wealthy men in Cameroon are more likely to start sexual activity early and have both multiple concurrent and lifetime sex partners, and are less likely to (consistently) use a condom in sex with a non-spousal non-cohabiting partner than their poorest and least educated compatriots (Kongnyuy et al, 2006). These unsafe sexual behaviours may explain the higher HIV prevalence among wealthier men in the country. The work by Chopra et al stated in the opening chapter of this section reported that 46% of participants thought that their main partners had sex with them because they expected or had received any form of material goods.

As already mentioned, most multiple sexual partnerships, many of which are probably concurrent, are not uncommon among sexually active men in Africa. The World Health Organization (WHO) in the 1990s, observed that in Africa men and women often have more than one—typically two or perhaps three—concurrent partnerships that can

overlap for months or years. For example, according to the WHO study, 18%, 22% and 55% of men in Tanzania, Lusaka (Zambia) and Lesotho, respectively, reported having two or more regular, ongoing (lasting at least a year) sexual partnerships in the previous year

According to a UNAIDS report, in 2007, on the average one man has nine premarital partners in rural Kenya before marriage (Abrahams, 2007). A study on multiple sexual partners and HIV transmission risks among people living with HIV/AIDS in Botswana showed that 62% of the participants were currently sexually active, of whom 80% reported only one sex partner in the previous 3 months and 20% reported two or more partners during that time (Kalichman et al, 2007).

A recent Kenyan study in April, 2009 by Njue, et al, discusses how the tradition of "disco matanga", or "disco funerals", put people at a significant risk of becoming HIV-infected. These parties are held by the relatives of a person recently deceased, in order to raise funds for the funeral. The "disco funerals" are characterized by loud music, singing, dancing, bidding games and risky sexual behaviour. These studies are just two examples, drawn from an abundant amount of research that has confirmed the fact that high-risk sexual behaviour is prevalent in Africa, and is often supported by beliefs and traditions. These behaviours are subsequently far more difficult to change than if they were instead inconsistent with the beliefs and moral standards of the people.

Men's access to resources (such as, higher education and prestigious occupations) is one of the determining factors in exploring multiple partners for a short time-span. Thus, while the belief system pertaining sexuality and stereotypes of women's behaviour encourage men to explore temporary partners, the lack of resources constrains some men's exploration multiple sexual partnership.

Men's exploration of multiple female sex partners can be measured by their frequency of buying sex services from prostitutes and keeping sexual relationships with multiple women within a short span of time. According to Farley and Hughes, buying sex and having multiple sex partners are closely dependent on a belief system that is operative in the minds of the actors, and thus, the analysis of these beliefs also reflects a social system. For men, both taking services from prostitutes and keeping multiple partners are socially acceptable and tolerable in several societies where the consumers of prostitution are invisible (Farley 2004 & 2005; Hughes 2004 & 2005; Hughes & Denisova 2002; Marianne 2004), and for the same reason, men's search for multiple partners is "naturalized" or "essentialized" in societies. Men are "allowed" to have multiple partners while women are penalized by sexual double standards (Mihausen and Harold, 1999). The 2003 Demographic and Health Survey undertaken in Ghana (GDHS, 2003) reported that 1.5% of men engaged the services of prostitutes twelve months before the Survey.

Religion and culture are important factors that play some role in men's sexual practices. A recent work on various African cultural beliefs and traditions encourage risky sexual practices, which in turn increase the risk of exposure to HIV. A recent study in Tanzania, for example, describes the unfortunate "peer pressure" that is regularly placed on the youth to have multiple concurrent sexual partners, with men who limit themselves to just one partner being ridiculed, and called "domo zenge", meaning "slow to move". On the contrary, men who succeed in having concurrent sexual relationships with several women are commended, and referred to as either "mshua" (the connoisseur) or "kichwa kikali" (the gifted) (Rweyemamu, 2007).

In another study on multiple sexual partners in Ghana, Anarfi, (1999) reported that about 80 per cent of the males have had more than one sexual partner in their lifetime. According to this study, premarital sex is a common practice in all communities surveyed. About 25 per cent of the males respondents have multiple partners currently (Anarfi, 1999). Analysis of 1998 Ghana demographic and Health Survey (GDHS) showed that men's sexual practices vary with age, in a normal distribution format, increasing from 7.8% in the 15-19 age group, peaking at 40-44 age group and decreasing to 49.0% in the 55-59 age group, for sexually active in last four weeks before the survey.

Both national and local area studies have shown that men's sexual behaviour varies across the regions of Ghana. In a study of 1,782 unmarried young people aged 15–19 years in the Greater Accra and Eastern Regions, it was found that 67% of males had ever had sex, and the mean age at sexual debut among those who had ever had sexual intercourse was 15.5 years for males (Nabila et al ,1996). In a study of 1,415 males and females aged 10–19 years in Ketu South, upper Denkyira and Offinso electoral constituencies, it was observed that the median age of first sexual intercourse for males aged 10–19 years in these three areas in Ghana was 16years. In a survey of 1,038 students (567males and 471 females) aged 13–18 years in nine senior secondary schools, 50% of the adolescents considered chastity as an ideal thing to attain and thought that it was realistically attainable. Yet 42% of the male students surveyed had had sexual intercourse. The average age at first sexual experience was 15years. Half of the sexually experienced students had their first sexual experience between ages 14 and 17years, and 25% had their first sexual experience at age 13 or younger. Reasons given for engaging in sexual intercourse included pressure from peers, deception by partners, experimentation, and satisfaction of sexual desires (Awusabo-Asare et al, 2004).

By age 15years, 47% of the males had ever had sex. Among adolescents aged 12–20years, studied in Kumasi and Accra, it was observed that the median age at first sexual experience was 16 for both boys and girls in the sample (Nabila et al ,1996). However, a ccording Djamba, 2004 evidence from studies in Africa suggest a declining age of first sexual debut, but increasing numbers of sexually active adolescents, and high-risk sexual behaviour (use of multiple sexual partners, commercial sex, and poor use of contraceptives) (Djamba, 2004). For example, the median age at first sex and median age at first marriage, for Ghanaian men according to GDHS, 2003 were respectively 20.2 years and 24.7 years. The period between age at first sex and age at first marriage can be a period of sex experimentations

In an era of HIV infection, the use of the condom as protection against STIs in addition to its use as a family planning method has become important. As with other modern contraceptives, adolescents' awareness of the male condom is high, but the vast majority of sexually active adolescents are not using condoms. Results from the 1998 Ghana Youth Reproductive Health Survey (GYRHS) indicated that 88% of males aged 15–19 years were aware of at least one method of contraception, but the number of males who were currently sexually active in this group, only 37% used modern methods.

According to a Multiple Indicator Cluster survey, 2006, the percentage of men who used a condom at last sex with non-marital, non-cohabiting partner was 53.5%. However, this varied across the wealth quintals and education levels of respondents with 33.9% for the poorest wealth quintiles and 57.7% for the richest while condom use was 30.9% for men with no education and 60.2% for men with at least secondary education (MICS, 2006).

One reason for the low level of condom use is that young people do not feel confident in insisting on condom use in a relationship. In the 1998 GYRHS, among those who had heard of condoms, 27% of males said they could not insist on using a condom if their girlfriend did not want to use one. Moreover, about one-third of male adolescents said they could not refuse to have sex if their girlfriend did not want to use a condom. The confidence that young people have to use condoms, an effective means of preventing the spread of HIV, is still far too low (Adih, and Alexander, 1999).

1.6 Conceptual Framework

The Conceptual Framework is shown in figure 1.1. It links the respondent's socio-demographic characteristics and sexual behaviour, operationalized here as men with two or more sexual partners and those with single sexual partners in the last 12 months. In this model, socio-demographic characteristics like age, marital status, religion, place of residence, region, occupation, wealth, age at first sex and education that are considered to influence sexual behaviour are categorized as independent variable.

Each of the background characteristics listed below as independent variable in the conceptual framework exerts an influence on sexual partnerships. For example it is expected, considering review of literature that men's occupation, wealth and education as well as urban residence will positively affects multiple sexual partnerships. It is also anticipated that age at first sexual intercourse will have an inverse relationship with multiple sexual partnerships, while currently married men or living together will keep single sexual partners compared to unmarried men. The Conceptual Framework will seek to explore how religion and region of residence will affect sexual partnerships in Ghana.

The categories of independent variables are:

Age Group: 15-19, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59.

Marital status: Never married, Married/living together, Divorced or Separated and widowed.

Place of residence: Urban or Rural.

Region: All the ten regions of Ghana.

Education level: No education, Primary, Secondary, and Higher education

Religion: Christianity, Moslem, Traditional, and other Religions

Occupational Status: Professional/Technical & Managerial, Clerical, Sales and services, agriculture and self employed, skilled manual, unskilled manual and no work.

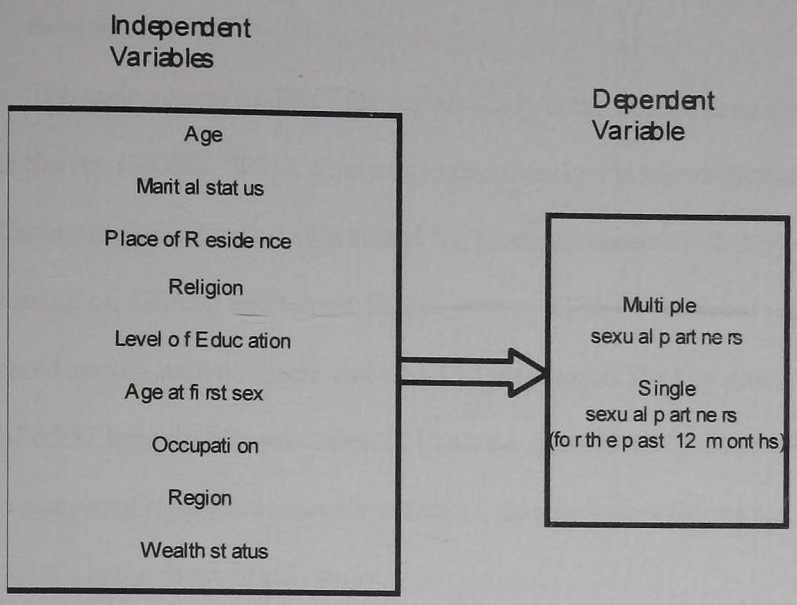
Age at First Sex: < 15, 15-19, 20-24, and 25+

Wealth Index: lowest (poorest), Second, Middle, Fourth and highest quintile.

The dependent variables is

Multiple sexual partners (the percentage of sexually active men who had two or more sexual partners) or **Single sexual partners** (percentage of sexually active men who had one sexual partner in last 12 months before the survey).

Figure 1.1: CONCEPTUAL FRAMEWORK



Source: Author's construct

1.7 Hypothesis

The study will test the following hypothesis:

i. Men in urban residence are more likely to engage in multiple sexual partnerships than men residing in rural communities.

ii. Men with professional/technical/managerial occupations are more likely to engage in multiple sexual partnerships than those with no occupation.

iii. Men who had their first sex at earlier ages, e.g. before attaining age 15 years are more likely to have multiple sexual partners than those who have their first sex at older ages, e.g. when they are 25 years or more.

1.8 Methodology

1.8.1 Source of Data

The main source of data used for the study is the 2003 Ghana Demographic and Health Survey (GDHS, 2003). This was undertaken by the Ghana Statistical Service (GSS) in collaboration with Noguchi Memorial for Medical research (NMMR) and under the sponsorship of, USAID and Ghana Health service (GHS). A national representative household survey with a sample size of 5,015 men within the age group 15-59 years from a total of 6,251 households were selected in all the ten regions of Ghana. 77.3% or 3,777 out of this sample of men were sexually active 12 months before the survey. This latter sample size (3,777) is the focus of this study.

The primary objectives were to provide current and reliable data on fertility, marriage, sexual activity, family planning behaviour, mortality patterns among others.

1.8.2 Limitation of Data

The 2003 Ghana Demographic and Health Survey (GDHS, 2003) did not collect data purposely on men's sexual behaviour. Hence this study is limited in scope. Another problem is that the data is almost out of date that it will less provide the most current evidence of men's sexual behaviour in Ghanaian communities. These limitations may affect the final interpretation of the results of this study.

1.8.3 Method of Analysis

Both descriptive and analytical methods will be applied in this study. First, bivariate analysis using simple frequency, ratios & rates, cross tabulation of variables will be employed to explain the basic relationships between these independent variables and sexual behaviour. Secondly, Logistic regression technique will be used to obtain degree of relationships between each of the selected demographic and socio-economic variables and the dependent variable.

In the logistic regression model, the log of the odds ratio or exponential β (which in this study is the ratio of the proportion of men engaging in multiple sexual partnership to those having single sexual partners) is expressed as a function of the various independent variables (i.e. predictors). A positive β shows the likelihood increase in multiple sexual partnerships in relation to the reference category (RC) while a negative β indicates the likelihood reduction in multiple sexual partnerships in relation to the reference category. A zero β coefficient on the other hand indicates no change in relation to the reference category.

Mathematically, it is expressed as follows:

$$Log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_n X_n = Z$$

Or $\frac{p}{1-p} = e^z$

Where β_n are the logistics coefficients and X_n are the explanatory variables.

P = probability of success and e = base of natural logarithm, approximately 2.7183.

The logistic regression model is fitted for all men between 15 and 59 years to determine the factors that influence their sexual behaviour (single and multiple sexual partnerships). The model estimates the probability that a man will have at a given time one or more than one sexual partners.

In the logistic regression analysis, the demographic and socio-economic factors are the independent variables while the dependent variable is sexual partnerships (i.e. single or multiple sexual partners). The statistical Package for Social Sciences (SPSS) was used for the analysis.

1.9 Definition of Concepts

Multiple Sexual Partnerships

This term will be used to define a situation where male-female partnerships overlap in time, either where two more partnerships continue over the same time period, or where one partnership begins before the other terminates. A sexual partnership is considered to be concurrent in surveys if man reports having two or more sexual partners in a month.

Male sexual behaviour:

In this study, male sexual behaviour is simply used to refer to how men express themselves sexually as human males.

Sexually Active men:

In this study, sexually active men will be used to refer to all men age 15 to 59 years who had sex twelve months before the survey. These men are conceived to have the potential to engage in sex at some regular time intervals.

Risky Sexual behaviour:

In this study, risky sexual behaviours will be used to refer to unprotected vaginal, oral, or anal intercourse with non-marital, non-cohabiting partner which takes forms ranging from two sexual partners to a large number of sexual partners.

1.10 Plan of the Study

The study will be organized into five chapters. The first chapter which is the introductory chapter focuses on the Background to the Study, Problem Statement, Rationale of the Study, Objectives, and Literature review, Conceptual Framework, Hypothesis and Methodology. Chapter 2 examines the Demographic and Social characteristics of the study population, while chapter 3 looks at the Patterns and Differentials in men's sexual partnerships.

Chapter 4 takes a look at the determinants of multiple sexual partnerships through the analyses of the relationships between selected socio-economic and demographic characteristics of men and sexual partnerships while Chapter 5 will comprise the summary, conclusion and recommendation.

CHAPTER TWO

EVALUATION OF DATA AND ANALYSIS OF DEMOGRAPHIC AND SOCIAL CHARACTERISTICS OF RESPONDENTS

2.0 Introduction

The purpose of this chapter is to evaluate data and give a descriptive analysis of some demographic characteristics of the respondents. Socio-demographic characteristics of a population have a bearing on sexual behaviour. Hence, background characteristics that may play a key role in the analysis of men's sexual behaviour are described in this chapter.

2.1 Evaluation of Data

Age is an important demographic variable. The age structure is considered basic to the study of population problems. However age data are not free from errors especially in sub- Saharan African countries. The 2003 GDHS defines age in terms of completed years that is age at last birthday. The errors in age data are of two types: coverage error and content error. Coverage error occurs as a result of omission or erroneous inclusion of individual at certain ages. Content errors are errors, which result from either the erroneous reporting of age by the respondent or erroneous estimation of age by the interviewer.

Table 2.1 evaluates age data of respondents using United Nations Age Ratios. Age Ratio (AR) is the ratio of the population in a given age group to the average of the population in the two adjacent age groups. In the absence of any disturbing factor, the age ratio will be approximately 100%. Deviations from 100 imply that data is subject to errors.

The Age Ratio is expressed as $$AR = \frac{p_x \times 100}{\frac{1}{2}(p_{x-5} + p_{x+5})}$$

Where

P_x is the population at age group x

P_{x-5} and P_{x+5} are the populations at the two adjacent age groups x-5 and x+5 before and after age group x respectively.

Table 2.1: Evaluation of Age data, Using United Nations Age Ratios

Age	Population	Age Ratio	Deviation from 100
15-19	1,095	-	-
20-24	692	75.96	-24.04
25-29	727	109.74	9.74
30-34	633	101.69	1.69
35-39	518	99.23	-0.77
40-44	411	85.71	-14.29
45-49	441	124.05	24.05
50-54	300	93.90	-6.10
55-59	198	7.45	-92.55
Total	**5,015**	**697.73**	**|173.22|**

Source: Computed from GDHS data set

The table indicates major age misreporting at age groups 20-24, 45-49 and 55-59.

The errors are also measured by Age Ratio Score (ARS) which is an index derived from Age Ratios given by the average of the absolute deviations as follows:

$$ASR = \frac{\sum \| AR_i - 100 \|}{N}$$

Where N is the number of deviations from 100.

If AFR = 0 then the age data are free from errors. However, from Table 2.1,

$$ASR = \frac{173.22}{8} = 21.65$$

Since 21.65 is far from 0, GDHS data are subject to errors and must be used bearing this situation in mind.

2.2 Demographic and Socio-economic Characteristics of Respondents

2.2.1 Age Distribution

The study population is made up of 3,777 sexually active men aged 15-59 years.. The distribution of the sexually active respondents by five- year age groups is shown in Table 2.2.

Conventional five- year age groups of respondents can minimize errors in single year's ages. Five years age groups tend to smoothen age shifting and this enables the researcher make a fair analysis of data. The distribution shows that about half (51.2%) of the respondents are under age 35 years while the proportions in each of the youngest and oldest age groups are about 5%.

Table 2.2: Percentage distributions of Respondents by Age group

Age Group	Frequency	Percentage
15-19	192	5.1
20-24	479	12.7
25-29	654	17.3
30-34	619	16.4
35-39	499	13.2
40-44	407	10.8
45-49	437	11.6
50-54	295	7.8
55-59	195	5.2
Total	**3,777**	**100.0**

Source: Generated from 2003 GDHS data set

2.2.2 Current Marital Status

Marital status is generally considered to be indicators of exposure to sexual activity. The 2003 GDHS classified mar ital status as: Never married, Married, Living Together, Divorced, Separated or Widowed. For the purpose of this study, marital status is grouped into three categories as shown in Table 2.2.

The distribution of Respondents by Current Marital Status shows that about 52.6% are married or living together, while 40.0% are never married. The rest (7.4%) are divorced, separated, or widowed.

Table 2.3: Percentage distributions of Respondents by Current Marital Status

Marital Status	Frequency	Percentage
Never Married	1,510	40.0
Married/ Living Together	1,986	52.6
Separated/ Divorced/ Widowed	281	7.4
Total	**3,777**	**100.0**

Source: Generated from GDHS, 2003

2.2.3 Educational Status of Respondents

Table 2.3 shows the Percentage Distribution of educational status of respondents by age group. Education affects man's behaviour and for that matter the sexual activity of men. The formal education system has undergone several restructuring over the past 25 years (Sedjwick, 2000). The 2003 GDHS grouped the current educational system as: No education, primary, secondary and Higher education.

The distribution shows that about 53% of respondents had completed secondary school, while 7.4% attained higher education and 25.4% had no formal education.

Table 2.4 Percentage distributions of Respondents by Educational level

Educational level	Frequency	Percent
No education	958	25.4
Primary	531	14.1
Secondary	2,008	53.2
Higher	280	7.4
Total	**3,777**	**100.0**

Source: Generated from 2003 GDHS data set

2.2.4 Region and Place of Residence

Table 2.5a displays the percentage distribution of Respondents by Region. Ghana covers an area of 238,537 km^2 with an average of 79.3 people per km^2. The country is divided into ten major regions, which have different population densities. Almost every region has different ethnic groups and differs also in infrastructure, communication and occupational activities among others. These variations may have some influence on the general behaviour of the people including their sexual activity. Regional distribution shows that majority of the respondents are in Ashanti (15.9%) followed by Northern (12.9) and Greater Accra (12.7%), while the least proportions of respondents are in Upper West, Central and Upper East regions.

Table 2.5a: Percentage distribution of Respondents by Region

Region	Frequency	Percentage
Western	344	9.1
Central	220	5.8
Greater Accra	481	12.7
Volta	294	7.8
Eastern	364	9.6
Ashanti	600	15.9
Brong Ahafo	434	11.5
Northern	489	12.9
Upper West	268	7.1
Upper East	283	7.5
Total	**3,777**	**100.0**

Source: Generated from 2003 GDHS data set.

Also differences in people's lifestyles and behaviour depend upon whether one is brought up in rural or urban environment. The GDHS, 2003 categorized towns with more than 5,000 people as urban and localities with less than 5,000 people as rural.

Table 2.5b indicates that majority of respondents (about 63%) are in rural communities while 37% resides in urban localities.

Table 2.5b: Percentage distribution of Respondents, By type of Residence

Type of Residence	Population	Percentage
Urban	1,402	37.1
Rural	2,375	62.9
Total	**3,777**	**100.0**

Source: Generated from 2003 GDHS data set

2.2.5 Wealth Status of Respondents

Research has shown that a man's level of wealth has some influence on his sexual behaviour (Kongnyuy, 2006). The 2003 GDHS classified wealth into five categories, using an index based on wealth scores of households. The wealth index is assumed to capture the underlying long term wealth index through information on household assets and it intended to produce a ranking of households by wealth from poorest to richest (Rutstein and Johnson, 2004).

Table 2.5 shows that the proportion of respondents by wealth status varies from 17.8% for the middle wealth quintal to 23.6% for the poorest wealth quintal.

Table 2.6: Percentage distribution of Respondents by Wealth Status

Wealth Status	Population	Percentage
Poorest	893	23.6
poorer	727	19.2
middle	670	17.8
richer	676	17.9
richest	811	21.5
Total	**3,777**	**100.00**

Source: Generated from GDHS, 2003 data file

2.2.6 Occupational Status of Respondents

Table 2.6 shows the percentage distribution of respondents by type of occupation. Men engaging in agricultural activities constitutes the majority of respondents (52.5%) followed by skilled and unskilled manual workers (19.7%). A proportion of 10.9% and 9.4% are in the Professional/Technical/ Managerial& Clerical and sales & services respectively while about 7.5% are made up of men without any specific work.

Table 2.7: Percentage distribution of Respondents by Type of Occupation

Type of Occupation	Frequency	Percentage
Not working	285	7.5
Professional/Technical/ Managerial & Clerical	413	10.9
Sales and services	350	9.4
Agriculture	1,984	52.5
Skilled manual & Unskilled manual	745	19.7
Total	**3,777**	**100.0**

Source: Generated from GDHS, 2003 data file

2.2.7 Religious Affiliation of Respondents

People's religious beliefs and norms have some impact on their general behaviour, depending on the specific doctrine of their religious affiliation which is likely to influence their sexual behaviour including multiple sexual partnerships. Table 2.7 shows the distribution of respondents by their religious affiliation.

It is evident from Table 2.7 that the Christian faith is the major religion of respondents. The survey grouped the Christian religion into: Roman Catholic, Anglican, Methodist, Presbyterian and other Christians which together form about 64.5% of the various religious groups. About 21% of the respondents were Moslems while 6.9% are from traditional and religion.

Table 2.8: Distribution of Respondents by Religious Affiliation

Type of Religion	Frequency	Percent
No religion	296	7.8
Moslem	782	20.7
Christian	2,439	64.5
Other Christians	2	0.1
Traditionalist	260	6.9
Total	**3,777**	**100.0**

Source: Generated from GDHS, 2003 data file

2.2.8 Age at First Sex

The onset of sexual activity is an important determinant of subsequent sexual behaviour and the risk of exposure to STIs including HIV/AIDS.

Table 2.8 shows the percentage distributions of respondents by age at first sexual intercourse.

The distribution shows that by age 19 years, more than half (52.9%) of the respondents has had their first sexual intercourse, about 13% initiated sex at 25 years and above while 5.1% had their first sexual intercourse before age 15 years.

Table 2.8: Percentage distribution of Respondents. By Age at first sex

Age at first sex	Frequency	Percent
< 15	191	5.1
15-19	1,806	47.8
20-24	1,280	33.9
25+	500	13.2
Total	**3,777**	**100.0**

Source: Generated from GDHS, 2003 data file

CHAPTER THREE

PATTERNS AND DIFFERENTIALS IN SEXUAL PARTNERSHIPS

3.0 Introduction

Men's sexual behaviour varies with demographic and socio-economic characteristics. The study of such variations among sub groups of a population is an important aspect of demographic research. Socio-economic factors influencing the number of female sexual partners a man has, according to Kumar Das et al (2008) include male difference in resource attainment, views about sexual behaviour, and beliefs in stereotypes about "expected" for women. Findings from their studies indicated that male resource attainment positively influences the men's preference for multiple female sexual partners.

The findings from such studies provide the bases for formulation of policies or drawing of efficient strategies aim at urging adolescents to make responsible choices that will not compromise their sexual and reproductive health. This section focuses on some selected background characteristics of respondents and their influence on the number of sexual partners they have.

3.1 Marital Status and Sexual Partnerships

Marriage is an important variable that determines the age at which a man is expected to first experience sexual intercourse. Multiple sexual partnerships are a common phenomenon in African country like Ghana (Wiederman, 1997). Whether a man is currently married, formally married or never married affects his sexual behaviour and for that matter

the number of sexual partners he has. Multiple sexual partnerships exist among currently married, never married or formally married men in communities in Ghana (Anarfi, 1999).

Table 3.1 summarizes the pattern of sexual partnerships according to respondents' marital status. For the purpose of this analysis, widowed, divorced and separated or not living together were put under one category while currently married and living together were put under one group. The proportion of men having more than two sexual partners ranges from 11.4% for men currently married/ living together to 19.7% for the never married. According to Table 3.1, the widowed, divorced or separated have 18.5 percent likelihood of engaging in multiple sexual partnerships.

On the other hand, men married or living together with partners are the most likely to maintain single partner relationships as compared to all other categories of men while men widowed, divorced or separated have the least likelihood of keeping single partners. This is expected for married men since they are always close to their normal sexual partners and as such are not exposed to the temptation of exploring multiple sexual partnerships. On average, about 85% of men are having single sexual partners.

Table 3.1: Differentials in Sexual Partnerships by Marital status

Marital Status	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
Never married	1,221	80.3	298	19.7	1,510	100
Married/ Living together	1,751	88.6	228	11.4	1,986	100
Widowed/ Divorced Or separated	227	81.5	52	18.5	281	100
Total	**3,199**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.2 Age and Sexual Partnerships

Age is one of the important demographic variables that are associated with sexual behaviour. People sexual preferences typically change over time, reflecting sexual experience. Age of an individual influences his behaviour and for that matter his sexual activity. Table 3.2 enumerates the pattern and differences in sexual partnerships by the age of respondents. Multiple sexual partnerships vary in a decreasing pattern from age 20-24 years (18.6%) to oldest age group 45-49 years (about 12%). Men within the age group 20-24 years have the highest proportions of men engaging in multiple sexual partnerships compared to those in other age groups. This situation is expected since men of this group are mostly unmarried and sexually active. However, 16.6% of men in the youngest age group and about 13% of those in the oldest age groups have more than one sexual partner.

For single partner relationships, men in older age groups (e.g. 35 years and above) are more likely to maintain one sexual partner than those in younger age groups. For

example about 87.8% of men within the 45-49 age group have single sexual partners compared with 81.4% for men in the 20-24 age group.

Table 3.2: Differentials in Sexual Partnerships by Age Groups

Age Groups	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
15-19	160	83.4	32	16.6	192	100
20-24	390	81.4	89	18.6	479	100
25-29	538	82.3	116	17.7	654	100
30-34	521	84.1	98	15.9	619	100
35-39	425	85.2	74	14.8	499	100
40-44	356	87.4	51	12.6	407	100
45-49	384	87.8	53	12.2	437	100
50-54	255	86.3	40	13.7	295	100
55-59	170	87.1	25	12.9	195	100
Total	**3,199**	**84.8**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.3 Educational status and Sexual partnerships.

Education contributes to men's socio-economic position. Educational status is an important socio-economic variable that play important role in the lives of men in regard to acquisition of skills and knowledge, enhancement of economic and secular values as well as morals that transforms norm and beliefs that shapes attitudes in life.

Table 3.3 displays the pattern of sexual partnerships by educational level of respondents. It is evident that men with a higher level of education has the highest proportion of their group engaging in multiple sexual partnerships compared to men without any formal education. The tendency of men to have more than one sexual partner increases from 14% for those with no formal education to about 22% for men with higher level of education. Furthermore, about 15% of men with primary education and those who have attained secondary level of education are engaged in multiple sexual partnerships. However, the reverse pattern exists in the case of single partner relationships where men with no formal education have a higher proportion (86%) having single sexual partner, compared with about 78% for men who has completed higher education.

Table 3.3: Pattern of sexual partnerships by Educational Attainment

Educational Attainment	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
No education	824	86.0	134	14.0	958	100
Primary	451	84.9	80	15.1	531	100
Secondary	1,706	85.0	302	15.0	2,008	100
Higher	218	77.9	62	22.1	280	100
Total	**3,199**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.4 Religious Affiliation and Sexual partnerships

People's religious beliefs may have some considerable impact on their sexual and reproductive behaviour, depending on the specific doctrine of their religion which is likely to influence their involvement in multiple sexual partnerships. For the purpose of this study, Roman Catholic, Anglican, Methodist, Presbyterian and other Christian sects from the GDHS, 2003 raw data were put under Christianity. It is worth noting that, data were not obtained on the religiosity of respondents (i.e. how religious or how they strongly or fervently practice their faith) and this can affect the outcome and interpretation of results as presented.

Table 3.4 indicates that men affiliated to the traditional religion are more likely to engage in multiple sexual partnerships than members from any other religious group. However, Moslems with a proportion of 14.6%, are less likely to involve themselves in this practice compared with Christians (15.5%). For some reasons, men with no specific religion have the least proportion (14.2%) of its members having more than one sexual partner. It appears the pattern of sexual partnerships does not vary too much among the various religious groups. As regards single partner relationships, the proportion ranges from 83% for men affiliated to traditional religion to 85.8% for those with no specific religion. The highest proportion of multiple sexual partnerships for traditionalist could be due to their likelihood of adhering to traditional beliefs and norms that promote large family sizes.

Table 3.4: Pattern of sexual partnerships by Religious Affiliation

Religious Affiliation	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
No religion	254	85.8	42	14.2	296	100
Christian	2,061	84.5	378	15.5	2,439	100
Moslem	668	85.4	114	14.6	782	100
Traditionalist	216	83.0	44	17.0	260	100
Total	**3,199**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.5 Wealth Status and Sexual partnerships

Researchers in Africa hold the view that men's resources or roughly their socio-economic positions (e.g. wealth and education), for example, may provide more avenues for exploring multiple sexual partners, because they have resources useful for such exploration (Kimuna and Djamba, 2005). According to Kongnyuy et al, 2006, the socio-economic status of a man has an association with the number of sexual partners he has.

Table 3.5 summarizes the pattern of sexual partnerships by the wealth status of respondents. With the exception of those in the lowest level of the wealth rankings where about 14% of men have more than one sexual partner, the proportion of men having multiple sexual partners increases from 11.4% (the poorer) to about 19% in the richest.

Table 3.5: Pattern of sexual partnerships by Wealth Status

Wealth Status	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
Poorest	767	86.0	126	14.1	893	100
Poorer	644	88.7	83	11.4	727	100
Middle	563	84.3	107	16.0	670	100
Richer	56	84.4	108	16.0	676	100
Richest	657	81.3	154	19.0	811	100
Total	**3,199**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.6 Region of Residence and Sexual Partnerships

As mentioned in the previous chapter, Ghana is divided into ten major regions, which have different population densities and also differ in resources. Some of the regions also share borders with neighbouring countries that may influence the culture of the people in these regions. These differentials have some bearing on the general attitude and behaviour of the people including whether or not a man has multiple sexual partners. For example, the 2003 GDHS reported that men who engaged the services of prostitutes 12 months before the survey was highest in the Western Region (3.6%), which shares border with Côte d'Ivoire, compared with Greater Accra (1.2%) and Upper East (0.2%).

Table 3.6 displays the differences in sexual partnerships for the ten regions. The region with the highest density of people, Greater Accra has the greatest proportion (21.4%) of men engaging in multiple sexual partnerships followed by Volta (19.4%) while Upper West, one of the less dense regions in the country has the least proportion (8.6%) of men

engaging in this practice. The high proportion of multiple sexual partnerships in Greater Accra can be attributed to the fact that the region is the most urbanized in the country, an area of high immigration and as such predisposed to high sexual networking. The low proportions as regard this sexual behaviour in the Upper West and Upper East is understandable since these regions are among the least urbanized in the country and also areas of high emigration of young men.

However, men residing in the Brong Ahafo or Northern regions have similar proportions (16.6% and 16.7% respectively) of men having more than one sexual partner.

Table 3.6: Regional Pattern in Sexual Partnerships

Region	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
Western	303	88.1	41	11.9	344	100
Central	181	82.3	39	17.7	220	100
Greater Accra	378	78.6	103	21.4	481	100
Volta	237	80.6	57	19.4	294	100
Eastern	310	85.2	54	14.8	364	100
Ashanti	519	86.5	81	13.5	600	100
Brong Ahafo	362	83.4	72	16.6	434	100
Northern	407	83.3	82	16.7	489	100
Upper west	245	91.4	23	8.6	268	100
Upper east	257	90.8	26	9.2	283	100
Total	**3,199**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.7 Sexual Partnerships by Place of Residence

The type of environment, (rural or urban) in which a person is brought up has some influence on his moral behaviour and attitude towards sex. Review of literature shows that men who live in urban, informal settings who have concurrent, female sexual partners constitute a high-risk population that could easily contract HIV/AIDS.

Table 3.7 summarizes multiple sexual partnerships by type of locality. It is evident that men in urban communities are more likely to engage in multiple sexual partnerships than rural dwellers. For sexually active men living in urban communities there are about 18% of them having more than one sexual partner. On the other hand, men residing in rural communities most likely to maintain single partner relationships.

Table 3.7: Pattern of sexual partnerships by Place of Residence

Type of residence	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
Urban	1,155	82.0	252	18.0	1,402	100
Rural	2,054	86.3	326	13.7	2,375	100
Total	**3,199**	**84.8**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.8 Age at First Sex and Sexual partnerships

The onset of sexual activity typically takes place during adolescence, a period of growth, experimentation and identity search during which individuals are particularly vulnerable and in many cases ill informed with respect to making responsible choices that will compromise their sexual and reproductive health (Zabin and Kiragin, 1998). Age at First Sexual intercourse influences the number of sexual partners a man has (Zaba et al, 2004). The median age at first sexual intercourse for men generated from the 2003 survey was 18 years.

Table 3.7 outline the pattern of multiple sexual partnerships by age at first sex. A significant proportion (31%) of men who initiates sexual activity by age 14 years are engaging in multiple sexual partnerships. It is apparent from table 3.7 that men who started sexual intercourse at earlier ages e.g. less than 15 years are more likely to have multiple sexual partners than men who initiates sexual activity at later ages e.g. 25 years and above, where less than ten percent of men within that category have more than one partner. On the other, men who initiate sexual activity at ages 15-19 years have 17.5% of men engaging in this sexual behaviour.

Table 3.8: Pattern of sexual partnerships by Age at First Sex

Age at First Sex	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
< 15	132	69.1	59	30.9	191	100
15-19	1,490	82.5	316	17.5	1,806	100
20-24	1,124	87.8	156	12.2	1,280	100
25+	453	90.6	47	9.4	500	100
Total	**3,194**	**84.7**	**578**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

3.9 Occupational Status and Sexual partnerships

Employment status enhances man's economic value such that the higher a man is in gainful employment the higher it may have an influence on his behaviour. Occupation is considered to exert some influence on sexual network. Foe example a study conducted in Ghana in 1991 showed that long distant itinerant soldiers, policemen, teachers and drivers are at risk of contracting STIs including HIV/AIDS due to high rate of sexual partner change (Anarfi, 1991).

Work or economic status is an important variable that may affect a man's sexual behaviour. The type of occupation a man engages in has a bearing on his sexual activity. For the purpose of this study occupation has been classified into five categories and the pattern of sexual partnerships by each type of group is shown in table 3.8.

Table 3.9: Pattern of sexual partnerships by Occupational Status of respondent

Occupational Status	Single Partner		Multiple Partners		Total of sexually active men	
	Number	Percent %	Number	Percent %	Number	Percent %
Not working	228	79.9	57	20.1	285	100
Professional, tech., managerial & clerical.	337	81.5	76	18.5	413	100
Sales and services	292	83.5	58	16.5	350	100
Agriculture	1,728	87.1	256	12.9	1,964	100
Skilled & unskilled manual	621	83.4	124	16.6	745	100
Total	**3,206**	**84.7**	**571**	**15.3**	**3,777**	**100**

Source: Generated from GDHS, 2003 data file

The proportion of men in various work categories who have at least two sexual partner ranges from about 13% in the agriculture sector to 20.1% for those without any specific employment. Skilled & unskilled manual workers are equally as likely as sales and service workers to engage in multiple sexual partnerships, while professionals, technical, clerical & managerial workers have 18.5% probability of engaging in multiple sexual partnerships. According to table 3.9, men without any employment have the greatest likelihood of having at least two female partners. For every ten men who have no specific work, there are two of them having more than one sexual partner.

CHAPTER FOUR

DETERMINANTS OF MULTIPLE SEXUAL PARTNERSHIPS

4.0 Introduction

Multiple sexual partnerships are influenced by a number of demographic and socio-economic factors. In chapter three, examination was made of the relationship between multiple sexual partnership and the various demographic and socio-economic background characteristics (age, marital status, age at first sex, educational level, work status, religion, wealth status, region and place of residence) of respondents using bivariate methods of analysis. However, it may be difficult to identify the relative importance of the variables considered using only the result obtained from the bivariate methods of analysis. As a result, the logistic regression method described in chapter one under "Methodology" has been applied to show the net effect and strength of each of the independent variable on the dependent variable (sexual partnerships).This section therefore seeks to look at the results of the logistic regression model on the determinant of multiple sexual partnerships for men in Ghanaian communities.

The summary of the logistic regression analysis are presented in the Table 4. In the table, three statistics are shown – the beta or logistic coefficient (β), the standard error (S.E.), the Exp (β) and the significance (Sig.) of the relationship between independent and dependent variables.

4.1 Determinants of Multiple Sexual Partnerships

The logistic regression showed that men in older age groups are less likely to have multiple sexual partners than men within younger age groups. This confirms the result of the bivariate analysis that the likelihood of men engaging on multiple sexual partnerships decreases from younger ages to older age groups. For example men within the age group 20-24 and 55-59 years are 25.5% and 76.4% less likely to have two or more female sexual partner respectively compared to men within the age group 15-19 years. The regression analysis also indicates that marital status of men is not a strong determinant of their having more than one female sexual partner. For example, never married men are only 6.7% likely to engage in multiple sexual partnerships compared with married/living together.

Men's education emerges as a strong determinant of sexual partnerships. The model shows that education level of men significantly increases the probability of them having more than one sexual partner. For example men with primary or secondary education are about twice more likely to engage in multiple sexual partnerships than their counterparts with no formal education. Also those who completed higher education are 2.6 times more likely to have more than one female sexual partner than men without any formal education. Results from the logistic regression also indicate that men's occupation has a significant influence on the number of sexual partners they have. The likelihood for men in good employment positions to have more than one sexual partner is higher than men without any work. For example Professional/Technical/Clerical and managerial workers are about 2.6 times more likely to have multiple sexual partners than men who have no work. This result confirm the truth of the hypothesis in chapter one that men with professional/technical and managerial work are more likely to have multiple sexual partners than men without any

work. In the same manner, men working in the sales and service sectors are three times more likely to have more than one partner than their counterpart without any work.

Logistic analysis shows that men residing in Greater Accra and Volta regions are 1.4 times and 1.5 times more likely to have multiple sexual partners than those in Western region respectively. This result implies that multiple sexual partners in Western region have little relationship with whether or not a man engages the services of prostitutes in that region. However, living in Upper East decreases the likelihood of having multiple sexual partners by 58%, confirming the results of the bivariate analysis in chapter three. Also men in urban communities are 1.5 times more likely to have multiple sexual partners than those living in rural localities, substantiating assertions in literature review.

Result also shows that Age at first sex has some influence on the number of sexual partners a man has. For instance, a man who initiates sex at age 15-19 and 24-29 years are 1.5 and 1.3 respectively more likely to engage in multiple sexual partnerships than men who begins having sexual intercourse at age 25 years and above, thus confirming the results of the bivariate analysis and hypothesis iii of this study.

Logistic analysis did not show religion as an important determinant of sexual partnerships. Results indicates that Moslems, Christians and men affiliated to the traditional/spiritualist sects are 40%, 26% and 43% respectively less likely to have more than one sexual partner compared to men with no particular religious affiliation. The results also indicate that the influence of wealth status on sexual partnerships were not as significant as expected. Men within the five categories of wealth status are equally as likely to have one sexual partner. The logistic model indicated the independent variables employed for the study was able to explain about 30% of the dependent variable (multiple sexual partnership).

Table 4: Logistic Regression models of Multiple Sexual Partnerships by Demographic And Socio- economic Characteristics of men in Ghana.

Background Characteristics	Logistic coefficient (β)	Standard error(S.E.)	SIG.	Exp(β)
Age group				
15-19 (RC)	-	-	-	1
20-24	-0.281	0.218	0.192	0.755
25-29	-0.481	0.236	0.042	0.618
30-34	-0.916	0.267	0.001	0.400
35-39	-0.869	0.295	0.003	0.419
40-44	-1.120	0.314	0.000	0.326
45-49	-1.051	0.306	0.001	0.347
50-54	-0.915	0.356	0.010	0.400
55-59	-1.446	0.351	0.000	0.236
Marital Status				
Never Married	-2.702	0.178	0.000	0.067
Married/Living together (RC)	-	-	-	1
Widowed/Divorced/separated	-2.883	0.167	0.000	0.056
Religion				
None (RC)	-	-	-	1
Moslem	-0.528	0.257	0.040	0.590
Christian	-0.299	0.236	0.204	0.742
Traditional/Spiritualist	-0.568	0.320	0.076	0.567
Wealth status				
Poorest (RC)	-	-	-	1
Poorer	-0.079	0.203	0.697	0.924
Middle	0.004	0.211	0.985	1.004
Richer	-0.219	0.247	0.375	0.804
Richest	-0.065	0.275	0.813	0.937
Education				
No education (RC)	-	-	-	1
Primary	0.749	0.202	0.000	2.114
Secondary	0.7787	0.178	0.000	2.177
Higher	0.957	0.291	0.001	2.605
Place of residence				
Rural (RC)	-	-	-	1
Urban	0.436	0.167	0.003	1.546

Table 4 Continued: Logistic Regression models of Multiple Sexual Partnerships by Demographic and Socio- economic Characteristics of men in Ghana.

Background Characteristics	Logistic coefficient (β)	Standard error(S.E.)	SIG.	Exp(β)
Occupational status				
Not working (RC)	-	-	-	1
Profess., Clerical, technical & managerial	0.968	0.230	0.000	2.633
Sales and services	1.106	0.324	0.000	3.021
Agriculture	0.945	0.214	0.000	2.574
Skilled & Unskilled manual	0.945	0.191	0.000	2.596
Region				
Western (RC)	-	-	-	1
Central	0.005	0.298	0.987	0.774
Greater Accra	-0.256	0.245	0.296	1.447
Volta	0.370	0.293	0.207	1.508
Eastern	0.411	0.276	0.137	0.883
Ashanti	-0.125	0.230	0.588	1.007
Brong Ahafo	0.007	0.268	0.980	1.005
Northern	-0.781	0.278	0.005	0.986
Upper West	-0.857	0.382	0.025	0.438
Upper East	-1.121	0.291	0.000	0.424
Age At First sex				
< 15	0.136	0.266	0.609	1.145
15-19	0.392	0.183	0.032	1.481
20-24	0.258	0.183	0.159	1.294
25+ (RC)	-	-	-	1
Constant	2.751	0.496	0.000	0.733

(RC) =Reference category
Number of Cases : 3,777
$R^2 = 0.299$

Source: Computed by Author from GDHS, 2003 data file

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The study was undertaken to find out the factors that influence multiple sexual partnerships with respect to men's sexual behaviour in Ghana. Specifically, the study aimed at examining the levels of multiple sexual partnerships and the effects of selected demographic and socio-economic characteristics such as education, marital status, and religion among other factors on this important aspect of men's sexual behaviour. The data set used for the study was the Ghana Demographic and Health Survey, 2003 (GDHS, 2003). The study population comprised 3,777 sexually active men aged 15 to 59 years selected from all the ten regions in the country.

Methodologies employed for the study included simple frequency, ratios, percentages and cross tabulation to examine the pattern and differences in sexual partnerships and use of logistic regression analysis to determine the contribution of each of the background characteristics to multiple sexual partnerships by men in Ghana.

Analysis of background characteristics shows that more than half (about 52%) of the study population were below 30 years. About 40% percent are never married, 52.6 percent are married or living together with partners while 7.4% are divorced, separated or widowed. Fourteen percent of the respondents had primary education, while 25.4% had no formal education. However, about 53% had completed secondary school while only 7.4% completed higher education. Out of the country's ten regions, the highest proportion of respondents

(about 16%) was from Ashanti, while the Central region had least percentage (about 6%) of respondents.

The proportion of respondents according to wealth status ranged from 17.8% (the middle quintile) to 23.6% (the poorest quintile). 21.5% of the respondents are in the richest quintile. Moslems accounted for about 21 percent of the population while 65% of the respondents were from the Christian faith. Seven percent have no religion while the remaining proportions are from the traditional and other religions. Most of the respondents (about 63%) were from rural areas. About 5% of the respondents had their first sex before age 14 years while 87% experienced sexual intercourse before age 25. About 13% initiated sex at age 25 years and above. 7.5% of the respondents were not working, 52.5% were engaged in the agricultural sector, and nearly 20% worked as manual labourers. About 9% were in the sales and services sectors while about 11% were in the professional, managerial, clerical and technical fields.

Bivariate analysis revealed some differences and levels in the number of sexual partners that men of various socio-economic and demographic backgrounds tend to have. Currently married men were more likely to maintain single sexual partners and avoid multiple partners than their Widowed/ Divorced or separated counterparts. About 88.6% of currently married or men living together with partners have single sexual partner while 11.4% are engaging in multiple sexual partnerships compared with about 80% and 20% respectively for never married men. This situation is expected because the currently married/living together are constantly with their regular sex partners and thus will not be exposed to the temptation of exploring multiple sexual partners. Age pattern revealed that men within the age group 20-24 years have the highest probability (18.6%) of engaging in

multiple sexual partners as against 12% for men in the 45-49 age group. With the exception at age groups 15-19 and 50-54, multiple sexual partnerships follows a decreasing pattern from men within younger groups to older age group.

Bivariate analysis further shows that men's educational attainment follows an increasing pattern on the number of sexual partners they have. About 14% of the sexually active men with no formal education have more than one sexual partner compared to 22% for those who had completed higher education. The study revealed that men affiliated to the traditional or spiritualist sects (with a proportion of 17%) are most likely to practice multiple sexual partnerships than those with no specific religion which has about 14% of its group engaging in this practice. However, Moslems, with a proportion of 14.6% are less likely compared to Christians, with a proportion of 15.5% to engage in multiple sexual partnerships.

Analysis also revealed that wealth status has a positive influence on the number of sexual partners a man has. With the exception of men within the poorest category which has 14% of its members having more than one partner, the tendency of men to engage in multiple sexual partnerships increases from those within the poorer quintile (11%) to about 19% for men within the richest quintile. Regional pattern shows that Greater Accra has the highest proportion of men, 21.4% who have more than one sexual partner while the Upper West region has the lowest percentage of men, 8.6% engaging in this practice.

The practice of multiple sexual partnerships with respect to men's sexual behaviour is more pronounced in urban localities than in rural communities, 17.6% for urban as against 13.5% for rural localities. Results further indicated that age at first sex has a bearing on multiple sexual partnerships. Men who initiate sexual intercourse at older ages are less likely

to engage in multiple sexual partnerships compared to men who start having sex at lower ages. Bivariate analysis shows that about 31% of men who initiates sexual activity at ages below 15 years have two or more sexual partners while those who started at ages 25 years and above have 9.4% of their group involving themselves in this behaviour. Concerning occupational status, men having no specific work have 20% of their group having multiple sexual partners followed by men holding positions in the managerial/ professional/technical field (18.5%) while men in sales and services sectors as well as those engaged as skilled and unskilled manual labour have equal proportions, about 16.5% of men engaging in this sexual practice.

Analysis of the logistic regression showed some differences with respect to important predictors of multiple sexual partnerships. However the significant predictors of this aspect of men's sexual behaviour were education, occupational status, place of residence and age at first sex. The logistic model indicates that men's economic positions significantly influence their exploration of multiple sexual partnerships. For example men engaged in various activities (e.g. sales & services, professional/managerial/technical and agriculture) are two or three times more likely to have multiple sexual partners than their counterparts without any work. The results revealed that men with at least primary or secondary education are more than twice likely to engage in multiple sexual partnerships than their counterparts with no formal education. Logistic results further indicate that men in urban communities are 1.5 times more likely to engage in multiple sexual partnerships than their rural counterparts. However this model did not indicate wealth status and religious affiliation as significant determinant of multiple sexual partnerships in Ghana.

5.2 Conclusion

This study has confirmed that multiple sexual partnerships exist among men of different background characteristics in Ghanaian communities. The findings from this study have shown that demographic and socio-economic factors have some influence on the tendency of men to engage in multiple sexual partnerships, a very important aspect of men's sexual behaviour. The results of this study, at least shows that education, occupational status, place of residence and age at first sex are important socio-economic factors determining multiple sexual partnerships in Ghana.

Notwithstanding the variations in magnitudes of this sexual practice among men of different socio-economic standings, this work has revealed that on the average 15.3 percent of sexually active men in Ghana have two or more female sexual partners while about 85% have single sexual partners.

However, only about 30% of the independent variables considered for this study could explain this aspect of sexual behaviour of men in Ghana. This implies that other factors might be involved in the tendency of men to engage in multiple sexual partnerships with women. These other factors could be socio-cultural that influences man's attitude or behaviour, e.g. moral teaching learned from parents, peers or society. Others include man's own beliefs, traditions, practices (e.g. alcohol consumption), morals and personal motives. Also spirituality, which is described as a search process in an attempt to discover that which is sacred (e.g. God) through different pathways (Pargoment and Mahoney, 2002) , culture and societal norms and religiosity of an individual, which according to Hendrick and Hendrick (1987) is significantly related to predicting or shaping one's sexual behaviour,

attitudes and experiences. A combination of these might bring about a man understanding of what he believes about sex and how he will approach sexual behavior.

5.3 Recommendations

The findings of this study have important policy implications for reproductive health. Results from the study have shown that men enter relationships at young ages some before 10 years. The results further revealed that men who initiate sex at early ages tend to have multiple female sexual partners. The youth of today are exposed to sex earlier than formally through the internet, where strip and sex shows, marketing of women and children in commercial sex (Hughes, 2003). Hence the earlier they are taught the right things concerning their sexuality and the dangers of risky sex the better it will help develop and shape their attitude and behaviour towards sex before they are fully matured. There is no other way to achieve this other than through education. Sex education must form part of the school curricular and made a compulsory core subject from primary level through to Junior High school. Parents must also take up the challenge of discharging parental responsibilities of caring and proper monitoring of children developments, teaching them the right things about their sexuality before they learn the wrong things about sex from their peers. To help consolidate the efforts of parents and teachers in educating the youth on sex, virgin clubs should be formed in schools and in our communities.

This study and literature review indicates that the number of young men having multiple female sexual partners is increasing. Meanwhile this aspect of sexual behaviour (multiple

heterosexual relationships) account for most HIV transmissions in Africa (Timberg, 2000).

Recreation, an important mode of relaxation and enjoyment has the potentials to draw the youth attention from sex. However, recreational centers is lacking in our communities. There is therefore the need to establish youth centers at the districts and revamp the existing community centers across the country. The Districts Assemblies should take up this responsibility with technical and financial assistance from government. At these centers indoor and outdoor games as well as counseling sections on issues about sex and the importance of family planning should form part of the programs for young men in the communities. Recreational centers can offer some potentially good programs, with appropriate support, they could become an essential part of community wellbeing, providing a safe and positive place that promotes a healthy lifestyle to community members of all ages. Trained counselors specifically equipped with knowledge on sexual and reproductive health issues could act as important resource persons at these centers. Here, participants would benefit from specifically-targeted HIV prevention interventions which address partner concurrency, inconsistent condom use, excessive alcohol consumption, and intimate partner violence. At a time when the world is still trying to find a lasting remedy for HIV/AIDS epidemic, this program when properly implemented and efficiently monitored could help control the spread of the deadly virus in Ghana as well as check the resultant social problems that accompanied multiple sexual partnerships, like unwanted pregnancies, abortions fatherless and street children in our societies.

While focusing on the youth to develop and follow a healthy and responsible sexual behaviour, attention should also be drawn to older men in our societies. Older men in our

communities must be called upon to show excellent examples for the youth to follow, especially married men who must realize the importance of faithfulness and respect for their wives, the people they love. Men's superior socio-economic position as against their female counterparts make the latter to contend with the allurement of financial gratification and sexual overtures by relatively richer peers and older males (the "sugar daddy" syndrome) whereby school girls for example enter into sexual relationships with older, wealthy men who can assist them with school related expenses or the purchase of material goods (DeBrugn, 1992; Gorgen et al,1993) These men should appreciate the importance of keeping their love under one roof by being faithful to their wives and know that having several sexual partners in addition to their wives/partners is dangerous for their health and the well-being of their families.

It is also recommended that any future research in the area of men's sexual behaviour should explore other plausible factors, including research on local norms, religiosity and spirituality that affect individual and group attitudes and behaviours in relation to sexual activity.

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