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MALE INVOLVEMENT IN MATERNAL HEALTH DECISION-MAKING IN NKWANTA SOUTH DISTRICT, GHANA

BY:

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DECLARATION

I, GEORGIA T. MITCHELL declare that **MALE INVOLVEMENT IN MATERNAL HEALTH DECISION-MAKING IN NKWANTA SOUTH DISTRICT, GHANA** is my own original research and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references. This dissertation, either in whole or in part has not been presented elsewhere for another degree.

Georgia T. Mitchell (ID. 10361114)	…… …… Signature	…….. Date

Certified by:

Prof. Richard M. Adanu (Supervisor)	...…… …… Signature	…….. Date

DEDICATION

This thesis is dedicated to Hon. Emanuel L. Shaw for his financial support that led to this great achievement. If thanks were as much as the sand on the ground, I would have given it all to him, for what he has shown me is beyond just a mere one.

I had the inspiration and support needed to be who I am from all my family members, loved ones, and friends who stood by me through this educational journey.

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ABSTRACT

BACKGROUND

Worldwide, men play critical role in women's ability to seek health care, including reproductive health care, even though more often than not, they are ill-informed about women's reproductive health needs. Male participation has been shown to yield substantial influence in decisions and health outcomes in several other areas of reproductive health, including abortion and breastfeeding. However, male involvement has been found to be affected by men's low knowledge of women's reproductive health issues, culture and traditional restrictions. The study therefore looked at determinants of male participation in women's reproductive health needs in Nkwanta South District of the Volta Region.

OBJECTIVE:

This study was undertaken to determine the level of male involvement in antenatal, delivery and postnatal periods in Nkwanta South District of the Volta Region of Ghana, using a male involvement index developed during the study, as well as identify factors that promote and barriers that limit such male involvement.

METHODS

A cross-section study, covering 433 men aged 18 to 50 years, whose spouses were currently pregnant, had ever been pregnant, or had children, was carried out. Quantitative data for the study were obtained using structured questionnaires, while four focus group discussions and four key informant interviews were used to gather qualitative data. A male involvement index was constructed, based on ten key indicators. . The index of male participation in pregnancy, delivery, and postnatal periods was constructed by adding the scores of ten indicators of male participation for each respondent. The ten variables used had equal weight in the score.

The male involvement score for each respondent ranged from 0 to 10, based on three categories, which included emotional, financial and physical supports.

Linear regression was used to determine the association between background characteristics of the respondents and their involvement in maternal health.

RESULTS

The median age of the respondents was 37 years. More than seven out of every ten men (or 71%) had a low male involvement index, though a higher proportion (85%) claimed they accompanied their wives/partners to the clinic.

The results also showed that men's knowledge of antenatal OR 0.3 95%CI (-1.422,-0.676) and delivery OR 0.2 95%CI (-1.801,-1.017), attitude towards antenatal OR 0.1 95%CI (-2.898,-1.968), and postnatal OR 0.3 95% CI (1.781,-0.945) were the major factors that influenced male involvement in maternal health issues. The barriers that hinder male involvement in maternal health were related to cultural beliefs, socio-economic and poor health system.

CONCLUSION

The level of male involvement in women health decision- making was found to be generally low in Nkwanta South District. Even though men did give financial support to their partners during their maternity periods, emotional and physical support was low. Men’s lack of knowledge of women maternal health needs, their limited roles and responsibilities in maternal health decision-making, and their attitudes were found to be shaped by cultural and gender roles. The structure of the health system also contributed to low male involvement as well. All of these were factors that contributed highly to low male involvement in maternal health matters. Despite increased knowledge of antenatal, delivery, and post-natal care, men still showed low participation in women maternal health needs.

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LIST OF ABBREVIATONS

AIDS	**Acquired Immune Deficiency Syndrome**
ANC	Antenatal Care
CRH	Center for Reproductive Health
CHPS	Community-Based Health Program Services
CBSVs	Community Based Service Volunteers
DHMT	District Health Management Team
FGM	Female Genital Mutilation
FGD	Focus Group Discussion
FIDA	International Federation of Women Lawyers
GHS	Ghana Health Service
HIV	Human Immuno-Deficiency Virus
ICPD	International Conference on Population and Development
KII	Key Informant Interview
MDGs	Millennium Development Goals
MOH	Ministry of Health
PRB	Population Reference Bureau
PNC	Postnatal Care
RH	Reproductive Health
SRH	Sexual and Reproductive Health
SPSS	Statistical Package for Social Sciences
SD	Standard Deviation
STDs	Sexually Transmitted Diseases
STIs	Sexually Transmitted Infections
SDHMT	Sub-District Health Management Team
SDHT	Sub-District Health Teams
TBAs	Traditional Birth Attendants
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WIFA	Women in Fertility Age

DEFNITION OF TERMS

1. **Male involvement**-addresses men's sexual and reproductive health needs and behavior. It includes encouraging men to become more involved and supportive of women's needs, rights and sexual, reproductive health and choices.

2. **Participation-** men's supportive role in their families, communities, and work-place during pregnancy, delivery and post natal care.

3. **Male Support-** the availability of the men to provide physical, emotional and financial support to his partner and child and also accepting his responsibility for the needs of the mother during the time she gives birth.

4. **Reproductive decision-making -m**eans being informed about and deciding together as partners on issues relating to the women, concerning how to provide care when the woman is pregnant, when she is about to deliver and after she gives birth. E.g.Is preparing where she will deliver, what she will need, and the wellbeing of the baby.

5. **Barriers** – are things that will stop men from taking part in the affairs or health of his partner and supporting his partner during childbirth, after she give birth and continue take care of her and the baby.

6. **Attitudes** – the way men think, say and feel about the role he should play or behave towards involvement of males, when his partner is pregnant, giving birth and after birth child.

7. **Pregnancy** – the state of carrying a growing embrayo or fetus in the uterus; the interval of time beginning when an egg and sperm unite and ending when and a baby is born. A full term pregnancy lasts 9 months (38 to 40 weeks).

8. **Child birth** – is the act or process of giving birth to a child.

9. **Postnatal care** – all the activities that occur relating to supporting the health and well-being of the mother and the new baby.

10. **Knowledge**- the information, understanding and skills that were gained through education or experience that supports or deters the involvement of males in antenatal, delivery, and postnatal periods.

11. **Involvement**- to take part in or to make somebody take part in maternal health programs.

Chapter 1
INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Reproductive health often indicates that men and women are involved in the process as they are considered partners in sexuality and reproduction. The behaviors of men and their reproductive health similarly have a great impact on women's reproductive health and children's well-being and society as a whole. Worldwide, men play critical role in women's ability to seek health care, including reproductive health care, even though more often than not, they are ill-informed about women's reproductive health needs and those of themselves.

Thus, over the last few decades, there has been increasing recognition of the importance of male involvement in sexual and reproductive health (SRH). This has been enforced by the discussions that centers on the AIDS epidemic when it became clear that there was an urgent need to encourage men to be a part of their sexual and reproductive health needs and that of their partners (Salem, 2004).

The International Conference on Population and Development (ICPD) held in Cairo 1994 with 180 countries represented, formally recognized the importance of men to women's reproductive health and also recognized the importance of men's own reproductive health. Male involvement centers on encouraging men to become more involved and supportive of women's needs, rights, and sexual and reproductive health and choices. It addresses men's own sexual and reproductive health needs and behavior (MEDiCAM[1], 2004). Male involvement in maternal healthcare can lead to decreased maternal mortality rates and increased contraceptive prevalence rate. The overall prevalence of HIV/AIDS can also be

[1]**MEDiCAM** is the non-profit and non-partisan membership organization for NGOs active in Cambodia's health sector.

reduced through male involvement, which has a positive outcome, if men are involved not just as clients of reproductive health, but rather as partners, service prodder, policymakers, teachers, and project manager (MEDiCAM, 2004). The ICPD, thus, urged all countries to provide men, as well as women, with reproductive health care that is accessible, affordable, acceptable and convenient.

But despite the increasing global recognition of the importance of male involvement in reproductive health, a number of countries are yet to develop large-scale programs that can reach out to men. Africa is a particularly challenging case. According to Watson et al. (2005), male involvement in reproductive health is particularly challenging in countries whose culturally defined gender roles hinders male participation in SRH. This is especially true in settings where couples' communication is limited and male dominance is being manifested, involving violence against women, high-risk sexual behavior and alcohol consumption.

As an African country, Ghana faces the same socio-cultural challenges that affect male involvement in sexual and reproductive health, making only very little progress over many years. In 1969, the Ghana Government adopted a national population policy. The main focus was to address high population growth problem with respect to slow growth rate of the economy (Benneh et al. 1989). However, there has been more focus and interest on involving males in family planning than maternal and child health as part of reproductive decision making in Ghana (Fayorsey C. 1989; Edgar et al, 1992; Ezeh A. C.1993; Ezeh et al. 1996). Thus, in Ghana, as in other places around Africa, the influence of men during the pregnancy period remains largely unexplored (Dudgeon &Inhorn, 2004; Sternberg &Hubley, 2004; Becker & Robinson, 1998).

The 2011 Mid-Year Health Report of Nkwanta South District indicated huge challenges in the area of reproductive health (including family planning). The report revealed that high fertility and low family planning acceptor rates lie at the heart of the problem.

Also significant in the report was the discovery of the high rate of infant mortality (2008 indicator: 500/100,000), high incidence of teenage pregnancy (estimated to be 7 percent), low number of supervised delivery (19.8 percent), high post-natal care coverage (79 percent), poor infant and young child feeding practices, etc. Though the Nkwanta District health authorities have set annual improvement targets, as a typical more traditional Ghanaian community, compared to a place like Accra, increasing male involvement in reproductive health is particularly challenging, affected by a number socio-cultural and other barriers.

1.2. STATEMENT OF THE PROBLEM

According to Ghana's 2008 MDG Report, quoting results from the Ghana Maternal Mortality Survey of 2007, the country's maternal mortality rate stands at 451 per 100,000 live births, with conditions much worse in rural area (Ghana MDG Report, 2010). This is high and challenges Ghana's capacity to achieve its MDG goal of reducing maternal mortality to 185 per 100,000 live births by 2015. As a generally rural setting, Nkwanta South District is also affected by this high rate of maternal mortality. Identifying and addressing the critical issues affecting maternal health is essential for impacting the problem. One such issue is low male involvement in maternal health.

Male involvement in maternal health has been shown to have a positive impact on women's maternal health. For instance, there are some components of antenatal, delivery, and post natal care, especially those with medical, nutritional and psychological targets that have been shown to improve birth outcomes and reduce maternal complications, particularly in resource poor settings (Carroli et al, 2001; Lumbiganon, 1999). However, to address these and other

elements of maternal care requires male involvement. Yet, anecdotal evidence shows that male involvement in maternal health is generally low in Nkwanta South District, as it is generally in Ghana. In addition, male involvement as a strategy for improving maternal health has not been fully embraced and incorporated in national and local strategies for improving maternal health in Ghana and more particularly Nkwanta South District. Seemingly, a general lack of insight into the subject of male involvement may be affecting the ability of the health system to develop and implement strategies for increasing male involvement in maternal health.

Understanding and addressing the factors affecting male involvement will pave the way for increasing their participation in maternal health, leading to improved maternal health outcomes. This study will provide a path for understanding the factors that affect male involvement in maternal health in a typical rural Ghanaian District. It will also facilitate the design of programs and strategies for improving maternal health through effective male participation.

1.3. JUSTIFICATION OF THE STUDY

Despite their important role and position, the influence of men during the pregnancy period remains largely unexplored (Dudgeon & Inhorn, 2004; Sternberg & Hubley, 2004; Berker & Robinson, 1998). The literature review confirms this statement to be true for Ghana, as only very little effort and research has been put into the subject in Ghana.

In order to improve male involvement in maternal health in a given district, it is important to understand the practices, and attitudes towards the involvement of male partners in maternal health, the cultural norms, socio-economic factors, health systems factors, that are influencing male involvement in maternal health and acceptable strategies that can be adopted in order to improve male involvement in maternal health.

This study will help to highlight the subject and provide new literature and strategies that will seek to improve male involvement and contribute to explaining the roles, challenges, and importance of male involvement in reproductive health in Ghana and, hopefully, generate more interest in the subject. It will seek to more specifically contextualize and explain Nkwanta South District's poor reproductive health indicators and outcomes in relation to male involvement in maternal health during pregnancy, labor/delivery, and postnatal periods.

1.4. OBJECTIVES OF THE STUDY

1.4.1 General Objective

To determine factors associated with male involvement during antenatal, delivery and postnatal periods in Nkwanta South District.

1.4.2 Specific Objectives

The study was undertaken with the following objectives:

- To assess the level of male involvement during women's antenatal, delivery, and postnatal periods in Nkwanta South District.
- To determine factors that influence male involvement during antenatal, delivery, and postnatal periods in Nkwanta South District.
- To identify strategies that enhances male involvement in maternal health during antenatal, delivery, and postnatal periods in Nkwanta South District.

Chapter 2
LITERATURE REVIEW

2.1. INTRODUCTION

Green et al (2006), in a background paper for the Millennium Project (Involving Men in Reproductive Health: Contributions to Development), made the point that "men's intimate involvement in sex and reproduction cannot be disputed". The research enumerated a number of examples that supported the need to involve men in sexual and reproductive health. It stated,

> "*Often overlooked in the general appreciation of the interdependence of MDGs 3, 4 and 5 is the role played by men and their relationships with women. There is little excuse for overlooking men in this regard*".

This is the general argument and the trend. The literature below provides the background, context, and a much better insight into the issues of male involvement in reproductive health, which is the focus of this study.

2.2. MEANING OF MALE INVOLVEMENT

Male involvement refers to the involvement, participation, commitment and joint responsibility of men with women in all areas of sexual and reproductive health, as well as reproductive health specific to men (Kumar, 2007). It is the concept of understanding male involvement that varies with the context in which it is used and its definition differs from literature to literature. Male involvement is also used as an umbrella term that encompass the various ways in which men relate to reproductive health problems and programs, reproductive right and reproductive behavior.

According to WHO (1992), maternal health refers to women's heath during pregnancy, childbirth and postpartum period.

Male involvement in reproductive health has two major facets:

- The way men accept and indicate support to their partners' needs, choices, and right in RH
- Men own reproductive and sexual behavior.

In this context other terms are often used, male responsibility and participation. The term "responsibility" stresses the need for men to assure responsibility for the consequences of their sexual and reproductive behavior, such as caring for their offspring, using contraception to take the burden of their partners and practicing safer sexual behaviors to protect themselves, their partners and their families from sexually transmitted infections, including HIV.

The term "participation" may seem self-evident since men defacto participate more than women in population and RH programs, as policy makers, media gate keepers, religious leaders, managers, and service providers, community leaders and heads of households. In this context, "Participation" refers to men's supportive role in their families, communities and work place to promote gender equity, girl's education, women's empowerment and the sharing of household chores and child-rearing. Participation also suggests as sharing reproductive decision-making with their making and a more active role for men in both decision-making and behaviors, such as sharing reproductive decision-making with their partners, supporting their partner's choice and using contraception and periodic abstinence

Reproductive Health refers to the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and process. Reproductive health implies that people are able to

have a responsible, satisfying and safe sexual life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so (WHO, 2006).

Reproductive Health care is defined by World Health Organization (WHO, 2006) as: "A constellation of methods, techniques and services that contribute to reproductive health and well-being of individual and family by preventing and solving reproductive health problems". Male involvement in maternal health care has now been described as a process of social and behavioral change that is needed for men to play more responsible roles in maternal health care with the purpose of ensuring women's and children's well-being (United Nations, 2005).

The concept of male involvement in maternal health is now being advocated as an essential element of World Health Organization (WHO) initiative for making pregnancy safer (WHO, 2002).In this study, the focus of male involvement in maternal health issues will be on their readiness to provide support- emotional, financial and physical to their female partners.

2.3. WHY INVOLVE MEN?

Despite the low levels of health knowledge, numerous studies have shown that men act as gatekeepers to women's health-seeking behaviors and utilization of health services in numerous settings (Carter, 2002; Matsuyama, 2002; Ghararo, 2000; UNFPA 2000; Adewuy, 1999; Piet-Pelon et al, 1999; Population Council, 1998, Pal, 1998; Singh et al, 1998, Khan et al, 1997; UNICEF, 1994; Thaddeus & Maine, 1994). Thus, men are involved in reproductive decision-making, and in societies characterized by an unequal balance of power, men may even wield considerable influence over their partners' sexuality (Green at al., 2012, Schuler et al., 2011). In most societies, women have less access than men to education, training and resources (Sivard, 1995). In this context, men are more likely than women to control sexual interactions and decision-making, which has implications for women' sexual and reproductive health (du Guerny & Sjoberg, 1993; Green et al., 2012).

There are an increasing number of studies that demonstrate the influence of men over reproductive health decisions (Gage, 1998; Ezeh, 1993).

Based on these studies, one can argue that family planning programs which target women will have a higher probability of success if they also encourage male involvement (Biddlecoman & Fapohunda,1998a;1998b). In cultures where men dominate reproductive decision-making the exclusion of men from reproductive health programs may lead to poor utilization of reproductive health services among women (Greene et al, 1995; 2012). Involving men in reproductive health is likely to improve women's access to reproductive health care and is also likely to have a positive impact on contraceptive adoption and continuation rates. Male cooperation may improve support for their partners' use of contraception and also, increase the choice of methods that a couple can use. Another reason for involving men in reproductive health is that men have a responsibility to protect their children. Male support is also necessary for women to progress through pregnancy and childbirth and to provide couples with the best opportunity of having a healthy child. Male decisions impact significantly on women's health. Men have an important role to play in ensuring that their pregnant partner receives proper care during and after pregnancy. Specific components of antenatal care (ANC), particularly those with medical, nutritional and psychosocial targets, have been shown to improve birth outcomes and reduce maternal complications, particularly in resource- poor settings (Carroli et al, 2001; Lumbiganon, 1999). However, the most important components of ensuring a healthy pregnancy and delivery may not be in the pregnant women’s control, but rather in the control of the household, usually the husband (Bloom et al, 2001; Beegle et al, 2001; Piet-Pelon et al, 1999).

The antenatal period provides excellent opportunities to reach pregnant women with prophylactic medication, vaccinations, diagnosis and treatment of infectious diseases, as well as with health education programs (Gross, Schellenberg, Kessy, Pfeiffer, & Obrist, 2011). Proven effective antenatal interventions include serologic screening for syphilis, provision of malaria prevention, anti-tetanus immunization and prevention of mother-to-child-transmission of HIV (Gross et al., 2011). Provision of advice during antenatal care about potential pregnancy complications and danger signs, and information on how to seek medical care, are viewed as key strategies to reduce delay in seeking skilled care (Gross et al., 2011). With men controlling the household resources in many settings, their role here is very crucial; thus, the need for their involvement. In both research and program implementation, however, ANC and pregnancy health interventions have traditionally been targeted only towards women because of their increased need for resources around the time of pregnancy, but also because of "the slowly changing perception that men are only loosely involved in the mother-fetus package" (Dudgeon & Inhorn, 2004).

2.4. HISTORICAL ANTECEDENT OF MALE INVOLVEMENT IN REPRODUCTIVE HEALTH

For many years, international family planning and reproductive health programs focused exclusively on women (Green, 2000). Male involvement was limited, often to ensuring contraceptive continuation and acceptability or to promoting the diagnosis and treatment of sexually transmitted infections (Char, 2011). However, experiment with male involvement in reproductive health began over 3 decades ago in the form of 'male involvement in family planning'. One of the earliest studies of male involvement was the Dacca Family Planning Experiment, in which researchers found that an intervention targeted at both husbands and wives led to greater adoption of temporary family planning methods than interventions targeted at women alone or at men alone (Green et al, 1972).Similar findings have been

obtained in numerous other family planning studies in later years, including Fiske & Sumbuloglu, 1978); Terefe & Larson, 1993; Amatya et al, 1994; Varkey et al, 2004; Wang et al, 1998; and Soliman, 1999).

In developed countries, efforts to involve men began as early as the late 1970s, with attempts to make women-oriented family planning clinics more inviting to men (FCI, 2004).

In the 1980s, there were both progress and challenges with male involvement in reproductive health. First, there was a rather quiet, but gradual, recognition within health promotion, that men were an important factor in the health of women and children. Research had shown that men not only acted as 'gatekeepers', restricting women and children's access to health services, but also through abuse or neglect, men's actions had direct bearing on the health of their partners and their children (Gallen et al., 1986). However, on the other hand, the feminist movement was in full swing and, therefore, initially, the way it was thought to deal with what increasingly had come to be regarded as 'the problem of men' was to foster women's empowerment through working directly with women (Sternberg & Hubley, 2004). Men, often identified as uncaring and unconcerned about the well-being of their partners, were ignored, and as a result, many health promoters began working directly with women in the communities as a means to empower them and protect them from the impact of men's behavior on their lives (Char, 2011).

By the end of the 1980s, the women's empowerment approach became an important driving force within health promotion, and, more particularly, within sexual health promotion (Stein, 1997). However, this strategy of women's empowerment without the active involvement of men was described as partial solutions which could alienate men further (Sternberg &Hubley2004). These fears, together with an understanding of the gender power

relationships in the society, brought about a firm belief about male participation in health promotion (Cornwall & White 2000; Drennan, 1998) and, thus, reproductive health.

2.5. TAKING A BIG LEAP FORWARD—THE INTERNATIONAL EFFORT FOR MALE INVOLVEMENT

In the early 1990s, interest had grown in the area of male involvement in reproductive health (Maharaj, 2000), particularly in developing countries, since efforts to involve men in developed countries began as early as the late 1970s. Male involvement in reproductive health garnered much attention and momentum since after the 1994 International Conference on Population and Development (ICPD), held in Cairo, Egypt. The 1994 ICPD and the 1995 Fourth World Conference on Women in Beijing formally recognized the role of men in promoting gender equality and better reproductive health for women.

The ICPD Program of Action states specifically that:

> *"Special efforts should be made to emphasize men's shared responsibility and promote their active involvement in responsible parenthood, sexual and reproductive behavior, including family planning; prenatal, maternal and child health; prevention of sexually transmitted diseases, including HIV prevention; prevention of unwanted and high risk pregnancies; shared control and contribution to family income, children's education, health and nutrition; and recognition and promotion of the equal value of children of both sexes. Male responsibility in family life must be included in the education of children from the earlier stages. Special emphasis should be placed on the prevention of violence against women and children"* (UN, 1995).

2.6. GLOBAL EFFORTS TO INVOLVE MALES IN REPRODUCTIVE HEALTH

Prior to and following ICPD, approaches to involving men in sexual and reproductive health underwent some changes, in favor of increasing the role of men. In their work, Greene et al. (2006) showed that, marked changes had taken place in the area of male involvement after the 1994 International Conference on Population and Development. Green and colleagues

(2006) thus demonstrated that male involvement had moved from the traditional family planning for women, to 'men as clients', to 'men as partners', and finally to 'men as agents of positive change', with each approach guided by a certain purpose and assumption that held implications for reproductive health programs globally.

2.7. FACTORS INFLUENCING MALE INVOLVEMENT IN MATERNAL HEALTH

There are numerous factors influencing male involvement in women's reproductive health that are found in literature on the subject. They include socio-cultural and socio-demographic factors as well as men's knowledge of and attitude towards women's reproductive health needs, in general, and maternal health needs, in particular.

Socio-cultural factors. Numerous studies have shown that male involvement in reproductive health is dependent on the socio-cultural context. According, to Gorge et al. (1998), problems of negative attitude emanate from culture, usually on the part of male partners, who make all decisions in the home, including those that affect women reproductive health.

Socio-demographic factors. These include age, level of education, ethnicity, marital status, average monthly income and religion, etc. Studies show that individual characteristics such as these affect the kind and level of male involvement of males in maternal health. For example, Byamugisha et al. (2010) believed that socio-economic and cultural influences determine gender roles that hinder male partner's involvement in RH.

Knowledge and Attitude. While men's knowledge of and attitude towards women's reproductive health needs are themselves influenced by socio-cultural and demographic factors, they affect male participation in maternal health. Males' knowledge or misconceptions about their partner's maternal health needs determine, to a large extent, how they respond financially, physically, and emotionally to those needs.

According to Jooste & Amukugo (2012), much of the reproductive health problems women face could be prevented if male partners were equipped with adequate knowledge and skills in respect of RH.

Like knowledge, attitude, on the other hand, can either be positive or negative as far as male involvement in maternal health issues is concerned. It also determines how men respond to the reproductive health needs of their partners and heavily influenced by the socio-cultural environment of the male. For instance, Roudi & Ashford (2004) found that negative attitude is more prevalent among men in rural settings. Their study showed that those who live in rural areas tend to manifest negative attitudes towards RH as compared with young, the educated and those who live in the city.

2.8. IMPLEMENTING MALE INVOLVEMENT IN RH IN AFRICA: PROGRESS AND CHALLENGES

The ICPD Program of Action urges all countries to provide men, as well as women, with reproductive health care that is "accessible, affordable, acceptable and convenient". It also encourages reproductive health care programs to move away from considering men and women separately and to adopt a more holistic approach that includes men and focuses on couples. As a result, many programs and strategies have been developed and implemented worldwide to expand reproductive health services to men and to encourage and increase their involvement in it. In African set-up, involvement of men is crucial for successful implementation of reproductive health programs, reduction of sexual and domestic violence, including sexual abuse of minors and FGM. The activities being implemented to enhance male involvement in reproductive health include male only clinics and information and education urging men to encourage and support their spouses/ partners in reproductive health. For sexually abused women, legal advice may be given to those who need it (Thumbi, 2001).

Despite global progress with involving males in reproductive health, there are often many challenges and obstacles. Onyango et al (2010) noted, for instance, that male participation in reproductive health has proved to be challenging in countries where there are culturally defined gender roles and where manifestations of masculinity involve violence against women, alcohol consumption, and high-risk sexual behavior. They further noted (citing WHO, 2002) that in most communities in Africa, men still have a dominant role in reproductive health-related issues, and a number of decisions, such as sexual initiation, contraceptive use, whether to have an abortion, prevention and treatment of sexually transmitted infections (STIs) and HIV, and sexual coercion, still depend on men. A study conducted in a northern Ghanaian community (Bawah et al, 1999), revealed that introduction of family planning services brought tensions in gender relations within the community. Women were worried that their husbands and relatives would find out about their use of contraceptives, while the men believed that they alone should make decisions about their partners' contraceptive methods.

In addition to these challenges, policy makers and health care providers have traditionally implemented policies and procedures that are not conducive to male decision-makers receiving the necessary education to make sound decisions regarding maternal health issues. For instance, the hours of operation in the vast majority of hospitals and clinics for pregnant women are limited to hours coinciding with men's work schedules. Men are also generally not allowed into checkup or delivery rooms of most hospitals and clinics, and providers often have a bias against involving men in reproductive health services (Khan et al, 1998; Dev. 1998). Accordingly, WHO (2002) notes that "without instituting a gender perspective, (RH) projects and programs not only risk re-enforcing damaging stereotypes or more but they also hold back progress that many societies are making towards more equitable relationships between men and women".

Male involvement has also been affected by the belief that men don't care about women's reproductive health issues.

However, contributing to a WHO report on reproductive health programming for men (WHO, 2002), Engender Health[2] said that everywhere the organization has worked, it had been observed that men are concerned about RH. While conventional wisdom has suggested that this is not the case or that men consider it a women's issue, the organization said it had not found this to be true in any place where it has worked. EngenderHealth cautions, though, that for men to be fully involved, they need to be understood holistically, stating that, for example, "both the research and our own work have pointed out that men prefer to visit facilities that offer an array of services, including general medical care and treatment for urological problems, sexual dysfunction, STDs and infertility. EngenderHealth experiences through our case study research and service delivery bears out the fact that men seek services for reasons other than reproductive health. Thus, many programs use services men are seeking to get them in the door, and then use that opportunity—or "teachable moment".

Added to their general decision making role as a support mechanism for maternal health, men can also provide physical and emotional support to their spouses during pregnancy and childbirth. A man can positively influence the pregnancy of his partner in numerous ways, including: giving financial and logistical support to his wife in seeking ANC, helping with housework/physical work so that his wife can rest during pregnancy, ensuring that his wife's delivery is professionally attended, making birth preparations with his wife, etc. (Isiugo-Abanihe, 2003). In addition, the extent to which marital partners are close, or emotionally bonded, is probably an important predictor of faithfulness in marriage, which has a telling effect on the outcome of pregnancy or maternal health. These emotional bonds can be both

[2]EngenderHealth is a US-based leading global reproductive health organization working to improve the quality of health care in more than 20 countries around the world, working in partnership with governments and communities

achieved and shown through such acts as sleeping together, eating together, communicating, etc. that women need during pregnancy (Isiugo-Abanihe, 2003).

Delivering services to men as a means of involving them in reproductive health care is also challenged by the capacity and orientation of service providers. Since most reproductive health efforts have been focused on female clients, providers need additional training to increase their comfort and competency for working with male clients.

2.9. MALE INVOLVEMENT IN REPRODUCTIVE HEALTH IN GHANA

The importance of male involvement in reproductive health is recognized generally in Ghana. Speaking at a conference in Tamale to discuss male involvement in promoting gender equality and reproductive health (2011), held by the International Federation of Women Lawyers (FIDA), in collaboration with the United Nations Population Fund (U.N.F.P.A), Ms. Mahama, the Northern and Upper East Regional program coordinator of FIDA Ghana, said that "men play a dominant role among couples, fertility decisions, family size, and other significant issues related to sexual and reproductive health". However, despite the role they play, men have often been overlooked in reproductive health programming and also their role are limited due to traditional and cultural restrictions. This is resulting in negative outcomes for reproductive health, partly evidenced by Ghana's high maternal mortality rate.

According to Green et al (2006), "a growing body of ethnographic and anthropological qualitative research has been reinforcing the recommendations (from the 1994 United Nations International Conference on Population and Development—ICPD--on male involvement), examining even more closely the impact of men, as individuals, as social gatekeepers and as powerful family members who enforce cultural practices, often to the detriment of women's reproductive health". Their finding is consistent with Mahama (2011), that ''Women cannot achieve gender equality and reproductive health without the

cooperation and participation of men". According to Sabakati (2011), posits that in Malawi, "Women point their fingers at men and say, 'we are willing to use family planning, but these people prevent us from doing so." This stresses the powerful role of men and their influence on women's reproductive health, which, all agree, can be negative if men lack adequate knowledge and involvement in supporting and communicating with their partners.

Interestingly, studies show that men are concerned for women's reproductive health, and are willing to participate in making decisions, according to *The State of World Population 1997* report by the UNFPA. According to the report, the problem may be one of communication: husband and wife may want the same thing, but they don't tell each other. According to the UNFPA, husband and wife communication about reproductive health, including family planning, has been improving over the past few decades, the report notes. However, a large minority of men still consider sexual and reproductive health to be exclusively women's concern - so they don't discuss it.

2.10. CONCLUSION

The literature shows that male involvement has gained worldwide acceptance as an important strategy for improving women's reproductive health, including maternal health. It has proven to provide a suitable alternative (or compliment) to the focus on women empowerment as the key to achieving sexual and reproductive health because such approach failed to take into account the critical role of men, particularly in such culture-influenced settings as Africa, where the men control household resources and makes most major decisions, including issues of pregnancy and contraception. The literature shows, generally, that where men are involved, the outcomes always favor improved maternal health for women and where their involvement is low, women's maternal health suffer.

Despite the evidence in support, the literature shows that acceptable levels of male involvement is a difficult target to achieve because it is affected by numerous individual and societal factors—like males' level of education, the influence of culture and tradition, awareness of women's maternal health needs, and age, among others. It shows that in Ghana, only limited programs for male activities are taking place, but the assessment of impact is low because research into this subject in Ghana is still largely limited—evidenced by very limited literature on the subject related to Ghana.

Accordingly, it is difficult to describe the situation of male involvement in reproductive health in Ghana, particularly male involvement in maternal health. This study will go beyond male involvement in family planning (a more researched topic in Ghana) and explore male involvement in maternal health in a rural setting like the Nkwanta South District of Ghana.

2.11. CONCEPTUAL FRAMEWORK

This study was built around the idea that special efforts should be made to emphasize men's shared responsibility and promotion of active involvement in responsible parenthood, sexual and reproductive behavior, partner's communication, and maternal health concerns (ICPD, 1994). The International Conference on Population and Development also called for male involvement in reproductive health programs to help overcome gender inequities and improve health of both women and men as well.

Male involvement is critical to achieving good maternal health and specifically investigates the situation of male involvement in maternal health (reproductive health during pregnancy, labor/delivery, and post-delivery) in Nkwanta South District, Ghana. As numerous studies have shown, male participation and support can lead to good maternal outcomes for women. Such participation and support, as shown in Figure 1 can include providing emotional and physical support to women during and after pregnancy, knowing and supporting women's

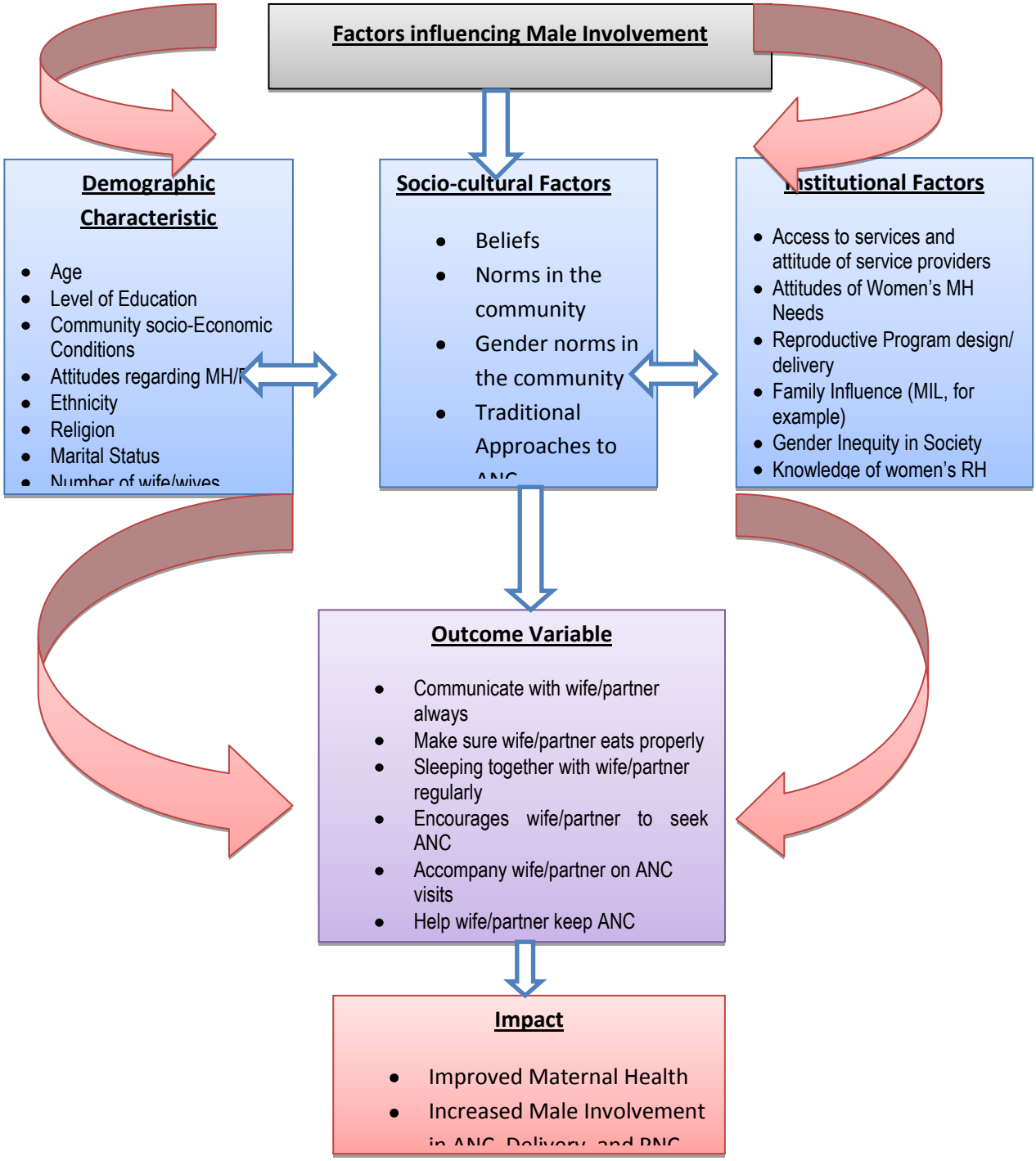
maternal health needs (including maternal care visits to health facilities), providing financial support, planning for delivery, communicating with partner, and exhibiting responsible sexual behavior.

On the other hand, low male involvement can lead to poor maternal health outcomes for women and can be a result of low level of knowledge of women's reproductive/maternal health needs, manifested by limited or no support for women's maternal health needs during and after pregnancy—inadequate emotional and physical support, limited nutritional support, limited financial support, among others. While the study will seek to explain the situation/level of male involvement by examining such indicators mentioned in the preceding paragraphs, it will also seek to investigate the factors that influence the level of male in maternal health.

As Figure 1 shows, this will include such independent variables as age, level of education, awareness about women's maternal health needs, marital status/type, culture/tradition, and access to reproductive health services, among others. It also looked at the influence of such intervening variables as the general community setting (including the general socio-economic condition and gender norms and relations, etc.) and family and community influence, among others.

The module also shows that there are two likely outcomes from male involvement, depending on the level of such involvement. It shows that high male involvement, manifested through such actions as physical and emotional support, financial support, etc., will lead to good maternal health outcomes, which the opposite will be true for low male involve

Figure 1: Graphic Presentation of Conceptual Framework



Source: Developed by author: May - June 2012

Generally, the study focused on what men know and perceive male involvement to be, what common practices of male involvement are prevalent, what factors affected male involvement, and what outcomes have been experienced from male involvement in Nkwanta South District.

In addition to explaining the key factors that influence the current situation of male involvement in maternal health in the district, the study also sought to establish the link between the local maternal health situation in the district and identify ways of improving male involvement, particularly learning from experiences and within the context of what is possible within this local setting.

Chapter 3
METHODOLOGY

3.1. INTRODUCTION

This chapter presents the -- methods used to determine male involvement in maternal health in Nkwanta South District. The analysis comprises of univariate, bivariate, and Multivariate analysis. The univariate analysis consist of descriptive statistics about the socio-demographic characteristics of respondents; the bivariate is based on cross tabulations and tests of association between the independent and dependent variables and binary logistic models served as a prerequisite of multivariate analysis; which is carried out to examine the effects of the dependent variable. All analyses were done using SPSS version 16 and Stata version 11.

The focus group discussion and key informant interview were analyzed using thematic content analysis.

3.2. TYPE OF STUDY/DESIGN

The study was *descriptive cross-sectional exploratory study* comprising mixed-methods involving qualitative (focus group discussions and key informant interviews) and quantitative (structured survey questionnaire), methods of data collection. Observation was also used as a method of data collection.

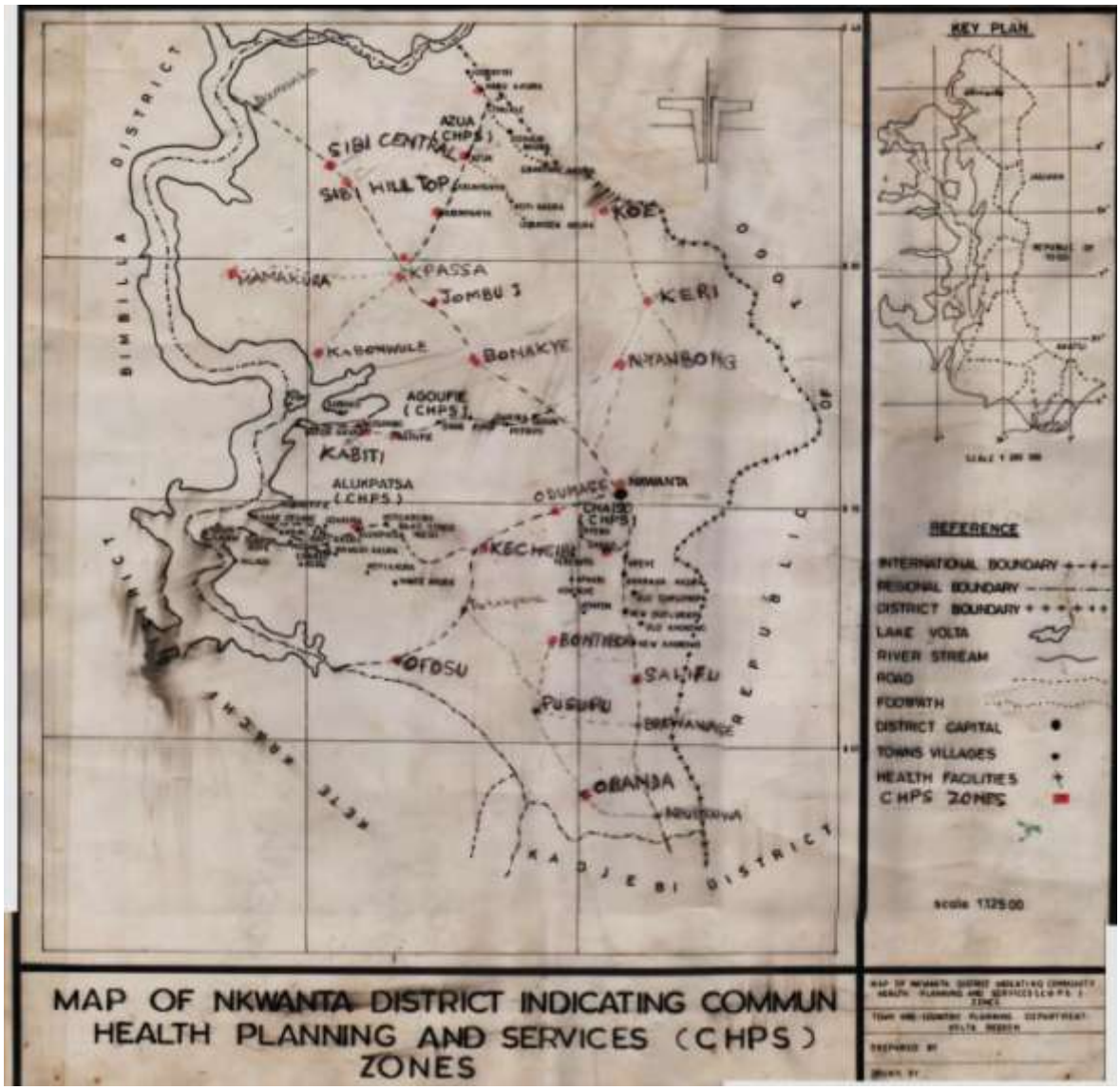
3.3. STUDY LOCATION/AREA

The study was conducted in Nkwanta South District of Volta region of Ghana.

3.3.1 Geography and History of the District

The Nkwanta South District is located in the north-eastern part of Ghana and the northern part of the Volta Region. It is bounded to the North by the Nkwanta North District, to the South by the Kacheibi District, to the East by the Republic of Togo and to the West by the Krachi East District. The former Nkwanta District was split in 2008 into this district and the Nkwanta North District. Nkwanta, the capital of the former Nkwanta District, remains as the capital of the new Nkwanta South District. The old Nkwanta District itself was carved out of the KeteKrachi District in 1989.

Figure 2: Map of Nkwanta South District



3.3.2 Demography of Nkwanta South District

The population of the District in 2010 was estimated to be around 107,755 and this was reportedly growing at a rate believed to be higher than the regional and national figures of 1.9% and 2.3%, respectively from the population demography statistics in 2010. The current estimated population for 2012 is 111,971. The population density is estimated at thirty five inhabitants per square kilometers with and uneven distribution.

It has four sub-districts (Nkwanta, Bonakye, Tutukepene, and Brewaniase) to facilitate effective administration, political, and development for the district. There are also some hard to reach communities and easily accessible communities within these sub-districts. There are a total of two hundred and sixteen (216) communities within the Nkwanta South District.

3.3.3 Economic and Cultural Activities

The main occupations of the people are farming and religions practiced include Christians, Muslims, and traditionalists. There is rapid natural increase among the poor who are constraint on household incomes and access to basic services.

3.3.4 Health Facilities

There are 19 health facilities that are government owned. There are 2 hospitals, 1 health center, 1 government clinic, 1 mission clinic among others. There are six doctors, two pharmacists, and one nutrition officer. There are also thirty eight nurses in the district, thirty seven Community Health Nurses, eighteen midwives, and the Technical Officer for Disease Control as well as two field technicians.

There are no private facilities and no maternity homes in the district. 15 CHIPS zones, 6 trained Peace Corps volunteers, 100 trained Traditional Birth Attendants (TBAs) and 204 Community Based Service Volunteers (CBSVs) in the Nkwanta South District.

Also, the 4 sub-districts are managed by the Sub-District Health Teams (SDHT) and the Sub-District Health Management Team (SDHMT). Outreach services are provided in addition to daily services at the health centers at points and carried out by staff from the health centers.

3.4. STUDY POPULATION

The study involved both married and unmarried men between the ages of 18-50 years who had ever had children or whose partners had ever been pregnant or currently pregnant at the time of the study.

In addition, female partners of males within the reproductive age group of 15-49 years, who were currently pregnant or had given birth in the last two years, were included.

- **Males**: Both married and unmarried men ages 18-50 with partners who had had children or are currently pregnant or had recently given birth.

- **Females**: Women of reproductive ages (15 to 49 years), who had had children in the last two years, currently pregnant, or had recently given birth.

Participants in the focus group discussion were both young and older men while the females were both young and older women in various communities in one sub-district through non-probability sampling technique. In each community within the sub-district, discussions were held with each of these groups using interview guide.

Between eight (8) to ten (10) discussants were selected per a FGD session, using such group criteria like age, occupation, location, gender, socio-economic status to ensure homogeneity. These groups were selected on the basis of the study criteria.

3.5. STUDY VARIABLES

3.5.1 Outcome Variable

Male involvement in maternal health decision-making during antenatal, delivery and postnatal periods.

3.5.2 Explanatory variables

The major independent variables used in this study were:

- Age
- Occupation
- Marital status
- Type of marriage
- Place of Residence
- Level of education
- Average monthly income
- Ethnicity
- Religion
- Knowledge of women's maternal health needs
- Attitude toward women's reproductive health issues
- Level of male involvement regarding maternal health issues
- Strategies to improve male involvement

The study examined the explanatory variables from the following aspects of male involvement: the socio-demographic characteristics (age, occupation, marital status, religion, and monthly income status, and ethnicity, type of marriage, education, attitudes, reproductive health program designs and delivery.

These variables helped to describe the factors that hinder or influence male participation in Nkwanta South District which were measured by administering a structured survey questionnaire to males concerning their involvement or participation in the form of support during their partners' maternity (antenatal, delivery and postnatal) periods. Specifically, male involvement or participation was measured using the following index variables:

a. **Knowledge of women's reproductive health issues/needs:** This (included such things as knowing the need to time pregnancy; knowing that pregnant women need maternal health care; knowing danger signs during pregnancy; exhibiting responsible sexual behavior that does not put the woman's health at risk, especially during her maternity period).

b. Provision of **emotional support** during pregnancy: (included communicate during pregnancy, eating and sleeping together, encouraging partner to seek antenatal care, helping her keep her appointments, and attending antenatal clinic with her).

c. Provision of **physical Support** (included assisting with house work at home, going to market when she is ill/unable, accompanying woman to antenatal visits, caring for the other children, if any).

d. Provision of **financial support** during maternity periods (included such things as paying for the antenatal care, arranging and paying for logistic for delivery, ensuring good nutrition during pregnancy and after delivery.

Factors influencing these measurements were also investigated which include the following:

- **Demographic and Socio-economic Characteristics** of the men involved in the study. These will include: age, level of education, number of children, occupation, residence, and type of marriage.

- **Knowledge of Reproductive Health and Male Involvement.** These items were measured using an index variable. Assessing knowledge of reproductive health included knowledge of various reproductive health components: awareness of health needs of pregnant women and post-partum mothers); knowledge of danger signs during pregnancy, labor/delivery, and after delivery; contraceptives types and use; sexual behavior during pregnancy of spouse; STIs); parenting, etc.

  Assessing knowledge of male involvement include: meaning of "male involvement", role during pregnancy, labor/delivery, and post-partum periods, also using an index variable.

- **Attitude Regarding Reproductive Health and Male Involvement.** The items of concerns measured by an index variable were: views on sexuality and reproduction; attitudes towards contraception; gender attitudes and gender-based violence; communication and discussion regarding reproductive health; male involvement in reproductive health.

- **Barriers to Male Involvement in Reproductive Health.** All these concerns of interest was measured using an index variable including: cultural norms and traditional practices that define and influence gender roles and norms; knowledge (general and reproductive health specific); availability of opportunity for male involvement (especially in the design and delivery of maternity health services); men's perception and attitudes; policies; etc.

As Figure 1 shows a set of independent variables was found to affect the level of male participation in reproductive/maternal health in the study area.

3.6. SAMPLE SIZE

The sample size was computed using Kish and Leslie formula (1965) as follows

. $$N=\underline{Z^2\ P\ (1\text{-}P)\ /}\ D^2$$

Where

N= Sample size

Z = Confidence interval at 95% which is 1.96

P = Proportion of incidence of cases

D = Maximum error allowed

For the purposes of the study, the following assumptions were made in calculating the sample size:

1. The proportion of male involved in maternal activities (P) was assumed to be 50% (which gives the largest sample size), since it was difficult to obtain the prevalence from previous studies.

2. 95% confidence level (standard value 1.96), and

3. Maximum margin of error of 5%

Substituting into the formula, the sample size was computed as follows:

$$N = \frac{1.96^2 \text{ x } 0.5(1 - 0.5)}{(0.05)^2}$$

$$N = \frac{3.8416 \text{ x } 0.25}{0.0025}$$

$$N = \frac{0.9604}{0.0025}$$

$$N = 384.16$$

The computed sample size was adjusted upwards by 10% to cater for anticipated non-response. This gave a final sample size of **422,** but field work yielded 433.

Qualitative Approach. A total of 36 participants were selected to represent the sub-district and four health care providers who are currently working in the health facility. The 36 participants included both older and younger men (16) while (20) older and younger females from four (4) communities in Nkwanta South. Four key informants consisted of health care workers who were chosen based on their influence and knowledge pertaining to the study. These key informants were interviewed individually.

3.7. SAMPLING METHOD

3.7.1 Selection of Communities

There are four sub-districts in Nkwanta South District of Volta region of Ghana which include Nkwanta, Bonakye, Tutukepene, and Brewaniase Sub-districts. The population for each sub-district was proportionately calculated using the sample size and the total population for Nkwanta South in order to derive the total number of questionnaires that were administered in each sub-district.

There are also two hundred and sixteen (216) communities within the entire Nkwanta South District, with fifty four (54) communities in each sub- districts, and all were homogenous. The 216 communities constituted the sample frame. The names of these communities were written on pieces of paper according to sub-districts, folded, put in a container and closed. The contents of the container were shaken several times to ensure a good mix or randomization of the pieces of paper.

The communities were selected according to sub-districts and two communities each were picked at random one after the other without replacement until eight (8) communities were

selected from the four sub-districts to constituted the study communities: Nkwanta, Paw, Bouake, Jumbo1, Kecheibi, Ashairbre, Brewaniase, and Pususpu.

3.7.2 Selection of Houses

Houses within which households were resident were mapped and each house was numbered according to the mapping strategy. Systematic sampling technique was used where every 3rd house was selected (from a random start) was used to ensure that each house had equal probability of being selected.

The first household was selected through simple random sampling followed by the selection of every other third house in that order. To qualify for selection and to be mapped, a house had to have at least one resident who was male between 18-50 years.

3.7.3 Selection of Respondents in Households

In each community, based on the proportionate distribution of respondents in the communities, individuals were contacted at the household level. Purposive sampling techniques were adopted in selecting eligible respondents, had had a partner who had ever been pregnant, with children or child and who are heads of households since they are the focus of the study.

3.7.4 Selection of Respondents of focus group, and Key Informants Interview

Two groups of men and women were formed with the assistance of some key informants in the various communities through non-probability sampling format to represent different segments of the population by gender, age, occupation, education, ethnicity and religion to ensure homogeneity. The key informants were community-based volunteers. The following was the inclusion criteria: age of 18 years and above for men, 15-49 years for women,

married or unmarried, had ever given birth in the past two year, and was either currently pregnant.

There were four health care providers: Medical Director, one male obstetrician/gynecologist; and two female nurse midwives, who had worked at least a year at the health facility.

Between eight (8) to ten (10) discussants were selected per a FGD session. These groups were selected on the basis of their experience and knowledge on the topic of study.

3.8. DATA COLLECTION TECHNIQUES/METHODS AND TOOLS

Data collection took place from the 23rd of May to the 6th of June 2012.

3.8.1 Quantitative Methods

This study used different data collection techniques and was conducted in two parts. The data information for the quantitative part was a face-to-face interview obtained by involving the use of structured questionnaire. The structured interviewer-administered questionnaire used to collect the data consisted of four parts: (1) socio-demographic characteristics (age, education level, marital status, occupation, religion, monthly income, number of wives and children), (2) knowledge of women's reproductive health needs, (3) attitude regarding maternal health issues, and (4) strategies to improve male involvement in maternal health (pregnancy, delivery and postnatal periods).

The principle investigator and research assistants administered the survey questionnaires. The interview method was used to solicit information on the background characteristics of respondents as well as their knowledge of pregnant women's reproductive health needs, attitudes and practice regarding pregnancy, delivery, and postnatal periods, administered to 433 selected males' respondents.

In each selected community the purpose of the study was first explained to the participants and a written consent from the participants was sought before the questionnaires were administered.

The questionnaires were close-ended items for ticking of yes or no, and making of choices among a number of possible alternatives and fill in items. The completed questionnaires after being administered were collected by the principal investigator from each research assistants in other not to encourage change of information.

3.8.2 Qualitative Methods

The qualitative part consisted of four (4) focus group discussions among men and women of reproductive ages (15-49) and key informant interviews were utilized. Interview guides were used to collect data through Focus group discussions to assess knowledge, current participation, desire to participate, improvement of male participation, beliefs in involving males during pregnancy, delivery and after childbirth.

The participants of the key informant interviews were health care providers and the interviews were conducted to give more insight about the practices of men and to their perspectives on male involvement in the district.

The focus group discussions were carried out in one sub-district that was purposively selected among both males and females from four (4) communities with respondents that formed part of the inclusion criteria. It comprised of two male (older and younger men) groups and two female (older and younger women) groups. Four data collectors were recruited, trained and served as interviewers to conduct the focus group discussions while the key informant interviews was conducted by the principal researcher.

The purpose of the focus group discussion was explained to participants as well as individual rights to refuse to participate or that they could stop at any time during the discussions. Informed consent was also signed by participants before the FGDs commenced. Permission was obtained from participants for the tape recording before the discussion started. It was agreed by all participants at the start of the discussion that anything discussed should remain in the group and it is not to be discussed outside in order to ensure confidentiality. No identifying information was kept in the notes or transcripts which mean names used during the discussions were deleted.

The FGDs were held in classrooms and community hall to provide as much privacy as possible where participants were comfortable. Participants sat in circle to ensure eye contact with each other and could hear each other speak.

The principal investigator served as an observer and assisted the moderator during the discussions, while an interpreter and two note takers who formed part of the team were present to conduct the focus group discussions. The purpose of the FGDs was to explore and obtain information about the factors hindering male involvement in antenatal, delivery, and postnatal periods and its influence on maternal outcome. The four focus group discussions were conducted in one of the local languages (Twi). The sessions lasted for one and half hours. At the end of each discussion, the discussants were given a bag of salt and one cake of sunlight washing soap each for their time spent during the discussions; this was done without their prior knowledge.

The data was transcribed by an analyst who speaks and understand the Twi language because the principal investigator lacks knowledge of the language. After the transcription, the data was grouped into specific themes based on these categories (pregnancy, delivery and postnatal) for analysis.

3.9. DATA ENTRY AND QUALITY CONTROL

Field data edited and entered using SPSS version 16. The data were cleaned by running frequencies of all variables to check for incorrect coding. After double checking with raw data, needed corrections were carried out before analysis.

There were measures put in place to ensure quality control and validity of data and findings of the study. To ensure quality, prior to field data collection, data collectors were trained or orientated about the research, the instruments, and the field procedures required for effective and efficient field data collection. Each data collector was given a sheet containing the basic field protocol.

The data collectors' training included field testing as part of the overall process of preparation for data collection which was done in Krontang Community of the Nkwanta Sub-district. The principal researcher was assisted by a field supervisor in providing guidance for the data collectors.

Additionally, the principal investigator monitored and supervised the overall study to ensure research procedures were adhered to by the research team. There were three teams of data collectors and in each team, one person from the data collectors served as a supervisor.

Furthermore, all completed forms from the field reviewed daily and on-the-spot feedback provided with follow-up/callback undertaken, where needed. Data collection instruments completed was signed by the supervisor and safely transferred to the principal investigator for data entry at the same time. Data collection instruments were coded with unique ID numbers to make them traceable. The researcher verified how data had been coded and entered into the computer.

3.10. DATA PROCESSING AND ANALYSIS

3.10.1 Quantitative

The information in each questionnaire was coded and keyed into the computer using excel and Statistical Package for Social Sciences (SPSS) version 16.0 and Stata version 11.0. The processes of the interviews were monitored in order to ensure research procedures are adhered to by the research team. At the end of each interview the questionnaire was cross-checked for completeness and internal consistency.

Method of Analysis

Data were analyzed using SPSS version16 and Stata version 11. Descriptive and analytic statistics were used. Frequency tables, mean, percentages, charts and cross tabulations were used to describe the findings, while bivariate analysis were conducted using Chi-square test to determine associations between the dependent variable, (male involvement, with each independent variable). Multivariate analysis involved binary logistic regression technique, with male involvement as the outcome variable. Odds ratios (OR) and their 95% confidence interval (CI) were used to assess the strength of association.

The level of male involvement in maternal health was constructed using an ad hoc male involvement index. This index was constructed using ten variables with equal weight in the score:

1. Communicate with wife/partner always, especially to know how she feels
2. Making sure wife/partner eats properly
3. Eating with wife/partner regularly
4. Sleeping together with wife/partner regularly
5. Encourage wife/partner to seek ANC
6. Helping wife/partner to keep ANC appointments
7. Accompanying wife/partner to ANC

8. Making sure wife/partner avoids hard work and rest well
9. Pay for wife/partner ANC services
10. Help her with household duties

The involvement score for each respondent could range from 0=no involvement, 1 to 5= low involvement, 6 to 10= high involvement in all ten activities.

3.10.2 Qualitative

Data analysis was undertaken immediately after each focus group discussion and key informant interview. The facilitator and note-taker met to review the main themes of each discussion and summarized patterns of responses and confirmed consensus or conflicts that emerged from participants.

The FGD/KII notes were typed removing all identifying information as participants' names. The audio-recordings from the focus group discussions were transcribed and translated from vernacular (Twi) language into English.

Responses were analyzed by arranging them in general categories identified in the discussion guide. The qualitative data was typed by an analyst, who transcribed the proceedings of the focus group discussions and grouped them by themes in a professional and easy-to-follow format. Thematic content analysis guided the data analysis.

After the final write-up of the FGDs, a neutral person who did not have interest in the research cross checked about 30% of the findings and found exactly what was found by the principal investigator.

The qualitative data served to amplify quantitative results, and also to analyze specific elements in line with quantitative findings.

The qualitative data was analyzed using such methods as constant comparison content analysis technique, after identifying specific themes that would answer the research questions, relying on field notes and transcriptions from group discussions(Glasser, B. 1965; Morgan, 1993; Hewitt-Taylor J (2001).

3.10.3 Limitations of the Study

Language barrier posed a huge problem in this research, in terms of time, cost, and personnel which served as a limitation to the study, since I could not be in the position to communicate directly with the respondents especially during the focus group discussions and had to rely on the interpretation of others.

3.10.4 Ethical Considerations

Approval was obtained from Ghana Health Service Ethical Review Committee. Permission was sought from the district health management team administration, community leaders, assembly men of the selected suburbs, and the Medical Director responsible for the health centers. People's rights not to participate in the study or to opt out were also respected.

The reasons for the study were explained to all respondents; both verbal and written consent were obtained and signed before the questionnaire was administered. Permission for consent formed part of the introductory aspect of both the quantitative and qualitative tools.

Privacy was ensured during the interview; respondents were interviewed individually and were assured of confidentiality. Identity numbers were used to disguise the respondents' identity. Those involved in the data collection and analysis were cautioned during the training process to maintain confidentiality and anonymity throughout the study.

Chapter 4
RESULTS

4.1. INTRODUCTION

This chapter presents the analysis and interpretation of the data collected for the study. It includes an overview of the socio-demographic characteristics of the survey population, which enhances an understanding of the participants and their current knowledge, attitude, practice/ behavior regarding maternal health issues- antenatal, delivery and postnatal periods.

4.2. RESPONSE RATE AND SAMPLE SIZE

The numbers of structured questionnaires administered to respondents were 433 in eight communities through face to face interviews. The response rate for the returned questionnaires was 100% of the sample size, the total of 433 questionnaires was collected with none missing.

4.3. ANALYSIS AND INTERPRETATION OF DATA

4.3.1 Socio-Demographic Characteristics of Respondents

A total of 433 male were recruited into the study. Socio-demographic characteristics of study participants are presented in Table 1. Respondents in the survey were men who were between the ages of 18 to 50 years and have ever had children or child, either married or unmarried at the time of the interview. As shown in the study, the average age of respondents was 37.4 years with a standard deviation (SD) of 8.2. The youngest man was 20 years old and the oldest was 50 years (Table 1).

The level of education of respondents varied from “no education” to “tertiary “ from the Table, a higher proportion of the respondents47.8% had no formal education and 20.3 % had primary education. However, about twenty four percent (23.6%) had secondary education.

The results showed that, sixty nine percent (69.1%) were farmers, 12.7% were self-employed, and while 9.9% were artisans/apprentice, and 3.7% were government employees/professional. Unskilled/casual laborer accounts for 2.8% while 1.9%was unemployed.

The income of respondents varied widely, from GHC10 to GHC2000 per month. However, the average income was around GHC184, while over two-thirds (or 68%) reportedly earned less than GHC200.

Majority of the respondents were married (96.5%), and 3.0% were separated, and 0.2% were single and widowed. The majority had one wife (81.9%), 15.6% had two wives and 1.4% had 3 wives, while 1.2% had four wives.

In terms of the number of children, a higher proportion had 5-9 children (30.0%), 21.7% had two children, while 16.9 % had three children and 15.7% had four children. The least was 9.9% who had just one child. Christians formed the majority of respondents (52.1%), 17.1% were Traditionalist, 16.2% were Muslims and 14.5%had no religion.

Table 1: Socio-Demographic Characteristics of Study Participants

Variables	Categories	Respondents	Variables	Categories	Respondents
		% (N=433)			*% (N=433)*
Age (years)	20-29	20.1	***Number of Wives***	1	81.9
	30-39	38.3		2	15.6
	40-49	31.6		3	1.4
	50	9.9		4	1.2
level of education	No formal education	46.9	***Occupation***	Unemployed	1.9
	Primary	20.3		Unskilled/Casual laborer	2.8
	JSS/Middle School	2.8		Self Employed	12.7
	SSS/Secondary	23.6		Farmer	69.1
	Postsecondary/Tertiary	6.5		Apprentice/Artisans	9.9
Average Monthly Income	<100	44.8		Civil servant/professional	3.7
	100-199	23.3	***Ethnicity***	Ewe	10.6
	200-299	11.5		Guan	24.7
	300-399	8.9		Akan	3.9
	400+	11.5		Konkonba	37.4
Religion	Christian	52.2		Kotokoli	20.3
	Muslim	16.2		Gonja	3.0
	Traditionalist	17.1	***Number of Children***	1	9.9
	No religion	14.6		2	21.7
				3	16.9
Marital Status	Never married/Single	0.2		4	15.7
	Married	96.5		5-9	30.0
	Separated/Divorced	13.0		10+	5.8
	Widower	0.2			

Source: Field Survey, May-June 2012

4.3.2 Demographic Characteristics of Focus Group Participants

The participants' age ranged from 18 to above 50 years and sixteen of the participants were male. Their occupations included farmers, business men/women, traders, seamstress, apprentice, drivers, and casual laborers. Their ethnic background included kotokoli, konkonba, Adele, Achode, Ewe and Guan. They were married with number of children ranging from 2 to 9.

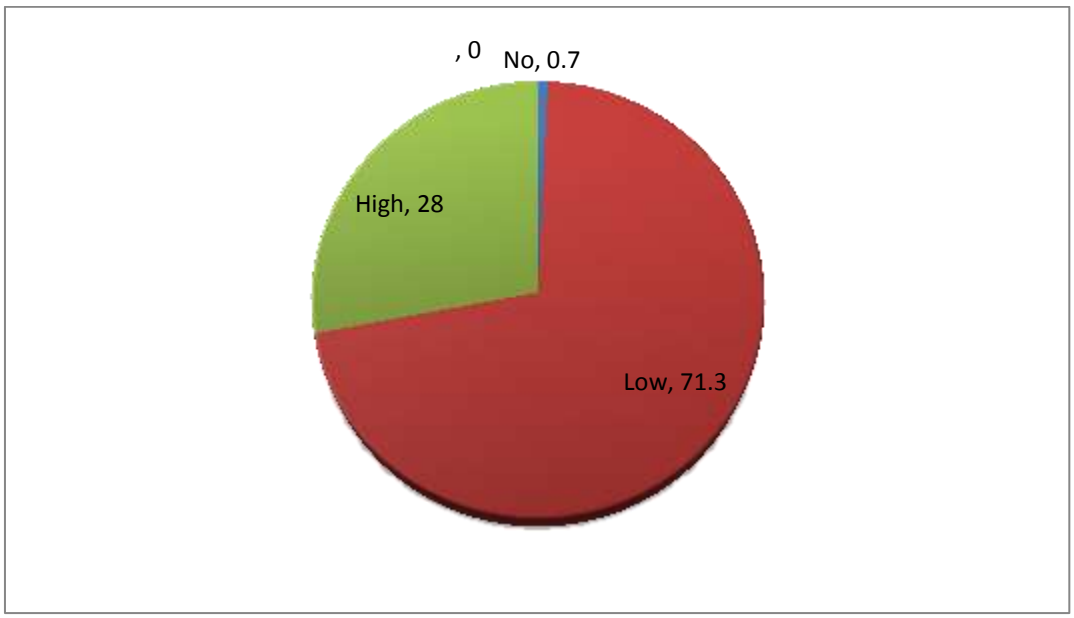
4.3.3 Level of Male Involvement during Antenatal, Delivery, and Postnatal Periods

A simple composite index of male involvement in maternal health is created by adding, for each respondent, the scores on ten indicators of male involvement. This was measured by the total number of positive answers to the ten roles on male involvement.

The composite index could range in value from 0 to 10 among respondents. The composite index ranged from0 (indicating no participation) to 10 (indicating highest participation). The level of participation is grouped into three levels; No involvement (value of index is 0), Low involvement (values of the index from 1 to 5) and High involvement (value of index from 6 to 10).

The distribution of respondents, according to the level of male participation, is given in figure 3. It shows, based on the index, a higher number of proportion 71.1% of the respondents showed “low participation” and 28% showed "high" male participation” and 0.7% for “no participation” in maternal health-antenatal, delivery and postnatal periods.

Figure 3: Level of Male Involvement during Pregnancy, Delivery, and Postnatal Periods



Source: Field Survey, May-June 2012

4.3.4 Measure of Respondents' Practice Regarding Antenatal, Delivery, and Postnatal

There were 33 items (yes/no) in general that were used to measured practice regarding antenatal, delivery, and postnatal periods. These items were distributed into the three different areas of specifications.

The first dealt with practices regarding pregnancy which was measured using a score of 5 items (yes/no) in describing the practices concerning pregnancy. The actual score ranged from 0 to 10 items among respondents using the median split which was 5.The split determined two dichotomized levels indicating poor and good practices. The score of < 5 represented poor practice while >5 represented good practice. In this case, a proportion of 55.9% shows poor practices toward pregnancy.

The second was about practices regarding delivery. This was also measured using an actual score of 0 to 4 items (yes/no) on practices of delivery. It was generated using the median of 3. This was used to determine two categories (poor and good practices). The level of poor practice was indicating by respondents options of any response < 3 and >3 represented the level of good practice during delivery. A higher proportion of respondents were shown to have 67.1% as poor practices of delivery.

On the other hand, postnatal care was also another aspect of measuring practices of respondents regarding postnatal care. It was measured using the respondent's responses to 6 items (yes/no) on their practices of postnatal care which was determined by the median. The items were developed into two categories of poor and good practices about postnatal care using the median of 4. The indications were <4 as poor and >4 as good practices about postnatal care. It was shown in Table 2 that 52.4% of respondents had poor practice during the postnatal period.

Table 2: Practice regarding pregnancy, delivery, and postnatal care

Practice	Maternal Health Issue		
	ANC	Delivery	PNC
	(N=433)	*(N=433)*	*(N=433)*
Good	55.9	67.1	52.4
Poor	44.1	32.5	47.6
Total	100	100	100

Source: Computed by author: Field Survey, May-June 2012

4.3.5 Factors Influencing Low Male Participation in Maternal Health Issues

The factors that were found to be hindering male participation during antenatal, delivery, and postnatal periods included culture, health system, socio-economic, knowledge and attitude.

a. Cultural Factors

Cultural belief served as one of the factors to low male participation in maternal health issues. Men have diverse views or perception about being involved in women's maternal health issues. There are mixed cultural beliefs in the various parts of the district due to the presence of different ethnic groups and background of participants. Each group has their own cultural beliefs. These quotes illustrate respondents' cultural beliefs that militate against male involvement in maternal health activities:

> *"Our culture does not permit husbands to take their partners to the hospital; it is either our brother or a male relative in the family that will accompany the woman and then report to the husband what the situation was."* ***(Discussant,*** **Nkwanta FGD)**

> *This was echoed by a key informant, thus "Culture plays a major role in this area concerning men bringing their wife/partner to the hospital. It is usually a male relative that accompany the woman to the hospital but indeed men in this area, do care about their women's health* **(Key Informants Interview, Nkwanta South**).Another respondent said***:*** *"I don't take my wife to antenatal because we the men believe it is the women's special time to see the doctors alone "(**Key Informant, Nkwanta**).*

> *"During delivery especially, men are not supposed to be there because we believe it is women's private time with the doctors,* said a male respondent ***(Male Discussant, Nkwanta South***).

b. Health System Factors

There were several factors related to health system that were identified in the focus group discussions. Men complained about health workers unfriendly attitude in the facility and how they do not exhibit good manners of approach. These were reflected in their responses:

> "*The health worker don't know how to approach our pregnant women when they go for check-ups, they shout and are not patient with them so sometimes we prefer the women going because maybe they are already used to that"* ***(Male Discussant, Nkwanta)***

> "*When we go with our wives to the hospital, we have to wait outside because the health workers will tell you that, you can't come in. So why should I take her?"* ***(Male Discussant, Nkwanta)***

> A female response : "*When you go to the hospital without money they will shout at you and because of that when I don't have money I don't go and that is why most women don't go to the hospital"* ***(Female Discussant, Nkwanta)***

> *"We are now encouraging the women to bring their husbands when they are coming for their next visits and some do come with their partners. Initially, men were not allowed in the consultation rooms but things have changed and we want men to bring their partners to the clinic. But for delivery, because of the way the facility is structured, there are other women in the delivery room so we don't allow men into the delivery rooms. This is to ensure privacy and confidentiality of other women. We are hoping that things will improve in the future, where each woman will be in a delivery room alone and her partner can be present when she is giving birth" (****Key Informant, Nkwanta Hospital****).*

c. Socio-Economic Factors

This third area mentioned as a hindrance to male participation was socio-economic. Majority of the men reported that because of socio-economic crisis, they do not have time to attend antenatal clinic with their partners because they are always busy looking for money to sustain their families. This was demonstrated in their responses:

> " *In this area, when your wife is pregnant, you have to save money for her up-keep because she can no longer do the kind of work she use to do to help herself"* ***(Male Discussant, Nkwanta).***

> "*After all is said and done, the bottom line is money. We need money to do most of the things we are talking about. This is why the men need to do the hard work to get the money to take good care of his wife"* ***(Male Discussant, Nkwanta*****).**
>
> *"All that we have said all ends up with money, and we have to work hard in order to provide for our wives/partners and take good care of them so how can we take them to clinic if we don't have money?"* ***(Male Discussant, Nkwanta*****).**

There were also other views concerning funding that were preventing men from accompanying their wives/partners. A male respondent from Nkwanta focus group said:

> "*Now when you register your wife/partner with the National Health Insurance, the husbands only give their wife/partner money for transportation and feeding. The cost involved has decreased as compared with times past. In times past they didn't have to go to the hospital".*

d. Respondents' Knowledge about Women's RH Needs during Pregnancy, Delivery and Postnatal Periods (n =433)

Pregnancy: The composite measure of respondents' knowledge on pregnancy was measured by the total number of correct answers to 11 items (yes/no) on knowledge of pregnancy. These varied from 0 to 15 score among respondents, while the actual score ranged from 5 to 15. The scale had a good Cronbach's Alpha coefficient of .82. The scale was then dichotomized into two categories (low and high knowledge of pregnancy) using the median split. The median was 10 (ten).

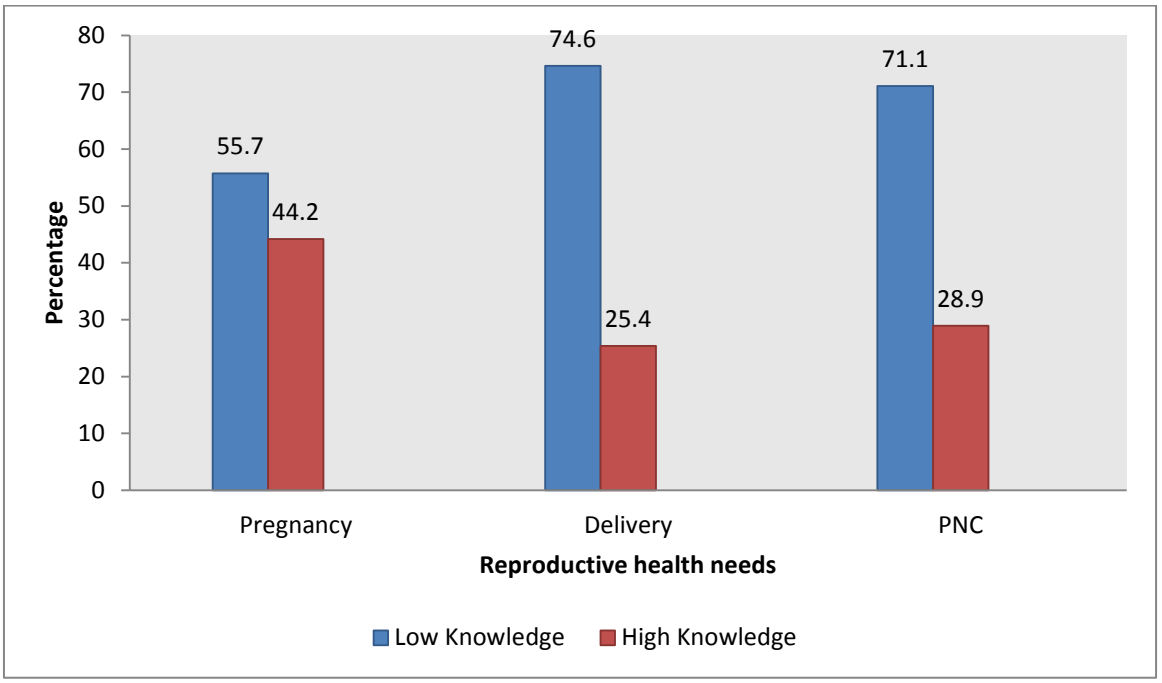
The grouping of these total marks produced two levels of knowledge about pregnancy signified as < 10 indicating low and >10 indicating high. The majority (55.7%) of respondents had "low knowledge of pregnancy".

Delivery: The measure of respondent's knowledge about delivery was measured by the total number of correct answers to four items (yes/no) on knowledge of delivery. The possible score of these items ranged from 0 to 4. The scale was dichotomized into two categories (low and high knowledge of delivery) using the median split. The score had a median of two (2).

The two levels produced from the total marks is represented as < 2 indicating low and >2 indicating high. Three–quarters (74.6%) of respondents were in the "low knowledge of delivery" category.

Postnatal: Also, knowledge of postnatal care was measured by the total number of correct answers to five items (yes/no) on knowledge of postnatal care. Therefore, the possible score ranged from 0 to 4. The sore was then dichotomized into two categories (low and high knowledge of postnatal care) using the median split of 3. There were low and high levels produced from the total marks, indicating <3 as low and >3 as high. The results showed that 71.7% had "low knowledge of postnatal care". All of these are shown in Figure 4.

Figure 4: Knowledge of Women's RH Needs during Pregnancy, Delivery and Postnatal Periods



Source: Computed by author: Field Survey, May-June 2012

Many focus group participants lack knowledge about women's reproductive health needs during pregnancy, delivery and postnatal periods. This was revealed from participants during the focus group discussions.

"We did not know about all these things concerning our wife/partners during their period of pregnancy, delivery and after delivery". ***(Male Discussant, Nkwanta)***

*"When our wives are going for check-ups at the clinic during pregnancy, we only give them money because that is our responsibility which is enough". (**Male Discussant, Nkwanta**)*

*"We did not know that women are supposed to go for check-up every time during pregnancy, we sometimes think that they want to cheat on us and looking for a way to get out of the home. So when they say they are going to the clinic we refuse sometimes and don't even give them money". (**Male Discussant, Nkwanta**)*

e. Respondents' Attitude Regarding Antenatal, Delivery, postnatal

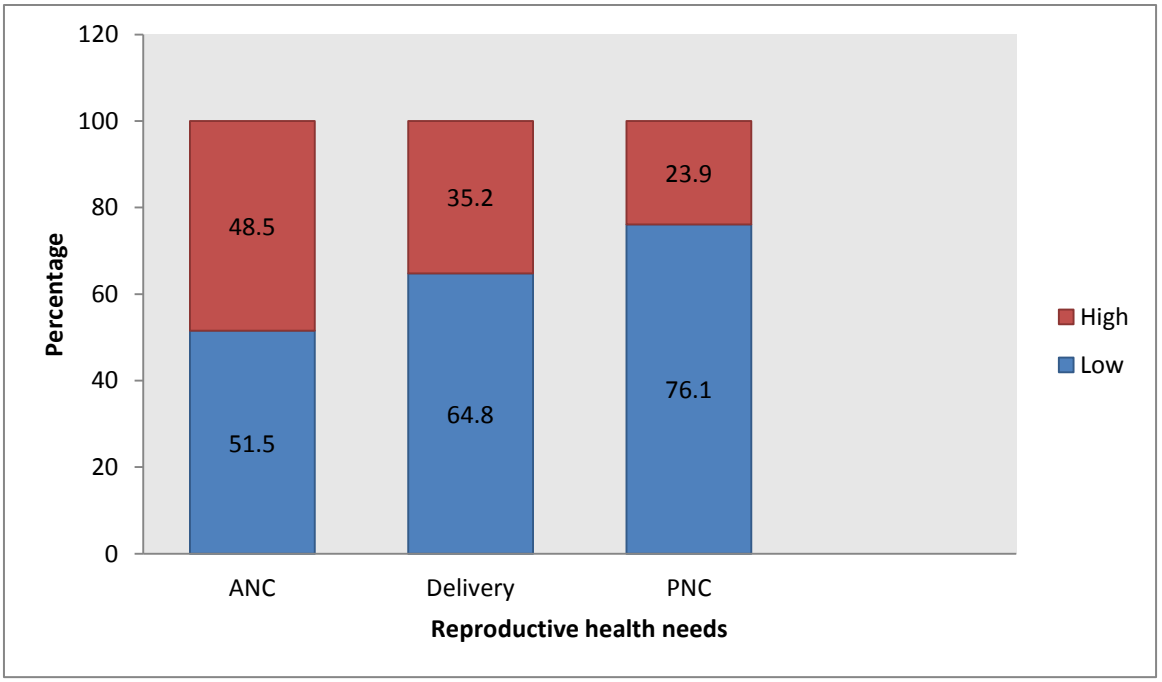
The composite measure of attitude for each respondent was measured by the total score of 20 items. The actual score ranged from 1 to 20 with the Cronbach's Alpha coefficient of .78 for three specific areas of antenatal, delivery and post natal.

Antenatal: The measure of attitude for each respondent used in was done by the score of 9 items. The possible score ranged from 1 to 9 with a median split of 4.The scale formed two dichotomized categories of attitude, which was defined with the frequencies and percentages of each respondent. The two levels produced indicating <4 as none receptive attitude and >4 indicating receptive attitude. The results showed 51.5% of the respondents as having "none receptive attitude".

Delivery: There was five items (yes/no) used to measure respondent's attitude during delivery. The actual score ranged from 1 to 5; the scale was divided into two categories indicating poor attitude and good attitude towards delivery. This was done using the median split of 3. < 3 represented none receptive attitude while >3 represented receptive attitude. This shows that respondents had 64.8% of none receptive attitude toward delivery.

Postnatal: In measuring postnatal care attitude for each respondent, a scoring was generated from 6 items (yes/no) using the median split of 4. The scale was dichotomized into two categories indicating poor and good attitude during postnatal period. Having a score of <4 represented poor attitude and > 4 represented good attitude. A higher proportion of respondents 76.1% were in the poor attitude category toward postnatal care. The illustration is depicted in Figure 5.

Figure 5: Attitude Regarding Antenatal, Delivery, and Postnatal Periods



Source: Computed by author: Field Survey, May-June 2012

4.3.6 Bivariate Analysis

In this study, bivariate analysis was carried out by using cross tabulations in SPSS program. Each independent variable is cross tabulated with a dependent variable to examine the relationship between two variables. The strength of the relationship is tested by the X^2 value and the statistical significance of X^2 is tested by the p value.

a. Relationship between respondent's ages with male participation in maternal health

The Table 3 shows that there is no significant relationship between ages and level of male involvement. However, the table shows that among the age of 20-29, about one-fifth (20.2%) had high level of involvement whereas, more than two –third (78.6%) had low level of involvement. Among those between the ages of 30-39 years, the results showed that a higher proportion had low level of involvement. Also, in the other age groups 40-49 years, and 50 years, Table 3reveals a higher proportion had low level of involvement (71.1% and 62.6% respectively). In general, the table shows that in all age groups, a higher proportion had low level of involvement, while a small proportion had no level of involvement and more than one-fifth had high level of involvement. The X^2 values indicate no relationship between age and male involvement which is not significant (p= 0.559).

b. Relationship Between Respondent's Educational Level and male involvement in maternal Health

As shown in Table 3, there is no significant relationship respondent's educational level and male involvement in maternal health. Nevertheless, the table showed that among respondents with no formal schooling, about (24.2%) had high level of involvement, whereas a higher proportion (74.2%) had low level of involvement. Among those with primary education, the results showed that a higher proportion (65.9%) had low level of involvement.

Likewise, in the other educational groups, secondary, and postsecondary, the table reveals that a higher proportion had low level of involvement (71.4% and 80.8% respectively). In four categories of educational levels, a higher proportion had low involvement while a lesser proportion had no involvement.

c. Relationship Between Respondent's Average Monthly Income and Male Involvement in Maternal Health

The results showed that there is no significant relationship between respondents' monthly income and male involvement in maternal health. The table shows that respondents that make < 100 GHC had a higher proportion (74.7%) had low level of involvement among all the different categories. The X^2 values indicate no association between monthly income and male involvement which is not statistically significant (0.543).

d. Relationship Between Respondent's Ethnicity and Male Involvement in Maternal Health

The results showed that there is also no significant relationship between ethnicity and level of male involvement. However, respondents of the Akan tribe shows a high level of male involvement, whereas more than half (58.8%) had low level of involvement. The p-value (0.721) shows the insignificant relationship in the various ethnic groups.

e. Relationship Between Respondent's Marital Status and Male Involvement in Maternal Health

There is no significant relationship between marital status and male involvement as shown in the table. The table shows that among respondents who were separated/divorced (91.7%) showed low level of male involvement, whereas (28.4%) among respondents married/cohabitating showed high level of male involvement. The p-value of (0.222) shows no significant relationship between marital status and male involvement as shown in the table.

f. Relationship between respondent's Number of Wives and Male Involvement in Maternal Health

According to the results, there is no significant relationship between number of wives and male involvement in maternal health issues (P-value 0.255).

Table 3 shows that in general among all categories of number of wives, respondents with two wives shows 38.5% had high level of involvement. However, among respondents who had one and three wives, the table reveals that a higher proportion had low involvement (73.3% and 72.7% respectively).

g. Relationship Between Respondent's Number of Children and Male Involvement in Maternal Health

The results from the study showed that there is also no significant relationship between the number of children and the level of male involvement with a p-value (0.102). The table shows among respondents with one child, three children and four children a higher proportion (70.7%, 72.1%, and 76.5% respectively), while among all categories of number of children, respondents with 5 children had the highest percentage of high level of involvement (37.8%).

h. Relationship between respondent's knowledge of pregnancy and male involvement in maternal health

The result in Table 3 shows a significant relationship between knowledge of pregnancy and male involvement in maternal health. This strong relationship is stated in Table 3 with the P value equaling <0.001 and Chi square equal to 80.116. Therefore, it is important to update respondents more frequently with information about pregnancy, especially men who do not know about their role during pregnancy. A male focus group participant said:

> "*In times past we didn't have any knowledge in things that had to do with ante-natal and the rest of the things that has to do with pregnancy but through the advertisement and meetings like this one we have come to know them"****(Nkwanta FGD).***

i. Relationship between respondent's knowledge of delivery and male involvement in maternal health

As shown in Table 3, knowledge of delivery has a strong and statistically significant relationship with male involvement in maternal health (X^2=97.134; P=<0.001). Therefore, it is very important to inform respondents more regularly about information on delivery.

j. Relationship between respondent's knowledge of postnatal care and male involvement in maternal health

Table 3shows that there is a strong and statistically highly significant relationship between respondent's knowledge of delivery and male participation in maternal health (X^2 = 99.081; P=<0.001). Men knowledge about postnatal care of their wife/partners is expected to improve men's participation in maternal health issues.

k. Relationship between respondent's attitude of pregnancy and male involvement in maternal health

As it is illustrated in Table 3, respondents' attitude during pregnancy and male involvement shows a strong relationship. The relationship between two variables are strong and statistically significant (X^2 =1.260; P=<0.001).

l. **Relationship between respondent's attitude of delivery and male involvement in maternal health**

It can be seen from Table 3, that there is significant (P=<0.001) and strong (X^2 =88.198) relationship between respondents attitude toward delivery and male participation in maternal health issues.

m. Relationship between respondent's attitude of postnatal care and male involvement in maternal health

According to information from results, there is strong evidence shown in the Table 3 that the relationship between respondent's attitude toward postnatal and male participation is highly significant. The X^2 of 1.084 and P-value of <0.001 shows that respondents attitude of postnatal care of their wife/partner has influence on maternal health issues.

Table 3: FactorsAssociated with Male Involvement during Antenatal, Delivery &Postnatal Periods

Variables	Categories	Level of male involvement			P-Value	Pearson's R	X^2
		(N=433)	*(N=433)*	*(N=433)*			
		No (%)	**Low (%)**	**High (%)**			
Age	20-29	1.2	78.6	20.2	0.559	.089	4.917
	30-39	0.6	70.0	29.4			
	40-49	0.7	71.1	28.1			
	50+	0	62.8	37.2			
	Total	0.3	71.3	28.0			
Education Level Total	No formal schooling	1.5	74.2	24.2	0.150	0.033	12.640
	Primary	0	65.9	34.1			
	Middle school/J.H.S	0	41.7	58.3			
	Secondary/S.H.S	0	71.4	28.6			
	Postsecondary/Tertiary	0	80.8	19.2			
	Total	0.7	71.3	28.0			
Average monthly income	<100	1.1	74.7	24.2	0.543	0.060	6.939
	100-199	0	70.5	29.5			
	200-299	2.2	60.9	37.0			
	300-399	0	65.7	34.3			
	400+	0	72.9	27.1			
	Total	0.7	71.2	28.1			
Ethnicity	Ewe	0	75.6	24.4	0.721	-0.032	6.445
	Guan	0	67.6	32.4			
	Akan	0	58.8	41.2			
	Konkonba	1.3	73.7	25.0			
	Kotokoli	1.2	73.3	25.6			
	Gonja	0	61.5	38.5			
	Total	0.7	71.3	28.0			
Marital Status	Never married/single	0	0	100.0	0.222	-0.092	5.463
	Married/cohabitating	0.7	0.7	28.4			
	Separated/Divorced	0	0	8.3			
	Widower	0	0	0			
	Total	0.7	0.7	28.0			
Number of wives	1	0.9	73.3	25.9	0.255	0.082	4.828
	2	0	61.5	38.5			
	3	0	72.7	27.3			
	Total	0.7	71.4	27.9			
Number of children	1	2.4	70.7	26.8	0.102	0.133	15.389
	2	1.1	81.7	17.2			
	3	0	72.1	27.9			
	4	0	76.5	23.5			
	5	0.8	61.4	37.8			
	10+	0	68.0	32.0			
	Total	0.7	71.3	28.0			
Knowledge of Pregnancy	Low	0.9	88.8	10.3	0.0001	0.428	80.116
	High	0.5	49.7	49.7			
	Total	0.7	71.3	28.0			

Variables	Categories	Level of male involvement			P-Value	Pearson's R	X^2
		(N=433)	*(N=433)*	*(N=433)*			
		No (%)	**Low (%)**	**High (%)**			
Knowledge of Delivery	Low High Total	0.9 0 0.7	83.5 34.9 71.3	15.5 65.1 28.0	0.0001	0.476	0.476
Knowledge of Postnatal	Low High Total	0.7 0.8 0.7	85.3 37.4 71.3	14.0 61.8 28.0	0.0001	0.469	99.081
Attitude of ANC	Low High Total	0.9 0.5 0.7	94.5 45.8 71.3	4.5 53.7 28.0	0.0001	0.537	1.260
Attitude of Delivery	Low High Total	1.1 0 0.7	86.0 44.3 71.3	12.9 55.7 28.0	0.0001	0.455	88.198
Attitude of Postnatal	Low High Total	0.9 0 0.7	84.0 32.0 71.3	15.0 68.0 28.0	0.0001	0.502	1.084

4.3.7 Multivariate analysis

The aim of the multivariate is to get the best model about male involvement in maternal health issues based on the available information on the factors identified in this study. In this model, all the independent variables are matched against the dependent variable to identify the best model.

Model building

The multivariate is intended to match each independent variable with the dependent variable using Binary Logistic Regression. Those independent variables which have shown statistically significant relationships with the dependent variable in the bivariate analysis are included in the multivariate model.

Table 4: Binary Logistic Regression of Predictors of Male involvement during ANC, Delivery &PNC

Variable	B	Std. Error	Sig.	Odds Ratio
Age				
20-29	-0.665	0.781	0.394	0.514
30-39	-0.573	0.622	0.357	0.564
40-49	-0.672	0.605	0.267	0.510
50+ (RC)	-	-	-	1.000
Education				
No formal education	0.501	0.893	0.575	1.650
Primary	1.516	0.923	0.100	4.556
Middle/JHS	2.916	1.607	0.070	18.47
Secondary/SHS	1.287	0.872	0.140	3.622
Tertiary (RC)	-	-	-	1.000
Income				
<100	-0.018	0.618	0.977	0.982
100-199	-0.155	0.669	0.817	0.857
200-299	0.031	0.728	0.966	1.031
300-399	-0.461	0.857	0.591	0.631
400+ (RC)	-	-	-	1.000
Ethnic Group				
Ewe (RC)	-	-	-	1.000
Guan	0.857	0.65	0.187	2.356
Akan	2.58	0.945	0.006	13.191
Konkonba	0.537	0.707	0.447	1.712
Kotokoli	-1.054	0.773	0.173	0.349
Gonja	-0.951	1.102	0.388	0.386
Number of wives				
1	-	-	-	1.000
2	0.922	0.554	0.096	2.515
3	0.421	1.051	0.689	1.523
Number of Children				
1	-	-	-	1.000
2	-0.979	0.719	0.174	0.376
3	0.304	0.757	0.688	1.355
4	-0.271	0.773	0.725	0.762
5	0.034	0.74	0.963	1.035
6 and above	-0.644	1.13	0.569	0.525
Nagelkerke R square=0.653	***Significant at P < 0.05***	***RC- Reference Category***		

Table 4 shows the factors that determine male involvement during antenatal, delivery and postnatal periods. The results showed a NagelkerkeR-square value of 0.653 and this means that about 65.3% of the variation in male involvement is explained by the factors in the model while 34.7% is explained by other factors. The results showed that there is no significant relationship between the men's age and their level of involvement.

However, men in the lower age groups were more likely to be involved in reproductive health needs of their wives compared to those age 50 years and above (48.6%, 43.6% and 49.0% respectively). Also, level of education, income, number of wives, number of children, marital status, knowledge of postnatal care were not significant predictors of male involvement.

On the other hand, among the ethnic groups, the results showed that being an Akan has significant relationship with male involvement. For instance, those who were Akan were 12.2 times more likely to be involved in their partners' reproductive health needs but male involvement is not significant in the other ethnic groups. More so, the table shows that among the religious groups, Muslims were significantly 2.8 times more likely to participate in their partners' antenatal, delivery and postnatal periods. However, male participation during these periods is not significant in the other religious groups.

The results further showed that men's knowledge of what should be done during the antenatal period is significantly related with their participation. The findings revealed that men who had high knowledge of their partners' antenatal periods were 65.3% less likely to participate in their partners' reproductive health needs compared to those with low knowledge. Also, those who have high knowledge of delivery periods were 75.6% less likely to participate in their partners' reproductive health needs compared to their counterparts with low level of knowledge. Attitude towards antenatal and delivery periods did not show significant relationship with males' involvement during antenatal, delivery and postnatal periods whereas attitude towards postnatal did. For instance, men who have positive attitude were 74.4% less likely to be involved compared with those with negative attitude.

Generally, the binary logistic regression shows that men's knowledge of antenatal and delivery, attitude towards ANC and postnatal were major predictors of male involvement.

Table 4 cont'd

Variable	B	Std. Error	Sig.	Odds Ratio
Religion				
Christian (RC)	-	-	-	1.000
Muslim	1.334	0.618	0.031	3.796
Traditional	0.385	0.569	0.499	1.469
No religion	0.490	0.634	0.440	1.633
Marital Status				
Never married/separated /divorced/widowed			-	1.000
Married/cohabiting	1.669	1.155	0.149	5.306
Knowledge of ANC				
Low (RC)	-	-	-	1.000
High	-1.059	0.383	0.006	0.347
Knowledge of delivery				
Low (RC)	-	-	-	1.000
High	-1.409	0.392	0.000	0.244
Knowledge of Postnatal				
Low (RC)	-	-	-	1.000
High	-0.256	0.445	0.566	0.774
Attitude towards ANC				
Negative (RC)	-	-	-	1.000
Positive	-2.433	0.465	0.000	0.088
Attitude towards delivery				
Negative (RC)	-	-	-	1.000
Positive	-0.471	0.415	0.256	0.624
Attitude towards Postnatal				
Negative (RC)	-	-	-	1.000
Positive	-1.363	0.418	0.001	0.256

Nagelkerke R square=0.653
Significant at P < 0.05
RC- Reference Category

4.3.8 Perspectives on improving male involvement in maternal health issues

There have been considerable efforts in addressing the issues of male involvement in maternal health. According to respondents in Nkwanta South District, the strategies that need to be implemented in order to improve male involvement are seen in the Table 5.

Of the 433 respondents included in the study, 282 (67.5%) said that there is a need to improve men's knowledge and awareness during pregnancy while 213 (51.0%) said public education among citizen were also very important. Eighty percent of the participants also

suggested the need to improve knowledge and awareness among men during delivery and 50.7% indicated public education among citizens during delivery. A higher proportion 67.7% were of the same view of improving men's knowledge and awareness during postnatal care and 53.1% supported public education among the citizens during postnatal care. This shows that men are willing to acquire knowledge about their wives/partners maternal issues. In trying to reduce maternal morbidity and mortality, men needs to have increased knowledge about women's maternal health outcomes. Notwithstanding, in achieving successful planned programs in the communities, men need to be involved in every aspect of maternal health issues since they are the key decision makers at the household level.

Table 5: Respondent Views on strategies to Improve Male Involvement (N=433)

Strategies to improve male participation	Pregnancy		Delivery		Postnatal	
	N	***%***	***N***	***%***	***N***	%
Improve knowledge and awareness among men	282	67.5	338	80.7	287	67.7
Service providers should allow male participation	177	42.3	190	45.5	179	42.2
Expand /improve maternal health services in the district	104	24.9	106	25.4	102	24.1
Establish programs to encourage male participation	197	47.1	196	46.9	202	47.6
Change in culture and tradition	176	42.1	170	40.7	195	46.0
Increase awareness among traditional and religious leaders	148	35.4	146	34.9	154	36.3
Public education among citizens	213	51.0	212	50.7	225	53.1
Increase employment/sources of income for me	100	23.9	100	23.9	110	25.9

4.5 SUMMARY

The analysis and interpretation of data on all 433 respondents have been discussed and presented in this chapter according to the questionnaire items. It was carried out using SPSS version 16 and STATA version 11.

The analysis of data on the respondents' demographic characteristics assessed the factors and the strength of each factor that influence male involvement in antenatal, delivery, and postnatal periods. Not all the factors looked at constituted each group noted above to have

exhibited strong and significant relationships with the relationships with the dependent variable, male involvement in maternal health issues-pregnancy, delivery, and postnatal. A combination of these factors showed the level of male involvement discussed in this chapter.

Chapter 5
DISCUSSION

5.1. INTRODUCTION

This chapter discusses the key results of the study from data collection carried out in the field. It relates the results to the objects, literature review, and key variables of the research

5.2. FINDINGS

In this section, the research findings are discussed according to the following three objectives of the research:

- To assess the level of male involvement during women's antenatal, delivery, and postnatal periods;
- To determine factors that influence male involvement during antenatal, delivery, and postnatal periods; and
- To identify strategies that promote and enhance male involvement in maternal health

5.2.1 The Level of Male Involvement in Maternal Health Issues

Perhaps the most significant finding of this study is that male involvement in maternal health during pregnancy, delivery, and postnatal periods was generally low. However, this is not surprising as it supports the general findings of most studies on male involvement in various aspects of maternal health in typical traditional African settings, which are characterized by low levels of knowledge and awareness and socio-cultural restrictions. For instance, Onyango et al (2010) found that male participation in reproductive health had proven to be challenging in countries where there are culturally defined gender roles and where manifestations of masculinity involve violence against women, alcohol consumption, and high-risk sexual behavior.

While male involvement was shown to be generally low, the findings of this study also showed that the respondents did generally care about the reproductive health needs of their partners. This confirmed the findings reported by Engender Health (WHO, 2002) that contrary to the popular belief that men do not care about women's reproductive health issues, a belief that has affected male participation, in every place the organization had worked, and men did show that they cared about the reproductive health issues of females.[3]

Close to 85% of respondents said they accompanied their partners to antenatal clinic. This finding was interesting in that it contradicted the general findings of most studies on this aspect of male involvement-- accompany partners to antenatal care—especially in comparable rural African settings. For example, Mullick et al. (2005) found that at facilities providing RH services such as family planning, pregnancy, and childbirth, men generally did not accompany their partners. Mullick et al. (2005) also found that "it is conventional in many African cultures for men not to accompany their partners to antenatal and postnatal care consultations as pregnancy and child birth are regarded as women's affair". Jooste & Amukugo (2012) backed these earlier findings, while Onyango et al (2010) specifically reported that men in Eastern Uganda rarely accompanied their partners to RH clinics, which they attributed to gender norms, low awareness, and lack of knowledge of male reproductive health programs.

Further research investigation, through focus group discussions with males and females, revealed, however, that the men's claim of accompanying their partners during antenatal care visits was misleading. Generally, it was found that what men referred to as accompanying their partners was not their own physical presence with their partners.

[3]Engender Health was contributing to a 2002 WHO publication on reproductive health programming for men.

They only usually ensure that male relatives from their or partners' families accompanied their wives/partners to clinic. This, they claimed, was based heavily on their cultural practice.

5.2.2 Factors influencing male involvement in maternal health issues

The study found a number of factors associated with male participation in maternal health issues. These included knowledge, attitude, cultural, socio-economic and health system factors. Interestingly, as shown in other studies, the socio-demographic characteristic were found to have influenced male involvement but unlike this study, it did not show any significance in all age groups, ethnic background, occupation, level of education, marital status, monthly income, number of wives and children, as well as religion. All these showed no significant relationship on male participation during pregnancy, delivery, and postnatal periods. This was contrary to what was found in another study (Byamugisha *et al*., 2010).

One plausible reason why the socio-demographic characteristics did not show significant association with men's participation may be due to other factors which were not considered in the study. For instance, it may be attributed to the different method of research used. Most of the studies conducted, as reflected in the literature, were qualitative, with focus either on male involvement in family planning or male involvement in mother-to-child transmission of HIV.

a. Knowledge and Attitude

The study found that men's knowledge of their partner's needs during pregnancy was significantly high, especially in relation to their knowledge of their partners' needs during delivery and postnatal periods, which were found to be relatively, lower. As a result, men supported their partners, mostly financially, to seek antenatal care, but not as much during delivery and postnatal periods. A female respondent said:

> "*As for me when I get pregnant my husband make sure I go for checkups regularly*"(Nkwanta FGD).Another female said: *The truth is that with me, before I gave birth my husband really took care of me but since I gave birth it has gone down rather"*(Nkwanta FGD).

Apart from the traditional cultural practice of celebrating birth, which requires certain expenditure, and the National Health Insurance Scheme that meets most of the cost of pregnancy and delivery for women, men contributed very little during and after delivery.

Closely associated with this finding was the statistical analysis that showed that men who had high knowledge of their partners' pregnancy health needs were found less likely to be involved in other ways other than financially, compared to those with low knowledge. This basically indicates that knowledge did not translate to practice. In other words, intervention to increase men's participation during pregnancy, delivery, and postnatal periods should look beyond promoting knowledge since this can be a web of dynamic social, economic, and psychological factors that influence male participation.

Like the case of knowledge, respondents also showed a generally negative attitude towards their partners' reproductive health issues during pregnancy and delivery, though somewhat more positive during postnatal periods. While this poor attitude did not seriously reflect their financial contribution, it is reflective of the trend in findings of many studies on male involvement. For instance, Roudi & Ashford (2004) found that senior citizens, illiterate people, and those who live in rural areas tend to manifest negative attitudes towards RH, compared with the young, the educated, and those who live in the city. Uys (2007a) believed that men demonstrated this kind of poor attitude through reduced financial and other resource contributions to their partners' reproductive health needs and involvement in risky sexual behavior.

Gorgen et al. (1998), believed that negative attitude on the part of the male partners is due to the fact that males tend to make all decisions imperiously in the home, which result in their wives being inferior and more dependent on their husbands. Focus group discussions with women in the study agreed with these views:

> *"We face a lot of difficulties, because we have to go to the farm even when we a pregnant and refusal to go will been seen as laziness. The household chores and every other activity that we perform before pregnancy we still do all that with the pregnancy"* (***Nkwanta FDG***).

> *"I would wish that my husband helps me during pregnancy but he doesn't. When I became pregnant I couldn't visit the hospital regularly because he didn't support me. I was even asked to come for some treatment but I couldn't, because of that I had a caesarean section at delivery. He doesn't help me at all" (**Nkwanta FDG**).*

Unlike pregnancy and delivery periods, men showed a more positive attitude during postnatal periods. This difference in attitude during post-natal periods was found to be mainly due to the traditional practice of celebrating the birth of children than on their personal concerns. In their setting, celebrating the birth of a child was more concerned with providing money for the upkeep of the mother and her child than providing other needs of their wives/partner, for example, emotional support.

b. Cultural Factors

Cultural factors were found to be a hindrance to male participation in maternal health. For instance, the men in this study saw the issues of maternal health as women's responsibility. In other words, their perception about antenatal issues was that culturally, it was the women's affairs and that they were not supposed to be a part of it, except in situations where the health provider asked them to come along with their wives to the antenatal clinic. The men believed that their only responsibility was to provide the money and make sure a male relative from either their or partners' family accompanied their wives/partners to the health facility.

A study in Western Kenya and other studies elsewhere have found that the typical excuses men give are that they are too busy or that reproductive health is a woman's responsibility (Onyango et al 2010; Byamugisha et al 2010;Jooste&Amukugo, 2012).

c. Socio-Economic Factors

The qualitative data revealed that because of time and the financial responsibilities placed on men to adequately care for their families, they did not find the time to attend ANC and PNC with their wife/partner. They said they found it difficult leaving their responsibilities to spend what is usually an entire day at the antenatal clinic with their wives/partners. A study in Namibia, and another in Malawi revealed the frustration of men with the extended periods of time they had to spend at the health facility to obtain treatment and services because they were forced to leave their household economic activities unattended for that time (Jooste & Amukugo, 2012; Kululanga et al. 2011). However, Onyango et al (2010) believed that men only used their economic responsibilities as an excuse for not attending antenatal clinic with their partners.

As far as socio-economic variables were concerned, what the study generally found, nevertheless, was that such key factors as level of education, occupation, and income were found to have no significant influence on male participation. This contradicts many other studies which have found these characteristics to be significant, including, for example, Byamugisha et al. (2010).

d. Health System

As part of factors hindering male participation, the structure of the health system also came out as a key area of influence, as revealed through the qualitative data. Men said that they were not allowed to enter delivery rooms even when they wanted to be there.

This was confirmed during the key informant interviews with the structure and polices of the health system blamed for the problem. The health system tries to protect other women's privacy because the delivery room is structured in a way that contains many delivery beds and there are always other women in the room. But men said this and the attitude of service providers made them unwilling to attend clinic with their wives/partners, even if they had the time. This situation is similar to findings in many other places. For example, Khan et al (1998) and Dev. (1998) found that men are generally not allowed into checkup or delivery rooms of most hospitals, clinics, and providers often have a bias against involving men in reproductive health services.

5.2.3 Strength and Weakness of the Study

One strength of the study is that, men were interviewed and not their wives/partners. The information collected is likely to reflect the men's view better than information obtained from women. Another strength is that, both quantitative and qualitative methods were used during the data collection. The qualitative findings assisted in explaining the findings from the quantitative part of the study.

The adhoc male involvement index that was used to measure male involvement was tested for the validity and reliability which was established in this environment. "Cronbach's Alpha was used to test the reliability and validity of the tool which was .82. To my knowledge, there exist no established instruments to assess male involvement.

The weakness of this study could have been the case of not having a mixed group for the focus group discussions. That is having both males and females in a discussion group in order to validate the responses.

Chapter Six

CONCLUSIONS AND RECOMMENDATIONS

6.1. CONCLUSIONS

The level of male involvement in maternal health was found to below in Nkwanta South District. According to the results, males did give financial support to their wives or partners during their maternity periods, but not sufficient emotional and physical support. This explains that the kind and level of support males gave was influenced more by their sense of obligation than an overall understanding and acceptance of the idea of supporting their partners' maternal health needs.

Several factors appeared to have contributed to this low level of male involvement. They included knowledge of women maternal health needs and the role of male partners; attitude towards participation in maternal health issues, influenced by cultural considerations regarding the role of men in such issues; socio-economic characteristics such as ethnicity and education; and health system factors, most notably the attitude of service providers and the male unfriendly environment of maternity services, which are designed principally for women alone.

Despite the influence of all of these factors, the study showed that some were more significant than others (example, knowledge of maternal health needs, rather than level of education or income), giving us more insight into the issue of male involvement. These outcomes should help improve our understanding of the subject and define the overall approach we take to increase male involvement in maternal health, particularly in Nkwanta South District and similar rural settings.

6.2. RECOMMENDATIONS

Based on the findings and other aspects of this study, the following are recommended to improve male involvement in maternal health decision making:

District Health Management Team:

- The DHMT should provide education on the importance and benefits of antenatal, deliveries, and postnatal periods by creating awareness and increasing knowledge. Education campaign should focus on the introduction of male participation in maternal health. It is important to involve all men (young and old) in the communities who are role models or source of advice to younger men on how to care for their wives, children and the negative outcomes of maternal health concerns.

- The DHMT should implement strategy to ensure that maternal health care services throughout the district become more male friendly.

- The DHMT should encourage and strengthen peer support groups for both males and females especially during maternity periods that will enable women seek proper care to avoid complications, and for men to be more involve in providing financial, emotional and physical support to their wives/partners.

- The men and women in the district should get more involve in spousal communication, build mutual trust and understand each other especially regarding maternal health issues. This is because FGD revealed elements of lack of trust and poor communication between partners. Men must make efforts to improve their emotional and physical contacts with their partners especially during maternity periods. Women must also make efforts to encourage their men and not just complain that men do not support them.

Policy and Decision Makers, including the Ghana Health Service

- The value of male participation to women's maternal health is indisputably significant accordingly; the Ghana Health Service must deliberately include male involvement in its overall strategy for improving maternal health and reducing maternal mortality in Ghana.

- This study clearly shows that programs for improving maternal health through male involvement should be informed by research rather than blanket assumptions regarding the factors that affect male involvement. Thus, Ghana Health Service and other decision makers should create the environment for expanding research on the subject.

Recommendations for further studies on the subject

Male involvement have been proven to be an critical element in maternal health outcomes, yet male involvement in Ghana, like in many other African countries, is assessed to be generally low. Surprisingly, there is not much research done in this area of importance or investigation on the subject. Therefore, these are proposed research for further studies that could be undertaken.

- The influence of socio-demographic characteristics on male involvement.

- A purely qualitative study should be undertaken in order to look at the influence of culture and tradition on male involvement.

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APPENDICES

APPENDIX 1: STUDY QUESTIONNAIRE

University of Ghana
School of Public Health
Department of Population, Family and Reproductive Health

Male Involvement in Maternal Health Decision-Making
in Nkwanta South District, Ghana

Household Questionnaire for Males

(Males Aged 18 to 50)

Greetings. My name is Georgia T. Mitchell. I am from Liberia. I am currently a student of the School of Public Health in the University of Ghana. As part of my research work, I am trying to understand the way men help their spouses during pregnancy, childbirth, and after. Such information will help governments throughout Africa to recognize the important role men play in child welfare. It will also help in creating programs to assist families.

We are hoping you can assist us in this effort. If you agree to participate, we will ask you some questions. We want to make sure that you understand our questions before you answer them. This way we will be able to get reliable information. Therefore, please feel free to ask for explanation or clarification at any time during the interview. Thanks for your cooperation.

SECTION A: Identification

A1. Name of Community:	
A2. Interviewer:	
A3. Interview Date: *(dd/mm/yy)*	/ /
A4. Interview Time:	*Start Time:* ___:____ *End Time:* ___:____
A5. Supervisor (Name & Signature):	

Quality Control
1. **Interview Status:** Fully completed ___ Partially completed ___ Not Completed ___
2. **Total # of Visits Made**: _____ (*Note*: Make up to 3 visits before making alternative plans (e.g. replacement)
3. **Enumerator Self Check (field):** _____
4. **Field Supervisor Self Check (field):** _____
5. **No. of Missing Values Found by Supervisor:** _____
6. **No. of Missing Values Resolved:** _____ **7. No. of Missing Values Unresolved:** _____

SECTION B: Personal Information

Direction for interviewer: *Please tick the option that best represents the response of the interviewee to the question you pose.*

B1 How old are you? _____ (*enter actual age in 2 digits, e.g., 30, 35, 50)*

B2 What is your education level?

a. No Schooling ( )
b. Primary ( )
c. Secondary ( )
d. Postsecondary ( )

B3 What do you do for living?

a. Unemployed ( )
b. Casual/laborer ( )
c. Agriculture (*farming/fishery*) ( )
d. Small-scale business/trader ( )
e. Private business ( )

f. Others (*specify*) _____

B4 What is the average monthly household income? _____
(Write the amount as given, in Cedis)

B5 To which ethnic group do you belong?

a. Ewe ( )
b. Guan ( )
c. Akan ( )
d. Konkonba ( )
e. Kotokoli ( )

f. Other (*specify)* _____

B6 Marital status:

a. Never married/Single ( )
b. Married ( )
c. Separated/Divorced ( )
d. Widower ( )

B7 If married, number of wives: _____ (*enter actual number of wives, e.g., 1, 2, 3*)

B8 How many children do you have? _____(*enter actual number of children, e.g., 1, 2*)

B9 Religious Affiliation:

a. Christian ( )
b. Muslim ( )
c. Traditional Religion ( )
d. No Religion ( )

e. Others (specify) _____

SECTION C: Partner's Pregnancy History

C1 Is your wife/partner currently pregnant?

a. Yes ( )
b. No ( )

C2 If **YES to C1**, are you currently assisting her with the pregnancy?

a. Yes ( )
b. No ( )

C3 If **YES to C2**, what are some of the ways you are assisting her? (*To the interviewer: Please 'Tick' all that apply.)*

a. Talking with her always, especially to know how she feels ( )
b. Making sure she eats properly ( )
c. Eating with her regularly, as much as possible ( )
d. Sleeping together regularly (as much as possible) ( )
e. Encouraging her to seek antenatal care ( )
f. Helping her keep clinic/antenatal appointments ( )
g. Going to the clinic with her ( )
h. Making sure she avoids heavy work and rest well ( )
i. Pay for her antenatal services ( )
j. Making arrangements for her delivery ( )
k. Others(specify):_____

C4 If **NO to C1**, when was her last pregnancy (*in months*)? _____ .
(Please record answer in months, e.g., 1, 2, 3, etc.)

C5 If **NO to C1 (**and **have 1 or more children in B8)**, how old is your last child?
_____Years (*give age only in years, e.g., 1, 2, 3, etc*.)

NOTE: If No children recorded in B8, SKIP C6 to C16 and go to SECTION D

C6 Did you help during your wife/partner's **pregnancy** with your last child?

a. Yes ( )
b. No ( )

C7 If **YES to C6**, what were some of the ways you assisted her during pregnancy?*(To the interviewer: Please 'Tick' all that apply.)*

a. Talked with her always, especially to know how she was doing ( )
b. Made sure she ate properly ( )
c. Ate with her regularly, as much as possible ( )
d. Slept together regularly (as much as possible) ( )
e. Encouraged her to seek antenatal care ( )
f. Helped her keep her clinic/antenatal appointments ( )
g. Went to the clinic with her ( )
h. Made sure she avoided heavy work and rested well ( )
i. Paid for her antenatal services ( )
j. Made arrangements for her delivery ( )
k. Others(specify):_____

C8 If **NO to C6**, why? *(To the interviewer: Please 'Tick' all that apply.)*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needed to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )
h. Others(specify):_____

C9 Did you assist **during delivery**?

a. Yes ( )
b. No ( )

C10 If **YES to C9**, what were the ways you assisted her during delivery?
(To the interviewer: Please 'Tick' all that apply.)

a. Took her to deliver
b. Encouraged her through the process
c. Made sure she was handled by a trained health worker
d. Did all she asked me to.
e. Others (*specify*): _____

C11 If **NO to C10**, why? *(To the interviewer: Please 'Tick' all that apply.)*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needed to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )
h. Others(specify):_____

C12 Did you assist her **after delivery**?

a. Yes ( )
b. No ( )

C13 If **YES to C12**, what are some of the ways you helped her after delivery?
(To the interviewer: Please 'Tick' all that apply.)

a. Took her home
b. Made sure she had a proper place to be with the baby
c. Made sure she and the baby got the right nutrition
d. Made sure she rested well and avoided work early
e. Assisted her to care for the child
f. Made sure she received post-natal care.
g. Others(specify):_____

C14 If **NO to C12**, why? *(To the interviewer: Please 'Tick' all that apply.)*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needed to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )
h. Others(specify):_____

C15 Did she have a safe delivery?

a. **Yes** a1. Normal _____ a2. Had Operation _____
b. **No** b1. Lost baby _____ b2 Lost Mother _____b3. Lost both _____
b4. Baby had birth defect ____b5.Mother suffered health problem____

C16 Did your partner attend clinic regularly during pregnancy? _____
a. Do any hard work during pregnancy? _____
b. Eat properly during pregnancy? _____
c. Rest well during pregnancy? _____
d. Deliver at clinic/hospital? _____

SECTION D: Knowledge of Pregnant Women's RH Needs

D1 What do you think are some of the things a pregnant woman **needs and/or should do** to make pregnancy safe? *(To the interviewer: Please 'Tick' all that apply).*

a. Eat properly ( )
b. Attend clinic regularly ( )
c. Rest from hard work ( )
d. Exercise a little ( )
e. Others(*specify)*_____

D2 What are some of the things a pregnant woman **should avoid** during pregnancy in order to keep her pregnancy safe? *(To the interviewer: Please 'Tick' all that apply).*

a. Lifting heavy objects/doing hard work ( )
b. Engaging in a fight ( )
c. Not take certain drugs and alcohol ( )
d. Getting certain sicknesses—like Malaria ( )
e. Eating poorly ( )
f. Others (specify) _____

D3 During pregnancy what are some danger signs?(*To the interviewer: Please 'Tick' all that apply).*

a. Feeling very weak/tired ( )
b. Swelling of legs hands/face ( )

c. Serious headache & blurred vision ( )
d. Pain in abdomen ( )
e. Fever ( )
f. Vaginal bleeding ( )
g. Vomiting ( )
h. Loss of appetite ( )
i. Baby not moving ( )
j. Back pains ( )
k. Others(specify):_____

D4 What do you know are some of the needs of a pregnant woman immediately before and **during the time of delivery**? *(To the interviewer: Please 'Tick' all that apply).*

a. A safe place for delivery ( )
b. Skilled attendant at delivery ( )
c. Someone to carry her to deliver ( )
d. Others(*specify*):_____

D5 What do you know are some of the needs of a pregnant woman **after she delivers**? *(To the interviewer: Please 'Tick' all that apply).*

a. Preparing bath water ( )
b. Washing, cleaning, general hygiene ( )
c. Care for baby ( )
d. Assistance with household duties ( )
e. Others(specify):_____

SECTION E: Attitude & Practice Regarding Pregnancy, Delivery, & After Delivery

Attitude

E1 Do you think men have a role to play in helping their partners during pregnancy?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

E2 If **YES to E1**, what do you think a man can do to help his partner when she is **pregnant**? *(To the interviewer: Please 'Tick' all that apply).*

a. Communicate with her always, especially to know how she feels ( )
b. Ensure that she eats properly ( )
c. Eat with her regularly, as much as possible ( )
d. Sleep together regularly (as much as possible) ( )
e. Encourage her to seek antenatal care ( )
f. Help her keep clinic/antenatal appointments ( )
g. Attend antenatal clinic with her ( )
h. Pay for her antenatal services ( )
i. Make arrangements for her delivery ( )
j. Others(specify):_____

E3 If **NO to E1**, why? *(To the interviewer: Please 'Tick' all that apply).*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needs to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )

h. Others(specify):_____

E4 Do you think men have a role to play in helping their partners during **delivery**?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

E5. If **YES to E4**, what are some supports you think a man should give his partner during **delivery**? *(To the interviewer: Please 'Tick' all that apply).*

a. Arrange where she will give birth ( )
b. Arrange transport/take her to where to give birth ( )
c. Who should do the delivery ( )
d. Accompany her to give birth ( )
e. Pay for delivery ( )

E6 If **NO to E4**, why? *(To the interviewer: Please 'Tick' all that apply.)*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needs to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )

h. Others(specify):_____

E7 Do you think men have a role to play in helping their partners **after delivery**?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

E8 If **YES to E7**, what are some things you think a man can/should do to help his partner **after she delivers**? *(To the interviewer: Please 'Tick' all that apply.)*

a. Assist with house work at home ( )
b. Go to the market ( )
c. Help to cook ( )
d. Take care of the other children, if any. ( )
e. Heat water for her and the baby to bathe ( )
f. Look after the baby sometimes ( )

g. Others(specify):_____

E9 If **NO to E7**, why?*(To the interviewer: Please 'Tick' all that apply.)*

a. Not man's role ( )
b. Not allowed in our local culture ( )
c. Not aware of what a man needs to do ( )
d. Not allowed by women to participate ( )
e. Too busy with work ( )
f. Feel ashamed/embarrassed ( )
g. Don't know/not sure ( )
h. Others(*specify*):_____

Practice

(To Interviewer: Complete only if interviewee's partner has ever been pregnant, given birth, or is pregnant)

E10 Do you assist your partner during

a. Pregnancy a1. Yes ____ a2. No ___
b. Delivery b1. Yes ____ b2. No ___
c. Post-Delivery c1. Yes ____ c2. No ___

E11 If **YES to E10a**, what are some things you have done to assist your partner during pregnancy? *(To the interviewer: Please 'Tick' all that apply.)*

a. Communicate with her always, especially to know how she feels ( )
b. Make sure she eats well ( )
c. Eat with her as much as possible ( )
d. Sleep together regularly to be there when she needs you at night ( )
e. Encourage her to seek antenatal care ( )
f. Help her keep clinic/antenatal appointments ( )
g. Attend antenatal clinic with her (accompany her to clinic) ( )
h. Pay for antenatal services ( )
i. Help make arrangements for her delivery ( )
j. Help her with her household duties ( )
k. Others (*specify*): _____

E12 If **NO to E10a**, why? *(To the interviewer: Please 'Tick' all that apply.)*

a. Work schedule ( )
b. Not allowed into checkups room ( )
c. Community stigma ( )
d. Ego/power of a man ( )
e. Don't know much about her needs and/or what to do ( )
f. Cultural reasons/taboo ( )
g. It's a woman's thing/not for men ( )
h. Just don't want to ( )
i. Ashamed ( )
j. Don't have the means to provide much ( )
k. Other (specify): _____

E13 If **YES to E10b**, what are some things you have done to assist your partner **during delivery**?

a. Arrange where she will give birth /who will do delivery ( )
b. Arrange transport/take her to where she will give birth ( )
c. Accompany her to give birth ( )
d. Pay for the delivery ( )
e. Other (specify): _____

E14 If **NO to E10b**, why?

a. Work schedule ( )
b. Not allowed into delivery room ( )
c. Community stigma ( )
d. Ego/power of a man ( )
e. Don't know much about her needs and/or what to do ( )
f. Cultural reasons/taboo ( )
g. It's a woman's thing/not for men ( )
h. Just don't want to ( )
i. Ashamed ( )
j. Don't have the means to provide much ( )
k. Other (specify): _____

E15 If **YES to E10c**, what are some things you have done to assist your partner after delivery?

a. Assist with house work at home ( )
b. Go to the market ( )
c. Help to cook ( )
d. Take care of the other children, if any. ( )
e. Heat water for her and the baby to bathe ( )
f. Look after the baby sometimes ( )
g. Other (specify): _____

E16 If **NO to E10c,** why?

a. Work schedule ( )
b. Not allowed into delivery room ( )
c. Community stigma ( )
d. Ego/power of a man ( )
e. Don't know much about her needs and/or what to do ( )
f. Cultural reasons/taboo ( )
g. It's a woman's thing/not for men ( )
h. Just don't want to ( )
i. Ashamed ( )
j. Don't have the means to provide much ( )
k. Other (specify): _____

E17. If **YES to E11g** (accompanied partner to clinic during pregnancy), then how many times in the entire period of pregnancy?

_____ *(enter only number of times)*

E18 If **YES to E11g** (*accompanied partner to clinic during pregnancy*), then what made you do it?

a. My wife's request ( )
b. Others requested ( )
c. Nobody else to do it ( )
d. Saw it as my duty ( )
e. Just wanted to help ( )
f. Cultural reasons/taboo ( )
g. Others(specify):_____

E19. **If No to E11g**(*accompanied partner to clinic during pregnancy*), why?

a. Work schedule ( )
b. Not allow into checkups or delivery room ( )
c. Health providers do not allow ( )
d. Community stigma ( )
e. Ego/ power of a man ( )
f. Don't know about them ( )
g. Cultural practices ( )
h. Taboo ( )
i. Not allow ( )
j. It's women thing ( )
k. You don't want to ( )
l. Ashamed ( )
m. Others(*specify*):_____

SECTION F: Future of Male Involvement

F1 In general, do you think men in this area have been sufficiently involved in their partners' reproductive health issues (pregnancy, delivery, and after delivery)?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

F2 If **NO to F1 or NOT SURE**, what do you think are some of the reasons why men have not been involved the way they ought to have been?

a. Lack of sufficient knowledge on how to be more involved
b. Restrictions due to culture and tradition
c. Restrictions from health facilities/workers
d. Restrictions by women themselves
e. No program to encourage men to be more involved
f. Insufficient money to do what we may want to do
g. Demands of our jobs
h. Other responsibilities
i. Others(specify):_____

NOW, FOR SPECIFICS: Pregnancy, Delivery, and After Delivery

F3 Do you think men in this area should be more involved in helping their partners during pregnancy than they are now?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

F4 If **YES to F3**, what can be done to help improve men's involvement during pregnancy?
(To the interviewer: Please 'Tick' all that apply)

a. Improve knowledge and awareness among men ( )
b. Service providers should allow male participation ( )
c. Expand/ improve maternal health services in the district ( )
d. Establish programs to encourage male participation ( )
e. Change in culture and tradition ( )
f. Increase awareness among traditional and religious leaders ( )
g. Public education among citizens ( )
h. Increase employment/ sources of income for men ( )
i. Others*(specify)*_____

F5 If **NO to F3,** why? *(To the interviewer: Please 'Tick' all that apply)*

a. Not a role for men ( )
b. What men are currently doing is enough ( )
c. Men are too busy ( )
d. Men here doing have the means (financial) ( )
e. Women here don't want men's help ( )
f. Not priority for men ( )
g. Other (specify)_____

F6 Do you think men in this area should be more involved in helping their partners **during delivery**?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

F7 If **YES to F6**, what can be done to help improve men's involvement during delivery?
(To the interviewer: Please 'Tick' all that apply)

a. Improve knowledge and awareness among men ( )
b. Service providers should allow male participation ( )
c. Expand/ improve maternal health services in the district ( )
d. Establish programs to encourage male participation ( )
e. Change in culture and tradition ( )
f. Increase awareness among traditional and religious leaders ( )
g. Public education among citizens ( )
h. Increase employment/ sources of income for men ( )
i. Others(specify)_____

F8 If **NO to F6**, why? *(To the interviewer: Please 'Tick' all that apply)*

a. Not a role for men ( )
b. What men are currently doing is enough ( )
c. Men are too busy ( )
d. Men here doing have the means (financial) ( )
e. Women here don't want men's help ( )
f. Not priority for men ( )
g. Other (*specify*): _____

F9 Do you think men in this area should be more involved in helping their partners **after delivery**?

a. Yes ( )
b. No ( )
c. Don't know/Not sure ( )

F10 If **YES to F9**, what can be done to help improve men's involvement after delivery?
(To the interviewer: Please 'Tick' all that apply)

a. Improve knowledge and awareness among men ( )
b. Service providers should allow male participation ( )
c. Expand/ improve maternal health services in the district ( )
d. Establish programs to encourage male participation ( )
e. Change in culture and tradition ( )
f. Increase awareness among traditional and religious leaders ( )
g. Public education among citizens ( )
h. Increase employment/ sources of income for men ( )
i. Others (specify)_____

F11 If **NO to F9**, why?*(To the interviewer: Please 'Tick' all that apply)*

a. Not a role for men ( )
b. What men are doing is enough ( )
c. Men are too busy ( )
d. Men here doing have the means (financial) ( )
e. Women here don't want men's help ( )
f. Not priority for men ( )
g. Other(specify):_____

End of interview. Thanks for your time.

APPENDIX 2: MALES FGD/KII GUIDE

University of Ghana
School of Public Health
Department of Population, Family and Reproductive Health

Male Involvement in Maternal Health Decision-Making
in Nkwanta South District, Ghana

Focus Group Discussion Guide

Participants: Males

Participant selection Criteria: Male aged 18 years and above, whose partners have ever been pregnant, currently pregnant or have had a child in the last five years.

Introduction

Good morning/ Good afternoon. Thanks for joining our group. My name is Georgia T. Mitchell and I'll be leading this discussion group along with _____. Have any of you talked in a group like this before? This called a "focus group". It's a way for us to hear what you have to say when we design new programs that are supposed to help you. We'll talk for about an hour.

We are going to talk about your involvement as males in issues of pregnancy, delivery, and after-birth, especially as it concerns your partners/wives. We want you to talk about what you think and/or know about men involvement with their partners in times of pregnancy, delivery, and after-birth. Specifically, we want your views on what you think men's role should be during such periods. We are also interested in talking with you about how you participate (d) or wish to participate during your partners' period of pregnancy, delivery, and after-birth. We will talk further about what prevents/prevented you from playing the role you may have wanted to play or were require/expected to play. You will then conclude this discussion by talking about what you think males' roles should be during pregnancy, delivery, and after-birth and what can be done to increase male involvement during these periods.

Right now, however, I want to first let you know a few things about what we're doing: how u participate or wish to participate

Disclosure

- Audio taping;
- Reporting;
- Observers helping to listen/ take note;

Procedures/ Ground Rules

- No right or wrong answer; want to her your personal opinions
- Be honest; want to know what you really think;
- We want to hear from everyone- so don't be shy;

- No need to raise your hand;
- One person talks at a time;
- No official breaks but going to washroom are allow.

Participant Introduction and Listing

- First name
- Age
- Occupation

Age	Tribe	Residence	Educational Level	Occupation	No. of Wives	No. of Children	Denomination

Getting Started

Let's get started.

A. Knowledge of Male Involvement

1. Have you ever heard of "male participation/Involvement" during pregnancy? **Probe:** Delivery? After-birth? Probe for what they know about male involvement during these periods.

2. What do you understand by "male participation/involvement" during pregnancy? What do men being involved during pregnancy periods mean to us in this group?

   Probe: Delivery? After-birth?

3. Women go through a lot of different experiences during pregnancy. What are some of them that you are aware of or have encountered when your partner was pregnant?

Probe: Delivery? After-birth?

4. Did you get involved in helping wife/partner deal with some of those problems? How? **Get examples**

B. Attitude and Perception

1. What are your views about being involved or participating during pregnancy? **Probe**: Delivery? After-birth? Why not?

2. Why do you think men should be involved at all during pregnancy?

Probe: Delivery? After-birth? Why not?

3. When you assisted your partner during pregnancy, did you see yourself as being involved? Did you think it was something you should have done?

Probe: Delivery? After-birth. Why? Why not?

4. What do you think about the attitude of the service providers? Probe further on the regularity and quality of services provided. What do they like about the service provider work, what do they want them to do differently

C. Current Participation (Roles Men Play)

1. What roles do men like you in this area currently play during pregnancy?

Probe: Delivery? After-birth?

2. What are the roles men in this area have always played? Or have the role of men changed over the years? **Probe:** If there are changes, then what has changed?

3. Do men in this area take their wife/partner to antenatal clinic during pregnancy? **Probe:** Delivery? After-birth.

4. How many times have you accompany your wife/partner to the clinic pregnancy? **Probe:** Delivery? After-birth.

5. What kind of support do you give to your wife/partner when she is going through pregnancy, delivery, and postnatal care? Probe: Mention at least five support given that are cardinal to you

D. Desire to Participate and Culture

6. What is the current level of male participation in this area? **Probe:** Explain.

7. What are the things that you want to do which you have not done? Or wanted to do that you did not do?

Probe: Why haven't you or couldn't you?

8. In this area, what does culture say about being involved with your wife/partner during pregnancy? **Probe:** Delivery? After-birth.

9. What does culture say about taking your wife/partner to the hospital during pregnancy? **Probe:** Delivery? After-birth.

E. Future of Male Participation

10. In addition to the roles men like you in this area play, what do you think you can or should do more to assist your partners during pregnancy?

    Probe: Delivery? After-birth?

11. What more do you think you can do?

12. In your opinion, how should men in your community be involved in reproductive health services/programs during these periods?

13. What are some factors that can encourage men to be involved in reproductive health programs for themselves and their partners?

14. What are some factors that may prevent men from taking part in RH programs?

15. What are some reasons that may prevent you from being more involved than you are at the moment?

    Probe: What are the obstacles?

16. How can the obstacles be removed?

    Probe: What must change?

    What are some strategies that can help improve male participation in maternal health issues?

Thanks for your time and your kind participation.

APPENDIX 3: FEMALES FGD/KII GUIDE

University of Ghana
School of Public Health
Department of Population, Family and Reproductive Health

Male Involvement in Maternal Health Decision-Making
in Nkwanta South District, Ghana

Focus Group Discussion Guide

Participants: Females

Participant selection Criteria: Females aged 15 to 49, who are pregnant or have had child/children or recently give birth

Introduction

Good morning/ Good afternoon. Thanks for joining our group. My name is Georgia T. Mitchell and I'll be leading this discussion group along with _____. Have any of you talked in a group like this before? This called a "focus group". It's a way for us to hear what you have to say when we design new programs that are supposed to help you. We'll talk for about an hour.

We are going to talk about the involvement as males in issues of pregnancy, delivery, and after-birth, especially as it concerns your partners/wives. We want you to talk about what you think and/or know about men involvement with you, as their partners, in times of pregnancy, delivery, and after-birth. Specifically, we want your views on what you think men's role should be during such periods. We are also interested in talking with you about how they have been involved with you and how you wish they should have been involved with you during your period of pregnancy, delivery, and after-birth. We will talk further about what you think prevents/prevented men from playing the role they should have played, or you may have wanted to play. You will then conclude this discussion by talking about what you think males' roles should be during pregnancy, delivery, and after-birth and what can be done to increase male involvement during these periods.

Right now, however, I want to first let you know a few things about what we're doing: how u participate or wish to participate

Disclosure

- Audio taping;
- Reporting;
- Observers helping to listen/ take note;

Procedures/ Ground Rules

- No right or wrong answer; want to her your personal opinions
- Be honest; want to know what you really think;
- We want to hear from everyone- so don't be shy;

- No need to raise your hand;
- One person talks at a time;
- No official breaks but going to washroom are allow.

Participant Introductions and Listing

- First name
- Age
- Occupation

Age	Tribe	Residence	Educational Level	Occupation	No. of Children	Denomination

Getting Started

Let's get started.

F. Knowledge of Male Involvement

1. What do you understand by "male participation/involvement" during pregnancy? What do men being involved in pregnancy mean to us in this group?

   Probe: Delivery? After-birth?

2. Women go through a lot of different experiences during pregnancy. Did your partner get involved in helping you deal with some of those problems?

   Probe: Delivery? After-birth? **Get examples**

G. Attitude and Perception

3. How do you think men should be involved at all during pregnancy?

Probe: Delivery? After-birth? If not, Why or why not?

H. Current Participation (Roles Men Play)

4. What roles do men in this area currently play during pregnancy?

   Probe: Delivery? After-birth?

5. What are the roles men in this area have always played? Or have the role of men changed over the years?
   Probe: If there are changes, then what has changed?

I. Assessment of Male Participation

6. What can you say about the current level of male participation in this area?

   Probe: Are there things that you expect them or would want them to do which they do not currently do? Or would not do? Why?

J. Future of Male Participation

7. In addition to the roles men in this area play, what do you think they can or should do more to assist you during pregnancy?

   Probe: Delivery? After-birth? What more do you think they can do?

8. What are the reasons that you know which may prevent them from being more involved than they are at the moment?

   Probe: What are the obstacles?

9. Can the obstacles be remove/overcome?

   Probe: How? What must change?

Thanks for your time and your kind participation.

APPENDIX 4: CONSENT FORM FOR PARTICIPANTS IN THE QUANTITATIVE SURVEY

INFORMED CONSENT FOR PARTICIPANTS 18 YEARS AND ABOVE

RESEARCH TOPIC:

Male involvement in Maternal Health Decision-making in Nkwanta South District

Principal Investigator: Georgia Tammy Mitchell

Qualification: MPH Student

Address: Box LG 13, Department of Population, Family and Reproductive Health, School of Public Health, College of Health Sciences, University of Ghana, Legon.

INTRODUCTION

I am a student from the University of Ghana, School of Public Health. My assistants and I are carrying out a study in this district to assess factors that make men do not or do participation during antenatal, delivery, and child birth among partners.

You are being invited to take part in this study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take your time and read the following information carefully. Please ask the researcher if there is anything that is not clear.

STUDY PROCEDURE, ADVANTAGES AND DISCOMFORTS

Accepting to take part in this study will take about 20 minutes of your time and we expect your honest response in answering these questions. The questions are mainly about you, your experiences regarding your partner's pregnancy during the time she was pregnant or now that she is pregnant.

Benefits: There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained will be useful to ensure that reproductive health programs and services are establish to encourage men to partake in women issues in your

communities and even outside. Another reason for this research is for academic purposes. The time you are going to take to answer these questions are the only discomforts you may have and the inconvenience in answering some of the questions that are your personal problems.

VOLUNTARY PARTICIPATION/CONFIDENTIALITY

Please do **not** write any identifying information on your questionnaire. Your responses will be anonymous. Every effort will be made by the researcher to preserve your confidentiality including the following: Assigning code names/numbers for participants that will be used on all researcher notes and documents.

Notes, interview transcriptions, and transcribed notes and any other identifying participant information will be kept in a locked file cabinet in the personal possession of the researcher. When no longer necessary for research, all materials will be destroyed.

The researcher and the members of the researcher's committee will review the researcher's collected data. Information from this research will be used solely for the purpose of this study and any publications that may result from this study. Any final publication will contain the names of the public figures that have consented to participate in this study (unless a public figure participant has requested anonymity): all other participants involved in this study will not be identified and their anonymity will be maintained.

This study has been reviewed and approved by Ghana Health Service Ethical Review Committee (GHS-ERC) and the University of Ghana, Legon Institutional Review Board (IRB) which are committees whose tasks are to make sure that research participants are protected from harm and their rights respected.

Person to Contact:

Should you have any questions about the research or any related matters, please contact the researcher. You may contact the principal investigator, Georgia Tammy Mitchell at the School of Public Health, University of Ghana, Legon.

(Tel. 0248440098); email: geo4life83@yahoo.com

Do you voluntarily agree to participate in this study?

PARTICIPANT'S CONSENT FORM

Consent:

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study.

Name of participant: _____

Signature/thumbprint: _____

Signature of Interviewer: _____

Date: _____

APPENDIX 5: CONSENT FORM FOR PARTICIPANTS IN THE QUALITATIVE

INFORMED CONSENT FOR FOCUS GROUP DISCUSSION

Male involvement in Maternal Health Decision-making in Nkwanta South District

Principal Investigator: Georgia Tammy Mitchell

Qualification: MPH Student

Address: Box LG 13, Department of Population, Family and Reproductive Health, School of Public Health, College of Health Sciences, University of Ghana, Legon.

INTRODUCTION

I am a student from the University of Ghana, School of Public Health. My assistants and I are carrying out a study in this district to assess factors that make men do not or do participation during antenatal, delivery, and child birth among partners. You are being invited to take part in this study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please take your time and read the following information carefully. Please ask the researcher if there is anything that is not clear.

STUDY PROCEDURE, ADVANTAGES AND DISCOMFORTS

The discussion will take about 45-60 minutes of your time and your responses will be audio taped, videotaped, reported, observers helping to listen or take note with your permission and these tapes will be kept under lock and key and destroy after a maximum period of one year. This research will involve men whose wives are currently pregnant or have had children for the last two years and women who are pregnant or have had children in the last two years as well. The questions are mainly about you, your experiences regarding your partner's pregnancy during the time your partner was pregnant or even now that she is pregnant. On the other hand, for women who have had children in the last two years or are now pregnant. This study will not pose any harm to you but rather some personal information will be required from you.

Benefits: There will be no financial or material benefits for participating in this study but will provide transportation and snack after the discussions for your time. However, we hope that the information obtained will be useful to ensure that reproductive health programs and services are establish to encourage men to take part in women issues in your communities and even outside. Another reason for this research is for academic purposes. The time you are going to take to be a part of the discussion is the only discomforts you may have and the inconvenience in discussing some of your personal problems.

VOLUNTARY PARTICIPATION/CONFIDENTIALITY

Your participation in the study is purely voluntary and it is your decision to participate or choose not to at any given time during the discussions. There will be no penalty against you if you decide not to be a part of the study. Your responses will be anonymous and would be for the purpose of the study. Every effort will be made by the researcher to preserve your confidentiality including assigning code names/numbers for participants that will be used on all researcher notes and documents. Notes, interview transcriptions, and transcribed notes, tapes and any other identifying participant information will be kept in a locked file cabinet in the personal possession of the researcher for the maximum period of one year. When no longer necessary for research, all materials will be destroyed.

The researcher and the members of the researcher's committee will review the researcher's collected data. Information from this research will be used solely for the purpose of this study and any publications that may result from this study.

Any final publication will contain the names of the public figures that have consented to participate in this discussion (unless a public figure participant has requested anonymity): all other participants involved in this study will not be identified and their anonymity will be maintained.

This study has been reviewed and approved by Ghana Health Service Ethical Review Committee (GHS-ERC) and the University of Ghana, Legon's Institutional Review Board (IRB) which are committees whose tasks are to make sure that research participants are protected from harm and their rights respected.

Person to Contact:

Should you have any questions about the research or any related matters, please contact the researcher. You may contact the principal investigator, Georgia Tammy Mitchell at the School of Public Health, University of Ghana, Legon.

(Tel. 0248440098); email: geo4life83@yahoo.com) Do you voluntarily agree to participate in this discussion?

PARTICIPANT'S CONSENT FORM

Consent:

By signing this consent form, I confirm that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I voluntarily agree to take part in this study.

Name of participant: _____ Date:_____

Signature/thumbprint: _____

Signature of Researcher: _____

APPENDIX 6: VOLUNTEER AGREEMENT FOR PARTICIPANTS

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the research title Male Involvement in Maternal Health Decision-Making has been read and explained to me. I have been given an opportunity to ask any questions about the research answered to my satisfaction. I agree to participate as a volunteer.

Date	Name and signature or mark of volunteer

If volunteers cannot read the form themselves, a witness must sign here:

I was present while the benefits, risks, and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the research.

Date	Name and signature of witness

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this research have been explained to the above individual.

Date	Name & Signature of person who obtained consent

APPENDIX 7: POPULATION FIGURES FOR THE NKWANTA SOUTH DISTRICT BY SUB-DISTRICT - 2012

NKWANTA SUB DISTRICTS 2007 -2012								
SUB DISTRICT	**LOCATION**	**COMMUNITY**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
1	Nkwanta	Nkwanta	17472	17804	18142	18487	18839	19197
2		Dadiase	513	523	533	543	554	565
3		Kabre Akura1	45	46	47	48	49	50
4		KabreAkura 2	32	33	34	35	36	37
5		Krontang	719	731	745	759	774	789
6		Animal Husbundary	92	94	96	98	100	102
7	Chaiso	Duflunkpa New	23	24	25	26	27	28
8		Oti	9	10	11	12	13	13
9		Duflunkpa old & New	127	129	131	132	135	138
10		Chaiso	627	649	661	674	687	700
11		Kpeve	296	302	308	314	320	326
12		Kope	23	24	25	26	27	28
13	Odumase	KpatcheAkua	55	56	57	58	60	61
14		BosmanAkura	32	33	34	35	36	37
15		Kwame Nkwanta	40	41	42	43	44	45
16		OkubroAkura	63	64	65	66	68	69
17		Odumase	2080	2120	2160	2201	2243	2286
18		OdumaseKrachAkura	65	66	67	68	70	71
19		OdumaseBasari	327	333	339	345	352	359
20		Kofi Akura	339	345	352	359	366	373
21	Nkw/Shiare	Kromase	259	364	371	378	386	393
22		Shiare	1112	1133	1155	1177	1200	1223
23		Chillinga	1049	1069	1089	1110	1132	1154
24		Odomi	622	634	646	658	671	684
25	Keri	Gekrong	830	846	862	878	895	912
26		Keri	2569	2618	2668	2719	2771	2824
27		PawaKonkonba Line	608	624	636	648	661	674
28		Pawa	1300	1325	1350	1376	1403	1430
29		Safianu	159	162	165	168	172	175
30		Bunga 1	130	132	135	138	141	144
31		Bunga 2/YaoviAkura	283	288	293	299	305	311
32	Koe	Koe	1800	1834	1869	1905	1942	1979
33		DjatoAkura	327	333	339	345	352	359
34		Binabre	40	41	42	43	44	45
35		KpanjalAkura	37	38	39	40	41	42
36		SayaAkura	283	288	293	299	305	311
37		KabreAkura/Sabo	104	106	108	110	112	114

NKWANTA SUB DISTRICTS 2007 -2012								
SUB DISTRICT	**LOCATION**	**COMMUNITY**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
		n						
38	Katai	NyameBekyre	100	102	104	106	108	110
39		Katai Junction	147	150	153	156	159	162
40		AbrewankorJunc	249	253	258	263	268	273
41	Nyambong	Dogokitiwa	439	447	455	464	473	482
42		Abrewankor	736	750	764	779	794	809
43		Mango Akura	370	377	384	491	501	511
44		Nyambong	1439	1466	1494	1523	1552	1581
45		NyambongJunct	673	686	699	709	723	737
46		Papaye	260	265	270	275	281	286
47		AgouJunct	407	392	399	407	415	423
TOTAL			**41,793**	**40150**	**40914**	**41793**	**42607**	**43417**

Figures obtained from population projection for Nkwanta South, 2012