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INTRA-FAMILY COMMUNICATION AND REPRODUCTIVE HEALTH DECISION MAKING IN THE VOLTA REGION OF GHANA

BY
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DECLARATION

I, Doris Mawuse Aglobitse, hereby declare that except for references to other people's work which have been duly cited, this work is the result of my own original research and that this thesis has neither in part nor in whole been presented elsewhere for another degree.

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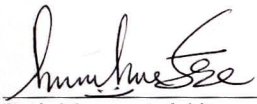

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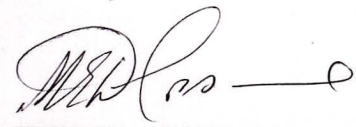

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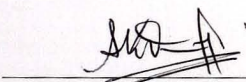

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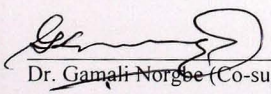

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DEDICATION

To the Almighty Lord for the inspiration.

To Dada, Ms Adeline Afua Soglo and Papa, Mr. Humphrey Dziko Abro, my maternal grandparents with love and appreciation.

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LIST OF ABBREVIATIONS

AIDS:	Acquired Immune Deficiency Syndrome
ANC:	Ante natal Care
CBFNS:	Community-Based Food and Nutrition Security
CBD:	Community-Based Distribution
CBO:	Community Based Organisations
CHPS:	Community-based Health Planning and Services
FGD:	Focus Group Discussion
FP:	Family Planning
DHS:	Demographic Health Survey
GDHS:	Ghana Demographic Health Survey
GHS:	Ghana Health Service
GSS:	Ghana Statistical service
HIV:	Human Immunodeficiency Virus
HRP:	Development and Research Training in Human Reproduction
ICPD:	International Conference on Population and Development
KII:	Key Informant Interview
LI:	Legislative Instrument
MCH:	Maternal and Child Health
MDG:	Millennium Development Goal
MESW:	Ministry of Employment and Social Welfare
MoH:	Ministry of Health
NGO:	Non Governmental Organisation

PID:	Pelvic Inflammatory Disease
RH:	Reproductive Health
RTIs:	Reproductive Tract Infections
SRH:	Sexual and Reproductive Health
STD:	Sexually Transmitted Disease
STI:	Sexually Transmitted Infection
TBA:	Traditional Birth Attendants
UNDG:	United Nations Development Group
UNFPA:	United Nations Population Fund
UNICEF:	United Nations Children's Fund
WHO:	World Health Organisation

ABSTRACT

At the centre of Ghanaian society is the institution of family. Sustained through a series of kinship, networks and marriages, the family is acknowledged as the bedrock of all social life where critical tasks including nurturing are organised. According to Segrin and Flora (2005), very few, if any, relationships are more important, salient, long lasting, and central to people's well-being than their family relationships. Although these relationships are often defined by genes and institutionalised ceremonies such as marriage, they are built, maintained, and destroyed by communication (or its absence). Therefore, communication in the family setting is critical, as it is the bedrock of human social relationships. Additionally, a variety of family-factors at the household and individual level exist that may have direct influence on poverty and health. The principal objective of the study was to identify some of the determinants of reproductive health decision-making as well as the determinants of intra-family communication or discussion about reproductive health issues. Structured interviews were administered to a sample of 1,080 respondents representing a total of 360 households from six districts in the Volta Region of Ghana, namely Ho, Krachi, Kadjebi, Hohoe, Ketu and Akatsi. Two focus group discussions (with one peri-urban and one rural community) for each district and two Key Informant Interview (KII) per district were also held at the same study sites. The Statistical Package for the Social Sciences (SPSS) version 17 was used to analyse the data. Regression techniques were used to assess the effects of education and income on family discussion at one stage and family discussion and reproductive health usage at another stage. Responses and discussions from FGD and KII were transcribed and data analyzed based on the objectives of this study. Results of the analysis indicate that

educational level is significantly related to all the elements of reproductive health examined. Income and education were positively correlated with family discussions about reproductive health issues such that higher income and higher educational level, were associated with greater likelihood of family discussions, and family discussion or intra-family communication was also positively correlated with reproductive health usage. Types of settlement (urban or rural) were only associated with family discussion about maternal health such that urban dwellers were more likely to engage in maternal health discussions than rural dwellers. Results also indicated that mass media, health workers, friends, and schools were the major sources of information about reproductive health issues. Young people and adults did not differ in their response pattern. This study recommends further research to assess whether comprehensive sexual and reproductive health communication within families facilitates adolescents' health care utilization. Examination of how intra-family communication quality and content are related to service use is needed to understand adolescents' sexual and reproductive health knowledge and needs.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Positive and effective communication can lead to successful decision-making. When a person has been well-informed on a subject matter via lessons and messages, he/she then chooses between options and makes a decision. Information and education, according to Hubley (1993), provide the basis for making choices. In the case of the family, people within families are called upon to make decisions regarding family security and welfare on a daily basis. Positive and effective communication is important for families because it provides economic, social and psychological security to all its members. Communication and information continue to define social and moral norms, safeguard material and spiritual customs, uphold traditions, and provide a variety of role models for youth within families. In every social environment, there is a leader or an authority who guides the progress of that setting. Similarly, in every family there is an authority that wields power and makes decisions regarding the welfare of the family. This position of authority within the domestic family group, according to Nukunya (2003), is often given to the man. As the head and master, he commands the respect and obedience of everyone in the domestic group (Nukunya, 2003). In many cultures, men are regarded as the authority and therefore required to be the major decision-makers concerning the general welfare of the household, thus effective skills in communication is essential.

One of the greatest decisions within families is determining the health and physical welfare of family members. Health is one major determinant of an individual's welfare as well as that of the family. According to the World Health Organisation (WHO), health is

defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In more recent years, this definition has been expanded to include the ability of a person to lead a "socially and economically productive life." Since families uphold reproduction and lineage at a high esteem, reproductive health is as important as general health. Therefore, in addition to the WHO definition of general health, the 1994 International Conference on Population and Development (ICPD) held in Cairo Egypt also defined reproductive health as a "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, its functions and processes."

Reproductive health, therefore, implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often they do so (UNFPA, 2000). Implicit in this last condition, is the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family planning of their choice. Reproductive health care is now defined as the constellation of methods, techniques, and services that contribute to reproductive health and well-being by preventing and solving reproductive health problems (UNFPA, 1999). Others also consider sexual health, whose purpose is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted infections (UNFPA, 1999).

The Government of Ghana endorsed the definition of health as stated by the WHO and adopted and adapted the reproductive health definition from the 1994 ICPD. Hence, the policy document that guides reproductive health care in Ghana includes:

i. Safe Motherhood: antenatal care, safe delivery, post-natal care including breast feeding and infant health;

ii. Family planning;

iii. Prevention and management of unsafe abortion;

iv. Prevention and management of reproductive tract infections (RTIs) including sexually transmitted infections (STIs) and HIV and AIDS;

v. Prevention and management of infertility;

vi. Prevention and management of cancers of the female and male reproductive system including the breast;

vii. Responding to the concerns on menopause and andropause (male climacteric);

viii. Discouragement of traditional practices and gender based violence that affects the reproductive health of women and men;

ix. Information and counseling on human sexuality, responsible sexual behaviour, responsible parenthood, preconception care and sexual health (Ghana Health Service Reproductive Health Service and Standards, 2003).

The reproductive health components this study will address are:

i. Maternal Health (Safe Motherhood) : antenatal care, safe delivery, post-natal care including breast feeding and infant health;

ii. Family planning;

iii. Prevention and management of unsafe abortion;

iv. Prevention and management of sexually transmitted infections (STIs) or sexually transmitted diseases (STDs) and HIV and AIDS.

Sexual and reproductive health issues are important for the wellbeing and welfare of every human being. A healthy start gives children the capacity to develop a positive self-image and self-awareness as well as the capacity to establish satisfying relationships (Health Canada, 1999). According to Health Canada (1999), during youth and early adulthood, decisions about sexual activity, reproduction, and parenthood become extremely important and the best possible choices occur when a strong foundation (through communication and information sharing) has been set from the earliest days of life. When information and education related to health issues are offered during early years in life, then in mid and later years, family members have the capacities, values, and support systems to influence the quality of their life through self-awareness, strong relationships, and sexual maturity. According to Tsui, et al, (1997), sexuality education and communication are needed to contribute to changing norms and behaviour in order to build images of responsible sexual behaviour for every individual.

1.2 Statement of the Problem

Sexuality education and communication are needed to contribute to changing norms and behaviour in order to build images of responsible sexual behaviour for every individual (Tsui, et al, 1997). According to Kelly (2004), human beings have a range of thoughts, feelings, fantasies and needs that must be shared with one another. One way of sharing these feelings and thoughts with others is through communication and information-sharing. Access to information is essential for increasing people's knowledge and awareness of what is taking place around them (Ghana Statistical Service, et al, 2009). There are a variety of channels for obtaining information. Information could be obtained from reading books, listening to what other people tell you, hearing from the media both

print and electronic, learning from what one has been taught in school, church and or at home.

According to Awusabo-Asare et al (2004), various mediums of information sharing have been used, but over the last two decades, electronic media has gradually replaced print media as the main source of information on a wide range of issues, including sexual and reproductive health. Prior to the print revolution, traditional forms of transmitting information included interpersonal communication from older men and women in the community (Awusabo-Asare et al, 2004). Similarly, information on one's sexual and reproductive health was carried out by elderly women using interpersonal communication to enable the young people particularly girls transit in to puberty. This they made sure was done through puberty rites. It was aimed at avoiding pregnancy before marriage.

Sexuality health officers through national health systems aim to reduce untimely mortality and morbidity. Yet, the burden of disease from those sexual-related conditions is significant and often lifelong. Gaps in reproductive and sexual health care account for nearly one-fifth of the global burden of illness and premature death and one-third of the illness and death among women of reproductive age (UNFPA, 2004). Every minute, a woman in the developing world dies from pregnancy-related complications (UNFPA, 2007). Moreover, Ghana has one of the highest levels of maternal mortality in the West African region, with 451/100,000 live births (Ghana Statistical Service et al, 2009) although estimates now place it at 350/100,000 (United Nations Maternal Mortality Estimates Interagency Group 2010), which is still relatively high and disconcerting.

According to the World Health Organization (WHO) and UNICEF (2007), a Ghanaian woman has a one in 35 chance of dying from a pregnancy-related cause during her lifetime. According to several hospital-based studies, it is estimated that complications from unsafe abortion are a factor in 22 to 30 percent of maternal deaths, significantly more than the World Health Organization's global estimate of 13 percent (Ipas, 2012). Unsafe abortion is one of the most neglected problems of health care in developing countries and a serious concern for many women during reproductive lifespan (Morhee & Morhee, 2006). Lack of access to adequate family planning services is a major contributor to the problem of unsafe abortion (Ngom et al, 2000). Conversely, unwanted pregnancy and, in many cases, unsafe abortion are also prime indicators of the unmet need for safe and effective family planning services.

Every day, nearly one million people acquire a new STI, and worldwide, more than 340 million new cases of curable STIs and even more new viral (non-curable) infections occur each year. Up to 80% of curable STIs occur in developing world settings, and adolescents and young adults have the highest rates of these STIs (WHO, 2006). If not identified and treated promptly, STIs can cause serious long term consequences, with most morbidity and mortality rates occurring in women and infants (WHO, 2006).

According to the 2008 Ghana Demographic and Heath Survey [GDHS] report by Ghana Statistical Service (GSS), Ghana Health Service (GHS) and ICF Macro (2009), 44% of females and 26% of males are sexually active by 18 years of age. The median age at first sex is18.4 years and varies between the rural (17.9%) and the urban (18.8%) areas. Females in rural areas initiate sexual activity a year earlier than those in urban areas. The median age of marriage is 19.8 years for females (GSS, GHS & IFC Macro, 2009). It is

therefore necessary for all young people to have access to comprehensive sexuality education and information to enable them take an informed decision regarding their reproductive health as some of the key issues that affect the health of young people in Africa are sexuality, risk and decision making.

According to Merrick (2001), reproductive health outcomes are influenced by a range of multisectoral factors within three identified systems: households and communities, the health sector, and the government policies and actions. All of the factors in the system have the potential to severely restrict or enhance good reproductive health (Merrick 2001). Merrick built his argument on a framework *Pathways to Improved Reproductive Health Outcomes,* adapted from the Health, Nutrition and Population Chapter for the PRSP Sourcebook. From the framework, it is apparent that reproductive health outcomes are directly and indirectly affected by factors at different levels of the system. Traditionally, efforts have focused predominantly on issues within the health system. However, as indicated by the framework, improving reproductive health outcomes require strategic efforts that address forces from within and outside the health system.

The women that die needlessly out of the pregnancy related complications including unsafe abortions, the millions of women who are married or are in consensual union but lack access to effective family planning despite their desire to delay pregnancy, the thousands that contract sexually transmitted infections due to the misconceptions could have been avoided if clear and effective communications were part and parcel of the numerous interventions yet communicating issues on sexual and reproductive health remain a critical challenge particularly to the Ghanaian family. Lack of relevant information and inadequate knowledge on the issues are barriers to the inability of

persons to make informed decisions. Husbands and wives hardly discuss sexuality and reproductive health issues let alone parents and children. Yet for people to take appropriate decisions, they need to be well informed and until they are well informed, they cannot make the desired and appropriate decisions.

1.3 Research Questions

i. How do individuals within the family access information about reproductive health issues?

ii. What form does intra-family communication on reproductive health take?

iii. Whose role is it to share information on reproductive health issues within the family and how does this influence decision-making on issues about reproductive health?

iv. What are the challenges of communicating reproductive health issues within the family?

1.4 Rationale of the Study

According to Satia (2004), family and reproductive health are intimately related. While various forms of family exist in different social, cultural, legal and political systems, the family is the basic unit of society and as such is entitled to receive comprehensive protection and support. Despite this important role of the family, Ghana has no policy on the family per se to protect the well-being of families and individuals. Rather policies and mandates exist to address the needs of family and individuals. This study is very important for its focus and treatment of the family as an entity. Data from this research will illuminate trends affecting families and increase awareness of family issues that can stimulate efforts to develop family-oriented policies. The health and welfare of the

family, including the rights and responsibilities of all family members may have a direct influence on poverty levels and family health status. This study will provide useful information to the Ministry of Employment and Social Welfare (MESW) to consider developing a policy that will guide and protect the family as the Ministry is the mandated government ministry responsible for the family. Although there are enough data on reproductive health communication through the use of mass media, very little data exist on communication of reproductive health issues within the family setting. Secondly, currently available literature indicates that couples who communicate about reproductive health issues have improved reproductive health outcomes, yet the family encompasses more than just the couple. Outcomes and information gathered from this study will strengthen national advocacy efforts that the 'family' is a part of the overall new reproductive health strategy. This study will also provide useful information and data to researchers who might be reviewing how the family influences key reproductive health related policies (i.e., the Population Policy of 1994, the Reproductive Health Policy of 2000, the Ghana National Gender Policy and the ASRH Policy of 2000, among others which are normally reviewed every ten years).

Finally, information gathered from this study, particularly the case studies, will be useful for changing policy at the country level and planning the next cycle of UNFPA and its Government of Ghana country programme. The outcome of this research will also be useful for stakeholders from civil society, policy advocacy groups, professional associations, youth groups, public service providers, public officials and government staff, parliamentarians, local and district level government staff, bilateral and multilateral

aid agencies, inter-governmental organizations, regional networks and all advocates interested in changing global policy.

1.5 Objectives of the Study

The general objective of this study is to examine how reproductive health decision-making is influenced by intra-family communication and information-sharing within the Ghanaian family.

Specifically, the study will:

i. Explore the knowledge on sexual and reproductive health issues among family members in Ghana
ii. Find out the sources where household members acquire information on sexual and reproductive health
iii. Identify the determinants of reproductive health decision-making among men, women and young people in the family
iv. Describe the experiences and challenges faced by various family members in communicating reproductive and sexual health issues

1.6 Definition of terms

Household - A household is defined as an individual or a group of people living together, whether related or not, recognizes one person as the head and eating from the same pot.

Young Person- A young person is defined as people aged between 10 and 24 years (this was based on the UN distinction).

Reproductive Health – It comprises of Safe motherhood, Family planning, unsafe abortion and Prevention and management of STIs including HIV/AIDS

Urban Community: a settlement with populations of 5000 or more

Rural Community: a settlement with a population of less than 5000

Decision-making: in this study, usage of reproductive health service is used as a measure of reproductive health decision-making.

Effective Communication: discussions, information sharing and dialogue between two or more people to reach a consensus

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter presents a review of literature based on the components of reproductive health and intra family communication within the context of safe motherhood (maternal health), family planning, prevention and management of unsafe abortion, and the prevention and management of sexually transmitted infections (STIs) in this study.

2.2 Concept of Reproductive Health

Reproductive health is a broad concept in which social, psychological and somatic aspects of childbirth and sexuality are interwoven. In more concrete terms, WHO defines good reproductive health as a responsible, satisfying and safe sexual life with the ability to reproduce, the freedom to decide about one's childbearing and the possibility to have healthy children. Good reproductive life presupposes knowledge of and access to birth control and disease prevention, as well as safe circumstances during pregnancy and delivery. Reproductive health is in line with the broader WHO definition of health as a state of physical, mental and social well-being and not only as the absence of disease or infirmity, in all matters relating to the reproductive system (WHO, 2004).

The concept of reproductive health was introduced to the international community at the UN population conference in Cairo in 1994. This was a breakthrough for a new approach to population issues. Instead of having threat scenarios such as a "population explosion" demand prevented only by extensive promotion of family planning, women's health and living conditions themselves were placed at the centre of the agenda (RFSU, 2004;

UNFPA, 2004). Representatives from around the world united in Cairo around an action plan for reproductive health with a broad health and social perspective. The position of women was to be strengthened through access to education, maternal health and delivery care, sexual education and services for contraceptives and safe abortions. Abortion, the most controversial issue discussed at Cairo, was discussed as a health matter and unsafe abortion was recognized as a ''major public health concern''. The action plan recommended that all women have access to care in the case of abortion – both for legal abortions and for complications in connection with illegal ones. It was also recommended that abortions be prevented through access to contraceptives (Danielson and Sundstrom, 2006: 151).

Although socio-economic and distance factors often affect the utilization of maternal health care, there remains a very strong relationship between women's education and utilization. A number of routes of causation might explain this strong effect. Earlier work in South Asia has suggested that the association may be due at least in part to educated family members fostering favourable values and attitudes towards the use of modern health care (Kazi and Sathar, 1996; Sathar and Kazi, 1997). Education may impart feelings of self-worth and self-confidence, which some have argued are more important in bringing about changes in health-related behaviour than exposure to relevant information (Chanana, 1996). Schooling may also increase women's receptivity to new health-related information (Lindenbaum, 1990). A study by Maine et al., (1997) found that even when women knew about their obstetric complications, many chose not to seek care because of the poor quality of care they expected to receive. Greater education may reduce the power differential between providers and clients and lower women's

reluctance to seek care (Basu, 1996; Jejeebhoy, 1995; Starrs, 1998). In addition to increasing the likelihood that women will value and desire skilled care, education may strengthen women's ability to act on this demand. The results of the study by Furuta and Salway (2006) suggest education influences and increases discussion between husbands and wives. Chanana (1996) pointed out that younger, educated women have a greater capacity to use "the weapons of the weak," while Basu (1996) described educated women as having hidden power to influence decisions "without rocking the boat." The closeness of the husband-wife bond and the degree of communication between spouses are considered important dimensions contributing to women's household position (Jejeebhoy, 1995).

Several interventions to promote sexual and reproductive health (SRH) have been developed and implemented, mainly targeting school-going youth in Tanzania (Obasi et al. 2006). A review of these interventions has shown that although they have had an impact on young people's knowledge about SRH, they have failed to change young people's sexual behaviour (Ross et al., 2007). The recent failures of school-based interventions to show a positive impact on sexual behaviour in Tanzania (Obasi et al. 2006) and elsewhere (Ross et al., 2007; Cowan et al., 2002) may stimulate focus on the wider socio-economic context that surround young people rather than exclusively on behavioural influences on individuals.

2.3. Family Planning

Family planning, according to the World Health Organization (2006), entails the ability of individuals and couples to anticipate and attain their desired number of children and

the spacing and timing of their births. It is achieved through contraceptive methods, which are considered to represent (modern) family planning behaviours. Most studies on the determinants of family planning behaviours or contraceptive use have mainly focused on micro-level (or individual-level) factors (Goodson, 2002; Gupta et al. 2003).

The influences of demographic and socioeconomic factors on family planning behaviour are addressed within a substantial body of literature. For example, Gupta et al., (2003) observed that women with higher levels of education are significantly more likely to practise modern family planning methods, and that women with at least five living children are more likely than those with no living children to practise family planning (Magadi & Curtis, 2003). Additionally, women's age and marital status have also been identified as significant predictors of family planning, although the findings are inconsistent. For example, findings showed that single (Magadi & Curtis, 2003) or formerly married women (Gupta et al., 2003), younger (Feyisetan, 2000) or middle aged women (Magadi & Curtis, 2003) are significantly more likely to practise family planning. A few studies also showed that religious affiliation is a strong predictor of family planning behaviour. Catholics exhibit lower utilization of modern family planning methods than Muslims (Feyisetan, 2000).

Despite some progress in gender equity and/or equality, most African countries still consist of patriarchal, patrilineal, and male-dominant societies. In many patriarchal and male-dominant societies, culture dictates that "good" women are ignorant about sex and passive in sexual interactions (United Nations Population Fund [UNFPA], 2002). UNFPA notes that this makes it difficult for women to inform themselves about risk

reduction and more difficult, even if they are informed, for them to negotiate safer sex or the use of condoms (UNFPA, 2002). Varga (2003) argued that the relationship between gender norms and sexual risk taking is reflected in adolescents' sexual negotiation dynamics. He explained that, "A girl's respectability is gained by her being sexually available to her partner, allowing him sexual decision-making authority, exhibiting coyness and resistance to his sexual advances, being sexually faithful, and avoiding pregnancy" (pp.163).

Studies have suggested that a community's gender norms are a contextual factor that affects individuals' reproductive as well as sexual behaviours (Varga, 2003; Waszak et al., 2003). For instance, Greenwell (1996) found that community beliefs concerning childbearing preferences and reproductive health behaviours have a strong influence on individual attitudes toward family planning and fertility preferences. Waszak et al. (2003: 197) argued that traditional gender norms "limit a woman's ability to use family planning if she perceives herself as being bound to cultural expectations or the will of her husband". As such, it is expected that the individuals' psychological benefits of practising family planning might be mitigated by patriarchal and masculine gender norms shared in a community.

One of the many challenges in realizing informed choices in family planning is people's difficulty to make a decision when presented with a variety of health care options. They may not understand the options, they may have trouble weighing the pros and cons, and they may not have clarified in their own minds which attributes of the various family

planning methods are most important to them (O'Connor et al., 2003). In such cases, people may need support to negotiate the decision-making process.

Yet, this kind of support has been lacking in many family planning programmes. Dissemination of information is one well-documented area of weakness: often, providers do not tailor information to clients' individual situations, and the information they do give especially about clients' chosen methods may be inaccurate and incomplete (Leon et al., 2001; Miller et al., 1998; Murphy and Steele, 2000). Another weakness is providers' and clients' lack of understanding of their roles in the decision-making process. In some cases, for example, providers may believe that they know what is best for clients and that they should make all the decisions; in other cases, they may accept that family planning is the client's choice, but incorrectly believe that that means they should relinquish all involvement in the decision-making process (Kim et al., 1998; Rudy et al., 2003). The challenge is to find a balance between the client's and the provider's decision-making input (Rudy et al., 2003). The client is ultimately responsible for choosing which method (if any) to use, but the provider should inform and support the client's efforts to make a decision (Engender Health, 2003; O'Connor et al., 2003; Upadhyay, 2001).

Family planning and decision-making programmes in the past have focused on women instead of men for several reasons: women bear the risks and burdens of pregnancy and childbearing; most modern contraceptives are for women; and many providers have assumed that women have the greatest stake, and interest, in protecting their own reproductive health. Reflecting these assumptions, the clinic-based service delivery design for family planning has made it difficult to include men (Edwards, 2001). Services

have often been offered in Maternal and Child Health (MCH) clinics. Many men see MCH clinics and their staff as serving only women and children and feel uncomfortable seeking information or services in that setting (Danforth, 2004; Galbn et al. 2001; Mason and Taj, 2001).

Today's men are becoming more interested in family planning and decision-making than in previous times (Drennan, 2003). Today, family planning programmes increasingly involve men. Yet, much remains to the done to turn interest into healthy behaviour. Today's men should be encouraged to discuss reproductive health with their partners and to share responsibility for reproductive decisions under a good health care strategy. Additionally, in the era of HIV/AIDS, it is urgent for men to protect themselves and their partners by addressing the problem of sexual risk-taking behaviours. Men play powerful – even dominant – roles in reproductive decisions. Without considering their partners' wishes or the health consequences for themselves or their partners, their actions can have unhealthy and even dangerous effects. In contrast, couples who talk to each other about family planning and reproductive health can make healthier decisions. These couples are more likely to use contraception and use it wisely and effectively (Beckman, 2002; De-Silva, 2000).

When men and women do not know their partners' fertility desires, family planning attitudes or contraceptive preferences, the consequences can include unintended pregnancies and unsafe abortions (Biddlecom et al. 1997; Hudson, 2000; Hollerbach, 2000).

Men's contraceptive use is lower than might be expected, given their levels of knowledge and approval of family planning, according to surveys of men in developing countries mostly in sub-Saharan Africa. In Nigeria, men's attitudes and behaviours toward family planning and reproductive behaviour appear negative and discouraging. Nigerian men prefer that their wives attend clinics and hospitals where provision for family planning is available. For example, between one- quarter and two-thirds of these men say they do not want to have more children, but neither they nor their wives use contraception (Ezeh et al. 1996). By comparison, about one-fifth of married women state that they do not want to become pregnant but are not using any method of contraception (Robay et al. 1996).

Use of contraceptive methods involving men's co-operation including condoms, vasectomy, withdrawal, and periodic abstinence amount to about one-third of all contraceptive use among married couples. Nevertheless, the two most effective male methods (condoms and vasectomy) are among the least used of all methods (United Nations (UN) 1999). One reason for the apparent gap between men's attitudes and their contraceptive behaviour is that while men may be aware of modern contraception, they often know little about it (Green et al. 1995). With more information and encouragement, more men would be able to play positive roles in reproductive health. For example, a husband can help his wife have safe pregnancies and give birth to healthy babies if he becomes better informed about maternal and child health (Sherpa and Rai, 1997). Reproductive health care programmes can help men play supportive roles during pregnancy, delivery (Thaddeus and Maine, 2001), and breastfeeding (Sherpa and Rai, 1997). Increasing men's participation can be a promising strategy for achieving good reproductive health for all. Most research work on couples' communication, decision-

making, family planning and reproductive health behaviour has been focused on meeting potential demand for family planning.

2.4 Contraceptive Usage

The easier that contraceptives and services are obtainable, the more likely people will use contraceptives and services. From the early days of the family planning movement in developing countries, programmes have recognized the importance of making contraceptives accessible (Ravenholt and Chao, 1974). In the 1970s, providing rural populations access to contraceptives was an ongoing challenge (Huber et al. 1975). As populations have migrated to urban areas over the past two decades, this challenge of access has expanded to densely populated "slum areas" located around most large cities.

Mauldin and Sinding (1993) demonstrate that family planning programmes have made significant progress to improve access. They offer services and supplies in clinics, medical facilities, retail outlets, community centres, places of employment, and homes. In addition to service provision by formally trained physicians and nurses, services were offered by paramedics, pharmacists, traditional birth attendants, midwives, traditional healers, outreach workers, and shopkeepers (Ross et al. 1989). Access has continued to increase in recent years. For example, of 87 countries studied in both 1987 and 1992 and scoring on a scale of 0 to 100 for access to family planning information and services by Population Action International, 33 countries exhibited score increases by 20 points or more, and another 24 countries exhibited score increases by 10 to 19 points. The most dramatic improvement in access took place in sub-Saharan Africa. Botswana showed the most improvement, gaining 49 points (Population Crisis Committee, 1992).

Overall, diverse sources of family planning services increase access to contraceptives and meet the needs of various groups. Particularly in Asia and sub-Saharan Africa, government programmes are the major source of family planning. As of 1992, 33 of 42 countries surveyed by Demographic Health Survey showed that they used government services more than through private- for-profit providers, non-governmental organizations (NGOs), or other family planning providers. In 25 of these countries, governments served a majority of family planning users (Robey et al. 1992).

For the individual client, the ability to use family planning depended on many factors. Most importantly, as many family planning programmes and donor agencies have long recognized, a range of services must be within convenient reach in terms of geographic distance and travel time (Huber et al. 1975). Several factors affect access such as the time required to obtain services, the cost (including not only the cost of contraception itself but also travel cost and the opportunity cost of time away from work), and the ability to arrange for child care and other obligations, and similar constraints. While a network of clinical services is the backbone of a successful family planning programme, other distribution channels such as community-based distribution (CBD) and social marketing help to make supplies more widely available and accessible.

DHS reports show that contraceptive prevalence is higher where services are closer, as measured by both travel time and distance (Wilkinson et al. 1991). In Zimbabwe, services are not as convenient. Median travel time is 31 minutes; and the median distance is five kilometres. Prevalence is 45%. In Uganda, most people have little access, where the average person lives 60 minutes and 19 kilometres from the nearest family planning

facility. Hence, contraceptive prevalence is only 5%. In Egypt, family planning service sites are accessible to almost everyone (Egypt NPC and DHS, 1993). Nearly 96% of all Egyptian couples live within 4 kilometres and 30 minutes of a family planning facility (Wilkinson et al. 1991). Convenient access to family planning services, along with widespread access to televised information about family planning, helps to explain the rising use of contraception in Egypt, which reached 47% in 1992 (Egypt NPC and DHS, 1993). Even in countries with strong family planning programmes, urban couples have better access to services than rural couples, largely because it is costly and difficult to extend services to sparsely settled rural areas (Lopez, 1993).

Many studies have shown that adding Community Based Distribution (CBD) to clinic-based family planning services has increased the acceptability and impact of programmes (Gallen and Rinehart, 1986; Philips and Greene, 1993; Ross et al. 1989). A study, reviewing programs in Nigeria, Mali, Sudan, and Zaire, reports that CBD programmes have added an average of three percentage points to a country's contraceptive prevalence rate, independent of all other influences (Philips and Greene, 1989).

Making only one or two contraceptive methods widely available is better than failing to provide family planning at all. But only a range of effective methods can meet people's diverse needs and serve individuals over their reproductive lifetimes.

Successful family planning programs provide as many different contraceptive methods as possible. "As any marketing expert will tell us, the more choices, the more likely the consumer is to select one of the available options" (Thomas, 1993). In 12 of the 14 countries considered to have the strongest family planning programs, no single method

accounts for as much as half of all modern contraceptive use (Mauldin and Ross et al. 1991).

Each contraceptive method has advantages and disadvantages. No single method is appropriate for everyone. The more methods offered, the more likely that each client will find a satisfactory one, and they may be able to shift to new methods as their circumstances change (Bruce, 1990; Jain, 1992; WHO, 1993; Hutchings et al. 1987).

2.5 Abortion

According to a report written by Boseley (2009), about 70,000 women die every year and many more suffer harm as a result of unsafe abortions in countries with restrictive laws on terminating a pregnancy. There were 41.6 million terminations worldwide in 2003, compared with 45.5 million in 1995. However, in 2003, 19.7 million of these were unsafe, clandestine abortions (Boseley, 2009).

An unsafe abortion is the termination of an unintended pregnancy by persons lacking the necessary skills, or in an environment lacking the minimal medical standards, or both. According to a global study collaboratively conducted by the World Health Organization and the Guttmacher Institute, most unsafe abortions occur where abortion is illegal (Rosenthal, 2007). Unsafe abortion is a significant cause of maternal mortality and morbidity in the world. Approximately 95% of unsafe abortions take place in developing countries (Henshaw et al., 1999).

The World Health Organization (WHO) reports each year nearly 42 million women faced with an unintended pregnancy have an abortion (WHO, 2011); and according to the 2007 estimates by the WHO and Guttmacher Institute, 20 million unsafe abortions take place

each year, mostly in countries where abortion is illegal (Rosenthal, 2007). According to WHO and Guttmacher Institute, approximately 68,000 women die annually as a result of complications of unsafe abortion; and between two million and seven million women each year survive unsafe abortion but sustain long-term damage or disease (incomplete abortion, infection (sepsis), haemorrhage, and injury to the internal organs, such as puncturing or tearing of the uterus). They also concluded that abortion is safe in countries where it is legal, but dangerous in countries where it is outlawed and performed clandestinely. The WHO reports that in developed regions, nearly all abortions (92%) are safe, whereas in developing countries, more than half (55%) are unsafe (WHO, 2011). According to WHO statistics, the risk rate for unsafe abortion is one in 270; according to other sources, unsafe abortion is responsible for one in eight maternal deaths (Nour, 2008). Worldwide, 48% of all induced abortions are unsafe.

Almost all the unsafe abortions were in less developed countries with restrictive abortion laws. "Virtually all abortions in Africa and in Latin America and the Caribbean were unsafe," (WHO, 2011). In Asia, safe procedures outnumbered the unsafe because of the large number of legal abortions in China. Most of those in Europe and almost all in North America were safe. Where contraceptive utilization has risen such as in former Soviet countries, the abortion rates have invariably fallen. Worldwide, the unintended pregnancy rate has dropped from 69 (for every 1,000 women aged 15-44 in 1995) to 55 in 2008. The proportion of married women using contraception increased from 54% in 1990 to 63% in 2003. However, in the same 2003, only 28% of married African women used contraceptives. Lack of availability is the biggest issue.

Many illegal abortions are carried out using inappropriate surgical methods: injecting poisonous solutions into the womb or inserting objects intended to dislodge the foetus. These kinds of abortions are referred to as 'backstreet abortions' because they are often carried out by someone with little to no training, in an unhygienic environment, and in conditions of great secrecy.

The World Health Organization estimates that unsafe abortions cause the deaths of at least 200 women each day, over 70,000 women each year, yet it is 'one of the most easily preventable and treatable causes of maternal mortality. (WHO Safe Motherhood Conference, 1998). Between two million and seven million women each year survive unsafe abortion, but sustain long-term damage or disease (WHO Safe Motherhood Conference, 1998).

Long-term health problems include chronic pain, pelvic inflammatory disease and infertility. About 95% of unsafe abortions take place in developing countries. In many African countries, up to 70% of women treated for abortion complications are under 20 years old. Unsafe abortion is responsible for one in eight maternal deaths. One of the United Nations Millennium Development Goals is to reduce by three quarters the maternal mortality ratio between 1990 and 2015.

The 1994 International Conference on Population and Development in Cairo stated that, 'In circumstances in which abortion is not against the law, such abortion should be safe. In all cases, women should have access to quality services for the management of complications arising from abortion.'

The WHO's Development and Research Training in Human Reproduction (HRP), whose research concerns people's sexual and reproductive health and lives (WHO, 2011), has an overall strategy to combat unsafe abortion, comprising four inter-related activities (WHO, 2011):

i. Collate, synthesize and generate scientifically sound evidence on unsafe abortion prevalence and practices;
ii. Develop improved technologies and implement interventions to make abortion safer;
iii. Translate evidence into norms, tools and guidelines, and
iv. Assist in the development of programmes and policies that reduce unsafe abortion and improve access to safe abortion and high quality post abortion care.

A 2007 study by Sedgh et al. (2007) found that, although the global rate of abortion declined from 45.6 million in 1995 to 41.6 million in 2003, unsafe procedures still accounted for 48% of all abortions performed in 2003. It also concluded that, while the overall incidence of abortion in both developed and developing countries is approximately equal, unsafe abortion occurs more often in less-developed nations.

Pro-life critics contend that the results of Sedgh et al. (2007) are flawed, as there are no accurate statistics about abortion from countries without socialized medicine, particularly those in the developing world (Mosher, 2007; Lyons, 2007). In a 2005 report, the WHO itself states, "More than a third of the 204 countries or areas examined did not report the number of deaths by sex even once for the period 1995 to 2003. About half did not report deaths by cause, sex and age at least once in the same period. Moreover, from 1975 to

2003, there has been limited progress in the reporting of deaths and their causes (United Nations Department of Economic and Social Affairs, 2006).

Women's opportunities for preventing unwanted births are still limited in many parts of the world. In the absence of knowledge or access to contraceptives and safe abortion, illegal abortions are often the only way out. According to Danielson and Sundstrom 2006), an estimated 46 million abortions are performed each year, 20 million of which are medically unsafe and often illegal. Around 70,000 women a year throughout the world die as a consequence of unsafe abortions. In African countries south of the Sahara, between 30% and 50% of maternal mortality is related to abortion. In addition, many women are afflicted by complications such as urogenital infections and infertility (Danielson et al 2006 p.151). There is some quantitative information available regarding the profile of abortion seekers. However, these studies have not examined the reasons why women seek an abortion. Decision-making is one of the least studied areas of abortion behaviour.

2.6 Sexually Transmitted Infections

Sexually transmitted infections (STIs) are often used as a generic term for various infectious diseases that are spread via sexual intercourse. A sexually transmitted disease (STD) is a virus, fungi, bacteria or parasite that can be spread through sexual acts. It is vitally important to realise that most STDs can be spread without any sexual contact at all. Some STDs can be picked up from used towels, and some, like fungi STDs, exist in everyone's bodies already but do not cause trouble until they start growing.

STIs are more serious for women than for men since women risk more severe complications such as extra-uterine pregnancy, infertility and cervical cancer. The prospects for treating STIs vary by the various diseases. Bacterial infections, (syphilis, gonorrhoea and chlamydia) can be cured with antibiotics while there are no curative medicines for the viral diseases (condyloma, herpes and HIV). For the latter, palliative treatment is available. All STIs, however, can be prevented, for example, through the use of condoms and contact tracing (Danielson and Sundstrom, 2006, P: 156).

Danielson and Sundstrom (2006: 157) have observed that the sharp increase in the proportion of young people infected with chlamydia in recent years indicates that condoms are not being used to a sufficient extent. Young people are protecting themselves more against unwanted pregnancies than against STIs. To them, condoms are commonly used during the first intercourse but thereafter, chiefly contraceptive pills are used as protection. The two methods are seldom combined. Many investigations show that young people have fairly good knowledge of STI prevention but find it difficult to put this knowledge into practice.

STIs and STDs treatment varies per type. Bacterial, fungi and parasitical diseases are usually fairly easy to treat if caught early, while viral diseases are difficult if not impossible to completely cure. Pelvic inflammatory disease is a common complication of several STDs. Technically speaking, pelvic inflammatory disease is defined as an infection of the womb, ovaries and fallopian tubes and only applies to women. However, men can get their prostate or testes infected. Gonorrhoea and chlamydia are the most common culprits, but even an untreated yeast infection can lead to pelvic inflammatory

disease (PID). It can be treated if caught promptly, but if it goes on too long permanent damage can result. The symptoms of PID are pain in the lower abdomen, fever, a discharge with a truly bad odor, pain during sexual intercourse and bleeding from the genitalia. Possible permanent damage includes scar tissue in the reproductive organs, chronic pain and infertility. In addition, PID can contribute to something called an ectopic pregnancy, where the fertilized egg implants in the fallopian tube rather than in the uterus where it is supposed to. Ectopic pregnancies can cause severe pain, internal bleeding, infertility and death.

Many STDs can significantly raise chances for cancer. The best known is the human papilloma virus, or HPV, which is often linked to genital cancer in both men and women. Hepatitis A, B and C can all also contribute to cancer of the liver, while human T-lymphotropic retrovirus type causes leukemia or lymphoma. The HIV virus that causes acquired immunodeficiency syndrome (AIDS) is perhaps the most famous STD that suppresses the immune system. HIV does so directly, targeting and killing the white blood cells that the body uses to fend off disease. However, almost any STD can have a negative impact on the immune system as a whole. Every time the body has to fight one invader off, it steals away energy and resources needed to fight other invaders. Untreated STDs can give other opportunistic infections the opportunity to cause complications.

2.7 Communication and Reproductive Health

Communication on reproductive issues among couples is important to enable them make sound decisions. A study conducted by Araoye (2006) among couples in Kwara State,

Nigeria found that respondents' attitudes were generally positive towards women's participation in decision-making. Araoye observed that, the locus of control for decision-making was commonly both husband and wife, rather than dominated by a male or a female. Despite this finding, only 53.2% of males and 58.1% of females had actually discussed desired family size with their spouses, while even fewer – 36.6% and 35.1% respectively – had discussed family planning methods with their spouses in the preceding six months. She concluded that strategies to mobilize both men and women for reproductive health promotion are desirable for improved reproductive health.

Similarly, a study by Furuta and Salway (2006) in Nepal found that few women reported participation in household decision making, and even fewer had any control over their own earnings. However, more than half reported discussing family planning with their husbands, and there were significant differences among subgroups in these indicators of women's position within the household. The study also revealed that, although associations were not consistent across all indicators, spousal discussion of family planning was linked to an increased likelihood of receiving skilled antenatal and delivery care. The study concludes that gender inequality constrains women's access to skilled health care in Nepal. Therefore, interventions to improve communication and strengthen women's influence deserve continued support. Given the strong association between women's education and health care utilization, Nepali decision-makers see the need to increase girls' schooling and alter perceptions of the value of skilled maternal health care. According to the Population Council (2001), the international reproductive health community has acknowledged the importance of addressing gender disparities in sexual relations and reproductive health decision-making as fundamental to improving the

reproductive health and rights of both women and men. The Council was of the view that gender-based power inequalities can contribute to poor health outcomes such as hindering communication between partners about reproductive health, constraining women's access to reproductive health services, preventing women's and men's attainment of sexual health and pleasure, and by increasing the risk of contracting HIV infection and other STIs.

Gender inequality in reproductive decision-making is a key constraint in the social context of reproductive health. Research shows that couples often disagree about the desirability of pregnancy and the use of contraceptives (Speizer, 1999; Bankole and Singh, 1998; Becker, 1999). When this discordance occurs in a situation of male authority, men's opinions about these issues may overrule women's, even though the women often must implement the decisions made on these matters. In some cases, husbands fear that if they approve of family planning and allow their wives to use it, they will lose their role as head of the family, and their wives may be unfaithful or they may lose face in their community (Watkins et al., 1997; Bawah et al., 1999). Even when men approve of family planning in theory, they may disapprove of their partners' practising contraception and may be unwilling to use male condoms (Blanc, 2001). As a result, women may sacrifice their own wishes to fulfil those of their partners or their perception of their partners' wishes (Speizer, 1999). Alternatively, women may practise contraception covertly, potentially exposing themselves to financial vulnerability or emotional or physical violence if discovered (Population Council and IGWG, 2001). Conversely, women who have some decision-making power and autonomy often are

better able than other women to meet their reproductive health goals (Kishor, 1995; Kishor, 2000; Kritz et al., 2000; Mason and Smith, 2000).

The bargaining power between men and women in Latin America, for instance, on these and other issues is undergoing transformation, in tandem with rapid social, economic and political changes in the region (Vigoya, 2001). In many parts of postcolonial Latin America, men of varying classes and ethnicities have historically acted as family providers and patriarchs, assuming responsibility for their families' reproductive health decisions and controlling their wives' access to reproductive health services (Hirsch, 2003). Over the past few decades, however, civil wars, growing feminist movements, high rates of unemployment, inflation and migration, and increased global media access have spurred major changes. Central American women are now staying in school longer, migrating to urban areas, participating in the labour force, marrying later, using contraceptives and having smaller families (Work Bank, 2003). For men, similar changes, including increased migration to urban areas, later marriage, and greater acceptance and use of contraceptives are taking place. The effects of these changes on gender-related decision making and reproductive health decision-making in particular are unclear and difficult to disentangle. A clearer understanding of power and bargaining processes in sexual relationships requires an examination of partners' influence relative to one another regarding decision-making on intra-household and extra-household matters and should take into account how the broader political, social and economic contexts shape partners' decision-making power (Blanc, 2001).

The results of a study by Speizer et al., (2005) provide important information about reproductive decision-making in Honduras for subsequent development of programmes targeting men's participation. The results underscore the need for public health efforts that recognize power imbalances and promote gender equity, especially among those categories of women and men who are the most likely to report male-centered perspectives (rural residents, persons in consensual unions and those with relatively little education). Instructing women to talk with their husbands about reproductive decision making would probably be unhelpful in places where prevailing gender norms do not encourage this type of communication.

Communication and decision-making play a vital role in assuring informed choices regarding family planning and reproductive health behaviour (Oladeji, 2008). Effective communication and decision-making empower people to seek what is best for their own health, and to exercise their right to quality health care (Rimal et al. 2002). It also facilitates decisions regarding how individuals control their fertility and whether one uses a family planning method – before ever seeking contraception use. A growing number of family planning and other reproductive health care programmes and providers report that men deserve more attention for the mere fact that men are potential partners in and advocates for good reproductive health rather than bystanders, barriers or adversaries (Oladeji, 2008: 99).

Many studies and policies have been based on the assumption that if women were more involved in household decision-making and had more control over financial resources, they would be more likely to use health services and, hence, to have better health

outcomes (Furuta and Salway, 2006). However, results of Furuta and Salway's (2006) study reveal a more complex picture, showing diverse relationships between the outcomes of interest and the four indicators of women's position within the household. Their findings help identify both the changes in women's position within the household needed to improve health care use and the usefulness of various empirical measures of their position.

Differences between groups of women in their use of maternal health services may be further influenced by factors unrelated to differences in their household position. Studies by Furuta and Salway (2006) found a strong association between a woman's discussion of family planning with her husband and the receipt of both antenatal and delivery care. This association could be explained by the fact that individuals who discuss family planning tend to be more open to modern ideas and therefore more likely to opt for skilled maternal health care. That is, the route of causation could be unrelated to intra-household gender relations. However, a plausible argument supported by recent qualitative work in Nepal (Mullany et al., 2005) is that women who discuss family planning with their husbands also communicate more about other matters, reflecting a more open, egalitarian relationship. Communication between partners about contraception may also indicate greater male involvement in matters that are traditionally identified as belonging in the "female" realm and therefore potentially stigmatizing for men. Thus, at least part of the association may reflect improvements in household gender relations that are translated into increased use of maternal health care. It seems likely that such communication would largely operate by increasing the chance that women (or

couples) would act on pre-existing demand for care, although it may also influence demand through the exchange of information and support.

In seeking to explain these low levels of health care use, most research has focused on the provision and geographic accessibility of services. However, no studies have looked at how socio-cultural factors, such as inequitable gender roles and women's position within the household, have influenced use of services. Some studies in South Asia have suggested various ways in which gender roles and relations may operate to restrict women's access to health care during pregnancy and at the time of delivery. Mumtaz and Salway (2006) outlined the following:

i. Heightened restrictions on women's movement because the pregnant state is considered "shameful,"
ii. Young women's lack of autonomy within the family and the fact that pregnancy-related knowledge and decision-making authority are commonly vested in older women,
iii. Young women's lack of influence over material resources, and the exclusion of men who are often the primary decision-makers and users of material resources.

Additionally, there is a growing body of literature that explores the links between women's household position and contraceptive use in South Asia (Durrant and Sathar, 2000; Hakim et al., 2003). However, there is little research on how women's household positions are related to their use of maternal health care services. It is widely asserted that increased gender equality is a prerequisite for achieving improvements in maternal health. The Programme of Action adopted at the 1994 International Conference on Population and Development stated that "improving the status of women also enhances their decision-making capacity at all levels in all spheres of life, especially in the area of

sexuality and reproduction" (UNDP, 1994). In Nepal, the low social status of women has been identified as a hindrance to progress towards national health and population policy targets (Tuladhar, 1997; Rimal, 2002). Although it seems reasonable to assume that greater equality within the household leads to higher use of maternal health care services, this factor has not been explored for Nepal. Little is known about how intra-household relations constrain or facilitate access to health care, or about the dimensions of women's household position that are most critical for achieving increased use.

Furuta and Salway's (2006) study examines the influence of four indicators of women's household position on the receipt of skilled antenatal and delivery care: their involvement in decision making about their own health care, their decision-making and about large household purchases, their employment and control over their own earnings, and their discussion of family planning with their husbands.

Lack of communication about family planning may be associated with misperceptions about a spouse's views on family planning, which, in turn, may inhibit mutual decision-making. In a Zambian study, the odds that women used a method covertly, rather than using no method, were about four times as high among those who were not comfortable talking to their spouses about family planning as among others; furthermore, husbands' disapproval of contraception appeared to work through spousal communication, rather than having a direct influence on covert use (Biddlecom and Fapohunda, 1998). Men and women who do not communicate with their spouses about family planning may not be aware that their spouses view contraceptive use positively (Oni and McCarthy, 1991).

In settings where family planning use is a sensitive issue and overt spousal communication is uncommon, men and women perceive such exchanges differently, and their underlying motivations and perceptions guide negotiation strategies between partners (Blanc et al., 1996). Other factors that may inhibit spousal communication are household crowding (Lozare, 1976), fatalism and perceived worthlessness of such discussions (Crisol, 1974), dominance of other relatives (such as mothers-in-law) in reproductive decisions (Poffenberger, 1969) and embarrassment about discussing family planning (Lozare, 1976). Behaviour change interventions like mass media campaigns intended to promote family planning may influence psychosocial factors associated with spousal communication, which in turn, leads to family planning use. For example, in studies in Tanzania and Nepal, people who were exposed to a media programme and communicated with their spouses held more accurate perceptions of their spouse's attitude toward family planning than those who were not exposed (Sood and Boulay, 2000).

Furthermore, partners in unions who communicate may perceive their spouses to be more supportive, feel less fatalistic about childbearing and more in control of their reproductive decisions, and be less embarrassed about discussing these issues with their spouses than partners who do not communicate. By encouraging couples to discuss family planning issues, these perceptions indirectly lead to the adoption of family planning. In Tanzania, spousal communication about family planning, which was stimulated by exposure to a radio soap opera, played an important role in the adoption of contraceptive options (Rogers et al., 1999). However, spousal communication may be independent of media exposure. Women who discuss family planning with their partners may be more likely

than others to use contraceptives, not because they have been exposed to mass media messages on family planning but because they want fewer children (Meekers and Oladosu, 1996).

The effect of spousal communication upon family planning use may also be mediated by the relative power of each spouse in the decision-making process. A study in Uganda suggests that women's social and economic vulnerability inhibits their ability to express and argue for their own interests with their partners, and recommends an explicit consideration of gender inequality as an important component of the study of reproductive outcomes (Blanc et al., 1996). A study in India found that husbands were the principal decision-makers and initiators of discussions about family planning (Raju, 1987). As one group of researchers has noted, power imbalances in marriages favour men, and the husband's opposition to contraception may be sufficient to block use in many cases, but the reverse—the wife's opposition preventing use if the husband is favourably inclined—will occur less often. The researchers conclude, "this asymmetry means that when spouses disagree, women's family planning aspirations will more often be frustrated by men's decisions" (Biddlecom et al., 1997).

Recent literature supports the view that couples' joint decision-making forms the basis of family planning use. "Programmes aimed exclusively either at men or women may fail in their purpose, because most sexual, family planning, and childbearing decisions are made or may potentially (and perhaps ideally) be made by both partners" (Becker, 1996). It is instructive to distinguish between contraceptive use resulting from a joint planning process and use by either spouse alone without consultation. A study in the Philippines,

however, failed to show that joint decision-making was more strongly associated with contraceptive use than individual decision-making. Presumably, as the researchers pointed out, because the index of decision-making used could have been faulty, and husbands' tendency to consider family planning women's concern may have muted the differences (Lozare, 1976). It remains to be conclusively shown, therefore, whether couples' joint decision-making is more strongly associated with family planning use than is decision-making by either spouse alone. Of particular interest are the dynamics of the decision-making process and whether and how spousal communication affects this dynamic (Dodoo, 1998).

Communication at all levels (namely, personal, family, community, and mass media) plays a major role in individual decision-making in the field of reproductive health (Piotrow, Kincaid, Rimon, & Rinehart, 1997). Piotrow et al. (1997: 2) have viewed the role of communication as the key process underlying changes in knowledge of the means of contraception, in attitudes toward fertility control and use of contraceptives, in norms regarding ideal family size, and in the openness of local cultures to new ideas and aspirations and new health behaviour.

Exploring the influence of communication on reproductive health has been considered one of the important perspectives to encourage people to practise family planning. Valante and Saba (1998) argued that communication campaigns that disseminate information about family planning methods and services will increase the demand for family planning services and eventually lead to reduced fertility.

Studies on individuals' exposure to mass media and family planning have found that exposure to contraceptive-use messages increases the likelihood of practising contraception (Cammack and Heaton, 2001; Gupta et al., 2003; Stephenson and Tsui, 2002). It should be noted, however, that the effect of mass media on behavioural outcomes might be mediated by interpersonal communication among individuals. According to a traditional hypothesis of media effects, the mass media is effective at changing awareness, knowledge, and attitude, but interpersonal communication is often necessary for behavioural change (Chaffee, 1982). Several studies have shown that mass media campaigns have an indirect effect on health behaviour through their effects on interpersonal communication, attitudes, or social norms regarding health-related outcomes (Rimal et al. 1999; Storey et al. 1999; Valante and Saba, 1998).

Rimal et al. (1999) showed that exposure to media campaign messages not only has a direct effect on overall health behaviours regarding cardiovascular diseases, but it also affects health information-seeking and interpersonal communication, which in turn, affect the health behaviours. Storey et al. (1999) also found that the Radio Communication Project (RCP) in Nepal had a significant indirect effect on modern family planning through interpersonal communication about family planning. Although communication has been described as a "cross-level" discipline, research too often has focused on individual use of communications, neglecting the more dynamic, multi-level nature of communications (Price et al. 1991). Paisley (1984), for instance, suggested that communication scholarship should pay attention to processes operating at cultural, social, and psychological levels. Pan and McLeod (1991) discussed several cross-level communication theories by nature, and Mutz (1998) coined the term *impersonal influence*

to emphasize the power of normative social influence that media can bring to people's everyday lives.

A large proportion of studies mainly from developed countries have been conducted on how parents influence adolescent sexual behaviour (Crosby et al. 2001; Voisin, 2002). There is also a growing body of literature from sub-Saharan Africa on the role of parents in young people's behaviour (WHO, 2007; Nyalali, 2009). Several programmes focused on the role of parenting in improving adolescent SRH have been implemented, and experience from 30 of these programmes were described in a World Health Organization review (WHO, 2007). In East Africa, there have been efforts towards exploring parent-child relationships and specifically parent-child communication. For example, Kinsman et al. (2000) and Muyinda et al. (2003) have explored the use of traditional forms of socialization (i.e. the Senga) in Uganda. Similarly, the "straight talk campaign" programme was explored and it has demonstrated the general willingness of parents and other adults to create a supportive environment for young people (Adamchak et al. 2007). In Kenya, programmes such as "families matter" work directly with parents and their children to improve intra-familial communication about sexuality and sexual risk (Miller and Vandenhout, 2007). In Tanzania, Nyalali et al. (2009) have examined general parent-child relationships and pointed to the strong social desirability biases inherent in questionnaires with parents about their relationships with their children.

Although there is overwhelming evidence of the need to involve parents as part of the comprehensive strategy for improving young people's health and development (WHO, 2007), there has been conflicting findings on whether parents in sub-Saharan Africa

communicate with their children about SRH and on the effect of such communication on young people's sexual behaviour. While some studies have shown that adolescents who discussed sex with parents were less likely to engage in unsafe sexual behaviours (Mireku, 2003; Ngom et al. 2003), other studies have not found a consistent relationship between parent-child communication and sexual risk behaviours (Fuglesang, 1997; Babalola et al. 2005). These differences may be attributed to the content, timing and frequency of communication as well as the actual characteristics of parent-child relationships.

In SSA, a few studies have focused on young people's family interactions through parent-child communication about sexual intercourse (Mireku, 2003) and material support (Omoteso, 2006; Oyefara, 2005). These studies have mainly focused on schooling young people with little consideration for the role that out-of-school young people play in the sexual decision-making of those attending school. While the above studies have identified some effects, the studies are too few to produce conclusive findings. They have recommended parental involvement in guiding adolescents in making responsible decisions about sex (Omoteso, 2006; Oyefara, 2005). The recommendations, however, do present some shortfalls because they do not explore whether parents currently do this in actuality, how the parents would guide their children, what exactly the parents should communicate, and why they should communicate.

Moreover, most of the studies focusing on communication about SRH in the developed countries (Henrich et al. 2006) and sub-Saharan Africa (Mireku, 2003) have focused exclusively on secondary school going adolescents or those at tertiary levels (Omoteso,

2006). This approach, though relatively easy to execute, still omits young people out of school or in primary school. As many of the East African countries still strive to achieve the Millennium Development Goal (MDG) on universal primary education, only 39% of young people attend primary school and 23% reach secondary school (UNICEF, 2007). In Tanzania, only 13% of children reach secondary school (UNICEF, 2007). Young people who attend school may be very atypical in terms of relative affluence, knowledge of HIV and AIDS and the ways they think about the future.

The importance of spousal communication is often emphasized in family planning programmes and research. In some analysts' view, it is the first step in a rational fertility decision-making process (Mott and Mott, 1985). Numerous studies show that the amount of communication that occurs between partners is positively associated with contraceptive use (Kamal, 1999; Lozare, 1976). Spousal communication concerning contraception, especially in developing countries, remains rare (Becker, 1996).

While the association of spousal communication with family planning use is widely recognized, the sequence of the relationship as to whether spousal communication precedes or follows adoption of contraception is unclear (Dodoo, 1998). A common assumption is that communication leads to family planning use, but the reverse could also be true. For example, one study by Shivnandan and Borkman (1986) suggests that use of natural family planning methods leads to greater communication, because couples need to talk about the reproductive cycle.

In a family planning communication study conducted in Pakistan (Rukanuddin et al. (1988), 63.8 percent of currently married female contraceptive acceptors attributed

husband-wife communication as the specific source for motivation to adopt family planning. On the other hand, 29.5 percent of contraceptive users reported interpersonal communication with friends, relatives and neighbours as the specific source for motivation to adopt family planning.

In the review of literature on communication, information sharing and reproductive health within the family, it was observed that there is lack of literature on this subject particularly in sub-Saharan Africa. This assertion is supported by Biddlecom et al (2009), which states that another dimension of parenting is communication yet in Sub-Saharan Africa, available evidence suggests that parent-child communication about sex-related matters is not very common and at times is fraught with discomfort, especially communication with fathers. This is a gap that this research intends to seal with information gathered.

2.8 Conceptual Framework

This study is based on the framework of Tom Merrick's 2004 *Pathways to Improved Reproductive Health Outcomes*. The framework allows one to conceptualize the interconnectedness of variables – effective communication, information-sharing and informed choices that affect reproductive health outcomes – since health outcomes are influenced by a range of multi-sectorial factors including family, household, and community behaviours.

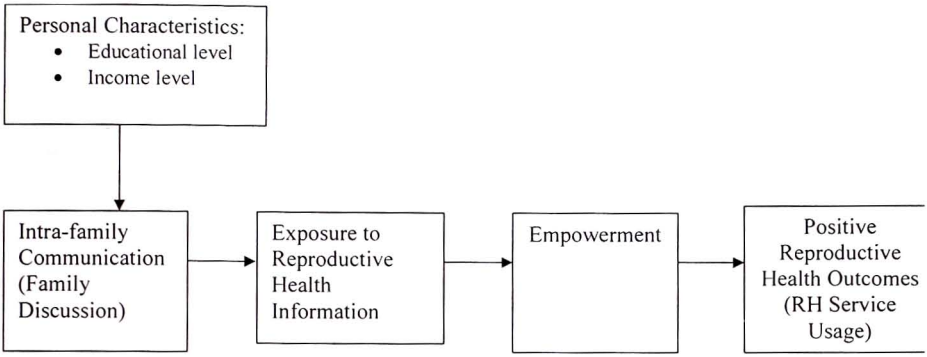
According to Merrick (2001), individual and family behaviours at the household level have an impact on health and such behaviour is often related to educational level, access to health services, communication among household members, membership of formal

and informal support networks, and information and knowledge due to exposure. Health-promoting behaviour requires not only knowledge about how to prevent disease and promote health but also the ability to act on this information. Much of health-promoting behaviour takes place within families. Decisions about whether healthy practices are worth the time, effort and money to carry them out are made within families (Merrick, 2001).

According to Merrick (2001), researchers and research studies have historically treated all members of a family or household as a single unit, assuming that benefits for one member will be equal for all other members. This may not be the case or the reality. It is widely acknowledged that intra-household differences in gender and age may significantly affect how decisions are made and whether a decision is beneficial for all. Thus, an understanding of communication, information sharing and decision-making is critical to policy decisions that affect families.

Figure 2.1 presents a model wherein effective intra-family discussion or communication is more likely to exist in households with higher education and higher income. In turn, such effective family discussion increases exposure to reproductive health messaging or materials, and exposure leads to empowerment. The empowerment may result from enhanced self-confidence, increased knowledge, and increased intention to take advantage of particular reproductive health services. In the model, empowerment finally leads to positive reproductive health outcomes.

Figure 2.1: Conceptual Framework Showing Projected Pattern of Relationship among the study variables



Source: Merrick (2001), with modification

2.9 Hypothesis

The study attempts to test the following hypotheses:

i. There is no significant relationship between educational level and intra-family communication such that the high level of education of individual will not have any influence on the frequency of intra-family discussion about sexual and reproductive health issues.

ii. There is no significant relationship between economic status (using income as an indicator) and intra-family communication. This is to say that the economic status of a family does not promote sexual and reproductive health communication in the family.

iii. There will be a significant positive relationship between intra-family discussion and use of reproductive health service. Effective family (household) communication improves usage of reproductive health services and methods.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the details of the methodology adopted for this study. Particularly, the chapter provides a profile of the research setting or study area so that persons unfamiliar with the research setting can familiarize themselves in order to understand why certain methods were adopted. In addition, the research design, data collection method, procedure for data analysis, data quality assurance and control, population and sample are all discussed in detail. Data quality control was maintained in accordance with ISO 20252 (international standards for market, opinion and social research).

3.2 The Study Area

The study area comprises six districts in the Volta Region of Ghana, namely Ho, Krachi, Kadjebi, Hohoe, Ketu and Akatsi. This constituted nearly 33% of the total number of districts (18) in the region. These districts were chosen based on purposive sampling. Volta Region was chosen for this study because of its geographical and cultural diversity compared to other parts of Ghana and its useful sub-division into the northern, middle and southern zones (Government of Ghana/ United Nations Population Fund [UNPFA], 2006). The findings can easily be compared to other parts of the country which is divided into three ecological zones: the sandy coastline backed by coastal plain, the middle belt which is heavily forested and has many rivers and streams and a northern savannah which is drained by the black and white Volta Rivers (Ghana Statistical Service, 2008). Additionally, these districts were chosen because:

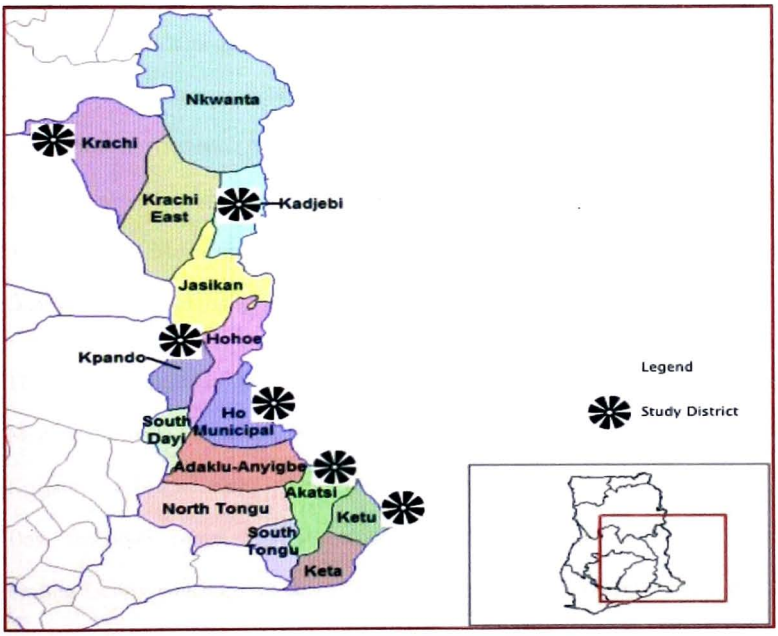
i. The socioeconomic conditions of the residents are typical of much of Ghana,

ii. Accessibility of these districts in terms of both the people and the localities, and

iii. Familiarity of the people and the geographical locations by the researcher.

It is important to note that the social and economic status of the residents and the participants has implications for accessibility of health facilities. In the following paragraphs, a brief description of the Volta Region is provided followed by descriptions of the individual districts involved in the study. Figure 3.1 presents a map of the Volta Region and the study districts.

Figure 3.1 Map of the Volta region showing Study area



Volta Region is located along the southern half of the eastern border of Ghana, which it shares with the Republic of Togo. Greater Accra, Eastern and Brong Ahafo regions share boundaries with it on the west, on the north by the Northern Region, and on the south by the Gulf of Guinea. The region occupies an area of about 20,570 square kilometres or 8.6 per cent of the total land area of Ghana. The region has a length of about 500 kilometres, stretching from the south to the north. It encompasses most of the vegetation zones found in the country, that is, the coastal grassland and mangrove swamps, replete with sandy beaches, the guinea savannah, from moist semi-deciduous forests in the central highland areas to the undulating Sahel-savannah and the mountainous wooded savannah in the north. The region's mountains form part of the Togo Range, which stretches from parts of the Ashanti and Eastern regions into the Republic of Togo. The highest mountain in Ghana, Mount Afadzato (Avadzeto), located in the Hohoe District, is part of this range. This mountain, together with several picturesque physical features such as the Vli waterfalls near Mountain Gemi (Amedzofe) and the monkey sanctuary in Tafi (Hohoe District) are some of the region's tourist attractions.

There are 18 districts in the Volta Region, namely; Adaklu-Anyigbe, Akatsi, Biakoye, Ho Municipal, Hohoe Municipal, Jasikan, Kadjebi, Keta Municipal, Ketu North, Ketu South, Kpando, Krachi East, Krachi West, Nkwanta South, Nkwanta North, North Tongu, South Dayi, and South Tongu. The most popular health facility in the region is the traditional healing facility which constitutes about 54 per cent of all the health facilities in most districts. Clinics constitute 37 per cent of the health facilities while hospitals constitute only about seven per cent. The greatest concentration of hospitals and clinics are in Keta,

Ketu, North Tongu, and Kpandu, with Hohoe having just one hospital but as many as 14 clinics (Ghana Statistical Service [GSS], 2000). Orthodox medical facilities are relatively inaccessible to the rural communities, while traditional healing facilities are within easy reach of between 80 to 100 per cent of all localities. Many people in the region, therefore, resort to the services of traditional healers on whom they rely considerably for their primary health care needs.

3.2.1 Ho Municipality

Location and Size

Ho Municipal is one of the twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The Municipality is also the administrative capital of the People of the Volta Region. The Municipality lies between latitudes 6 ° 207 N and 6 °55 N and longitude 0 ° 127 E and 0 ° 53 E. The Municipality shares boundaries with the Republic of Togo to the east, to the west with Ho West District, to the north with Hohoe Municipality and to the south with Agotime–Ziope. The Administrative capital of the Municipality is Ho.

Population

The total population of Ho Municipality is about 200,000 according to the year 2000 population and housing census. The urban population comprising three towns in the Municipality as details in being 37% while the rural population is 126,107 being 63%. The average household size in the urban centres range between 4.1 to 4.7 whilst that of rural settlements range between 3.2 to 6.6 The average annual population growth rate in the Municipality is 1.17%. This is below that of the national figure of 2.7% and regional average of 1.7%.

Health Profile

The Ho Municipality has a total of 45 health facilities out of which 43 are under the Ghana Health Service and the rest are Mission and Private owned. In general, the health status of the people in the Ho municipality is improving gradually. More infants and young children are surviving and adults are living longer. However there exists some cultural and religious resistance to the use of modern drugs to treat illnesses, resulting in fluctuating figures in the health indicators like maternal mortality rate, Infant mortality rate, and measles, malaria, and guinea worm cases.

Educational profile

The municipality has a total of 162 Pre-Schools, 185 Primary, 114 Junior Secondary Schools, 22 Senior Secondary Schools, 1 Training College and 1 Polytechnic in the Ho Municipality. The school dropout rate is 2.8% in the Primary and 4.1% in the JSS the previous academic year 2004/2005.

Economy

The economy of the Ho Municipality is not particularly buoyant. The formal sector of the economy is made up mainly of employment in the public service and private construction companies. Other economic activities in the municipality are petty trading mostly in the urban areas and subsistence farming, animal rearing, artisanery and vocations such as hairdressing and dressmaking. About 63% of the population in the rural areas are engaged in subsistence farming as their primary occupation.

3.2.2. Kadjebi District

Location and Size

Kadjebi District is one twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The District has its Administrative Capital at Kadjebi. The District was created as an assembly by Legislative instrument (L I) 1465 in the year 1989. The District is located in the south-northern belt of the Volta Region of Ghana. The District shares boundaries with Nkwanta South to the north , to the south with Jasikan District, to the west with Krachi East District and to the east with Republic of Togo.

Population

The 2000 Population and Housing Census stated that the total population of Kadjebi district is 51,998. Out of the 51,998total population 84.1% are rural, while 15.9% are urban. The Kadjebi District is the least populated district in the Volta Region. It provides only 3.2% of the total Volta Region population of 1, 6235,421. The population growth rate of the district stands at 4.9%. This is considered too high compared with the growth rates of 1.9% and 2.7% for the Region and the Nation respectively. There were 8,314 houses and 12,483 households with the average household size of 5.3 in the district during the 2000 Population and Housing Census. The separate and the compound houses are the main type of dwelling units in the district. However, a sample household's survey provided household size of 9.5 persons. With a large household size of 9.5, there is the corresponding high household expenditures on food, transport, clothing, education and health services.

Health Profile

The district has seven (7) public health institutions. The Mary Theresa Catholic Hospital at Dodi-Papase is the only hospital in the District by national standard. Infant mortality

rate is 0.1% and maternal mortality rate is zero. Also prevalent in the district is the HIV and AIDS. Out of the 66 number of reported crises 19 are males and 47 females. Since the district shares a border with the Republic of Togo, there are cross-border activities, which go to increase the prevalent rate of the disease and make it a critical issue for the district.

Education Profile

The district has 13 nursery schools, 72 primary schools, 30 junior secondary schools, two senior secondary schools and one vocational school. Total enrolment is 13,731 and there are 530 trained teachers and 79 untrained ones.

Economy

The Kadjebi district is predominantly an agricultural producing district. 62.5% of the economically active population are engaged in agriculture and animal husbandry, 14.8% are in the production and transport sector, while 1 1.1% are in the trading sector.

3.2.3 Hohoe Municipality

Location and Size

Hohoe Municipal situated in the middle of the Volta Region is one of the twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The Administrative Capital of the Municipality is Hohoe. The Municipality Shares boundaries with Afadjato District to the north, to the south with South Dayi District , Ho Municipal and Ho West District respectively, to the east with the Republic of Togo and to the west with Kpandu Municipal

Population

The 2000 population and housing figure for Hohoe Municipal is 144,511 with the gender

breakdown established as 70,754 males and 73,547 females. Using the number of settlements that have attained the 5000 population mark, the Municipality is essentially a rural one. Hohoe is the only urban settlement. The average household size is 4.4 (the urban figure is 4.3 and the rural 4.6). Comparative national average size for urban and rural areas is 4.3 and 4.9 respectively. Households numbering 7172 lived in the urban areas while the rest 25672 were in the rural areas.

Health Profile

The district has seven (7) public health institutions with the Mary Theresa Catholic Hospital at Dodi-Papase being the only hospital in the District by national standards. Infant mortality rate is 0.10% and maternal mortality rate is zero. Also prevalent in the district is the HIV/AIDS. Since the district shares a border with the Republic of Togo, there are cross-border activities, which go to increase the prevalent rate of the disease. There is the need to curb the HIV/AIDs. The Health institutions within the district have acute shortage of Professional staff. The district has only one (1) Medical Officer, thirty-one (31) Nurses of various qualifications and thirty-six (36) other categories of workers.

Education profile

The formal education system in the municipality, as of 1997, comprised 88 kindergartens, 129 primary schools, 80 junior secondary schools, 10 senior secondary schools, two training colleges, one technical institution and one special education school for the deaf.

Economy

Majority of the people of the Municipality (about 65%) are engaged in agricultural production and the technology employed is largely the traditional cutlass and hoe. Agriculture continues to offer employment to about 70% of the population in the district.

3.2.4 Ketu South District

Location and Size

Ketu South Municipal with its administrative capital Denu is one of the twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The Ketu South Municipal established by Legislative Instrument (LI) 1469 of 1989. The Municipal shares boundaries with Ketu North District to the north, the Republic of Togo to the East, the Gulf of Guinea to the south and to the west with Keta Municipal. The municipality serves as the Eastern Gateway to Ghana where continuous cross-border trading activities occurs.

Population

The population of the municipality during the 2000 Population is 237.201 which constituted about 11.5% of the region's population .It has a gender breakdown of 53.2% as females and 46.8% males. The municipality has a population growth rate of 1.7%. The district exhibits both the rural and urban types of settlement as 65% live in rural settlement and 35% in urban centers.

Health Profile

There are seven hospitals and 16 clinics in the municipality. The services come from the public and private sectors as well as traditional practitioners. The service providers are the public, private sectors and the traditional practitioners. Of greater concern is the high prevalence rate of HIV/AIDS in the municipality. It is difficult to assess the exact rate of

the disease in the municipality since in-migrants and patients across the Ghana-Togo Border attend hospitals in the district for treatment. The existence of commercial sex workers continues to pose a threat and serves as a challenge to the municipality anti HIV/ AIDS programs.

Education Profile

There are 325 educational institutions in the district. Seventy-one (71) pre-school level institutions, 155 primary schools, Ninety (90) Junior Secondary School and eight (8) Senior Secondary School and one vocational School. Both public and private sectors contribute to the educational facilities in the Municipality. The private sector contributes about 17% of the facilities and the public sector about 83%.

Economy

Ketu South Municipal thrives in markets. The major markets specialize in fish especially smoked herrings and agricultural produce. The Border market of Aflao is a commercial distribution centre for agricultural produce from Western, Brong-Ahafo and Central regions of Ghana. These goods are subsequently exported to Togo. Crop farming happens to be the major source of income in the Municipality.

3.2.5 Akatsi District

Location and Size

The District is located in the South-Eastern part of the Volta Region. It has a total land area of about 960.445 sq. km. The total land under cultivation is about 51,438.12 hectares. The District is bounded to the South by the Keta Municipal, to the East by the Ketu North District: to the North by North Tongu Districts to the West, Adaklu Anyigbe District and the Republic of Togo to complete the demarcation of the Akatsi District.

Population Size

The population of the District according to 2000 Populations and Housing Census is 93,477, which is made up of 46.9% (93,843) male and 53.1% (49,634) female. About 96.3% of the total population is resident. The District share of the total Regional Population is 5.7%. According to the 2000 PHC, 79% (88,373,860) of the population lives in the rural areas while 21% (19,617) lives at the urban area. It has 2.5% population growth, which higher than the regional growth rate of 1.8%, but at par with that of the national growth rate

Health Profile

There are 18 health facilities in the district. Out of this number, 13 of them belong to the Government whiles the remaining five are privately owned. There is no district hospital however; serious cases are referred to the two private hospitals in neighbouring districts.

Education Profile

There are 116 primary schools 40 Junior Secondary Schools, two (2) Secondary Schools and one training college.

Economy

Agriculture is the leading employer of the District's workforce since the economy is a rural one. This accounts for about 85 % of the labour force (population) engaged in food crop production such as roots and tubers, cereals, legumes and vegetables.

3.2.6 Krachi West District

Location and Size

Krachi West Dsitrict is one of the twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The District is located at the north-western corner of the Volta

Region. The Administrative capital is Kete-Krachi. The District Shares boundaries with Krachi Nchumuru District to the North, to the east with Krachi East District, to the south and west with the Volta River.

Population

The total population of the district is 81,954 with the growth rate of 2.5%, the population stands at about 92,723 (2000, PHC). The population distribution in the district shows that 51.7 percent are males while 48.3 percent are females. This differs from the national distribution where there are more females (50.68) than males (49.32 percent).

Health Profile

The district has one government hospital at Kete Krachi, ten health posts, one primary health care clinic and one mission clinic, four MCH/FP clinics and one private maternity clinic. In addition to these health facilities mobile health teams from Kete Krachi and occasionally from (the regional capital) visit a number of the villages. Traditional healers and Traditional Birth Attendants (TBA) play an important role in important role in the health delivery system in the district.

Education Profile

The district has 51 preschool 98 Primary26 Junior Secondary Schools and three (3) Senior Secondary Schools. The district also has one Vocational and one Technical institution as part of the educational facilities.

Economy

The major economic activity of the people is agriculture Farming is the major agricultural occupation with farmers producing mainly yam. Other crops cultivated on large scale in the district are cassava, maize, rice, beans and groundnuts. Livestock also thrives in the

district and cattle, sheep, goats and pigs are in abundance. Fishing is also a major economic activity as a result of the creation of the Volta Lake. The Battor and the Ada settlers are the major tribes doing fishing here.

3.3 Research Design

This study consists of descriptive research. Mitchell and Jolley (2007) suggest that descriptive research is not equipped to answer "why" questions but can help us address the "what", "who", "when", and "where" questions. They suggested that researchers interested in the "why" questions should adopt experimental research designs. They also suggested that there are several ways of obtaining data for descriptive research but that the most common method of doing descriptive research is by survey, which was the primary data collection tool in this study. In addition, qualitative research methods such as key informant interviews and focus group discussions (FGDs) were also used. Ultimately, both quantitative and qualitative data collection methods were adopted.

While the structured self-administered questionnaire survey represented a quantitative approach, the focus group discussions (FGDs) and key informant interviews comprised the qualitative approach. A combination of quantitative and qualitative data collection procedures increased the understanding of the issues related to intra-family communication, among spouses and parent-child communication. Focus group discussions were conducted to capture general perceptions on sensitive issues. And, detailed descriptions of findings emerged from the administration of the questionnaires probing exactly why certain practices were adopted or certain decisions taken.

3.4 Population

The target population for this study consisted of all households in the Volta Region of the Republic of Ghana. However, the accessible population consisted of six districts, namely Ho, Krachi, Kadjebi, Hohoe, Ketu and Akatsi out of eighteen districts in the Volta Region. These districts were chosen based on purposive sampling. As indicated earlier, these six districts were selected as a result of their accessibility, diversity, and researcher's familiarity with the region. In particular, diversity was critical to ensuring an authentic representation of the sample population. Shaddish Cook, and Campbell (2002, cited in Oppong, 2011) have suggested that researchers can choose between purposive sampling of typical cases and purposive sampling of heterogeneous cases. In this research, purposive sampling of typical cases was chosen as it enabled the researcher to identify those households whose characteristics matched those that are typical of households of the Volta Region.

3.4.1 Sample

According to Fraenkel and Warren (2002), there is no clear-cut guide to appropriate sample size selection. Rather, the best sample is as large as the researcher can rely on to obtain the needed data with affordable time and energy. Continuing, they stated that a sample size should not be too small or too large. Alreck and Settle (1985) on the other hand, have proposed 10% as a representative sample size relative to the entire population. Kumekpor (2002) also stated that the process of selecting a sample is an important part of any study because it has significant bearing on the extent to which the sample will be representative of the universe. He added that, the element of chance or randomness should, to a large extent, inform or influence the process of selecting a sample.

Sample size was determined by using the following formula (Ary, Jocobs, & Razavieh, 2002: 387):

$$\sqrt{n} = \frac{1}{\left(\frac{E}{\sqrt{pq}}\right)}(z)$$

Where:

n = sample size needed
E = the desired margin of error
pq = variance of hypothesized proportion
z = z-score of the confidence level

Using E= +/- 3% at 95% confidence level (z = 1.96), p = 0.5 and q = 0.5, the desired sample size was calculated as follows:

$$n = ([1/0.03]/\sqrt{(0.5)(0.5)})^2 \text{ X } (1.96)^2$$

$$n = (1/0.06)^2 \text{ X } (3.8416)$$

$$n = (277.7783) \text{ X } (3.8416)$$

$$n = 1067.1131$$

$$n = 1067$$

The sample size was rounded up to 1080 to enable the researcher select equal number households (60) from each district. As a result, a sample size of 1,080 respondents from the six selected districts in the Volta Region was purposely selected for this study irrespective of the number of households in the districts. The sample size was made up of sixty (60) households per district and three (man, woman and a young person) people per household (1,080 = 60 x 6 x 3). Two focus group discussions (one peri-urban and one rural community) were held for each district made up of 10 discussants. This was

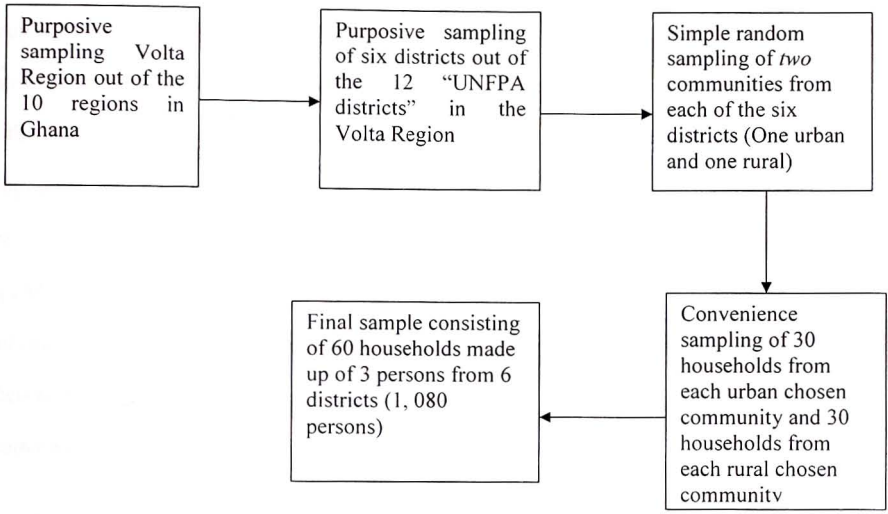
followed with five key informant (District Medical Officer, a nurse/midwife, a traditional healer, a community chemist/pharmacist and a religious leader) interviews per district.

3.4.2 Sampling Method for Survey

Sampling technique is important in any social science research because it has significant bearing on the outcome of the research and the extent to which the sample will be representative of the universe or population. Additionally, the element of chance or randomness should, to a large extent, inform or influence the process of selecting a sample (Kumekpor, 2002). Issues related to the width of coverage that is acceptable to allow for inferences and generalizations, and what types of respondents will be able to give answers reflective of the population of the area (universe). In this study, a combination of purposive sampling and simple sampling were applied in the sample selection.

Figure 3.2 illustrates how the sampling was done. In the first place, purposive sampling was used to select the Volta Region and the six districts as well. The Volta Region was purposively selected out of the 10 regions of Ghana because of its sub-division into the northern, middle and southern zones due to its geographical and cultural diversity compared to other parts of Ghana (GoG/UNFPA, 2006).

Figure 3.2: Illustration of the Sampling Methods used for the Household Survey



With regards to the districts, the main reason for the use of purposive sampling instead a probability sampling technique lies in the fact that United Nations Population Fund (UNFPA), one of the sponsors of my studies, requested that data be collected in the districts in which it is currently operating so that findings from the research could be used to improve reproductive health programming in those districts. In addition to the fact that the chosen districts were all "UNFPA districts", the selection of the districts for this study was also based on the distribution of the districts among the zones which are not equal in size and population. The northern zone has five districts, out of which one was selected for the study; the middle zone has eight districts, out of which three were selected for the study; the southern zone has four districts, out of which two were selected for the study.

Simple random sampling was used to select the communities in order to increase the representativeness of the final sample. Prior to the training of the field assistants (enumerators), who were also staff of the Ghana Statistical Service of the chosen districts, lists of communities in the chosen districts or administrative areas were obtained by the field assistants from the officials of their district assemblies and were used as the sampling frame for the simple random sampling. The communities were also classified as rural or urban using definitions of the Ghana Statistical Service. Localities with populations of at least 5,000 constitute urban areas and those with less than 5,000 constitute rural areas. During the training, names of the communities were written on sheets of paper, put into baskets and shuffled. Six volunteers were then requested to pick a community from the baskets each.

Even though the communities have different numbers of households, a total of 60 households were selected from each community. Convenience sampling method was used in the household survey such that whoever was available at the time of the data collection and willing to participate was included in the study. The chief's palace was used as the point of reference in each chosen community to ensure that a uniform approach was adopted in the use of convenience sampling. Using the chief's palace as the reference point, the field assistant moved one direction at a time (east, west, north or south of the chief's palace), ensuring that the respondents selected were representative of people from all segments of the village or town. The field officer then had to select eight households to the north and south and seven households each to the east and west making a total of 30 households in the community. He or she had to make sure that the households selected in the assigned direction were based on availability and willingness

to participate in the study. To qualify to participate in the study, a household had to consist of two adults (a male and female couple) and a young person to be interviewed. A young person was defined as a child aged between 10 and 24 years (this was based on the UN distinction).

3.4.3 Sampling Method for Interviews and Focus Group Discussions

A number of sampling methods were used in selecting respondents for this study so that the strength of one approach could complement the weaknesses of the other. As indicated earlier, the six districts were purposively selected for this study because of their characteristics which are of interest to the study. Key informants or significant others such as District Medical Officer, a nurse/midwife, a traditional healer, a community chemist/pharmacist and a religious leader were also selected purposively because of their in-depth knowledge of the phenomenon under investigation. A purposive sampling, however, was used to select one peri-urban and one rural community each in the six study districts for focus group discussion (FGD) and key informant interviews (KII).

3.5 Data Collection Procedures

Informed consent was obtained from all the study participants before the start of each group discussion or interview. Participants' willingness to participate was validated through the signing or thumb-printing of a consent form incorporated into the questionnaire. The right 'to not participate' was also explained to each potential participant, but there were no objections to participation.

In order to collect the data for this study, questionnaires were designed in accordance with the study objectives and in each of the selected districts, interviews were carried out

using the questionnaire which contained both open and closed-ended questions. Focus group discussions and key informant interviews were conducted in the same study areas. For the household survey, field assistants interviewed three members from each of the selected households. In each household, a male, female and a young person were selected. Not more than one household on the same compound was interviewed. Selected households that did not meet the criteria of a couple and young person were disqualified and the field assistant moved to the next randomly selected household.

Data collection instruments were modelled along the lines of the 2008 Ghana Demographic Health Survey (GDHS) as far as background and the identified reproductive health issues are concerned. The study used both quantitative and qualitative research techniques to collect the data required to address the objectives of the study. The qualitative researcher is one who looks through a wide lens searching for patterns of interrelationships between a previously unspecified set of concepts, and the quantitative researcher is one who looks through a narrow lens at a specified set of variables (Patton, 1992).

The data collection process began with reading and explaining the contents of the forms to each participant. The literate participants read the consent forms themselves and signed. With regard to the minors there were two levels of consent. Because they did not have the legal capacity to consent to their own participation in the study, consent for their participation was first obtained from their parents/guardian and additionally from the young person. Thus, consent of the guardian did not mean that the young person must necessarily participate in the study. They had the right not to participate or to end their

participation after they had initially agreed to do so. These conditions were adequately explained to them. In all, the household survey took 21 days spanning from late September to early October, 2010.

In the qualitative research technique, the study made use of face to face interviews, focus group discussions (FGDs) for some selected opinion leaders and significant others in the communities, and key informant interviews (KII) with service providers on family decision making and access to reproductive health services. The interviews were conducted at respondents' homes separately for men, women and young people. A checklist was developed to elucidate information about the general social and educational status of the group, their work patterns, knowledge, attitude and practices on their own reproductive health problems, behaviour and customs followed in the society during pregnancy, antenatal care services available in their community, family planning options and practices and sources of information in the community.

All the FGDs were recorded after permission had been sought from discussants. The interviewees were purposively selected as key informants based on their profession, their in-depth knowledge, views, understandings, interpretations, experiences, and interactions contributed to the social reality that the study research questions are designed to explore. The interviews served more to interpret the data of the questionnaire than to provide additional quantitative information.

3.5.1 Research Materials

Questionnaire, interview and discussion guides were employed in this study. The following paragraphs discuss each of the main research instruments used.

The questionnaire was divided into five main sections. The first section covered the socio-demographic background of the respondents. The second, third, fourth and fifth sections also covered knowledge of reproductive health as defined in the study: maternal health (safe motherhood), family planning, prevention and management of unsafe abortion, and prevention and management of STIs and HIV and AIDS respectively. The questions, their wording and sequence were identical for all categories of respondents of the study. This was to ensure also that any differences that may be observed in the study can, to a large extent, be attributed to respondents' own views on issues determining their life circumstances. The printed questionnaires, with 73 questions in all, were administered to respondents, to which they gave answers. The majority of the questions were open-ended with few close-ended ones.

Interview guide was designed and used to collect data from key informants in the six research districts. The interview guide covered all the five sections of the research questions and, included asking for opinions and assessment of intra-family communication on sexual and reproductive health, agencies in the district that are involved in education and dissemination on reproductive health, channels of communication on reproductive health used in the district, and reproductive health challenges of families.

3.6 Quality Assurance and Control

As indicated earlier, data quality control was maintained in accordance with ISO 20252: Market, opinion and social research – Vocabulary and Service Requirements. Schoenbach (2000) has identified some of the procedures of maintaining data quality

control and security in data management in accordance with ISO 20252. Among other mechanisms, Schoenbach (2000) identified the following quality control mechanisms:

i. Prevention and detection of errors in data through written procedures, training, verification procedures, and avoidance of undue complexity;
ii. Avoiding or eliminating inconsistencies, errors, and missing data through review of data collection forms (ideally while access to the data source is still possible to enable uncertainties to be resolved) and data sets, and
iii. Assessing the quality of the data through notes kept by inter viewers, coders, and data editors, through debriefing of subjects, and through reviews or repetition of data collection for sub-samples.

In this study, the above mechanisms were combined with training and competency as recommended by ISO 20252. In particular, six field assistants and two supervisors with experience in data collection were trained for a day to enhance their data collection skills as far as this particular study was concerned to ensure that high quality data were collected from the field. This involved taking them through the objectives of the study, reading survey questions and familiarizing them with the data collection tools. The field assistants were also trained in such a way as to assure respondents of confidentiality of the information they provide in order to win their confidence and willingness not only to participate in the interview but most importantly provide accurate information to enrich the study.

After the training, the survey instruments were pre-tested and information from the pre-test was used in modifying the data collection tools for the field by the same field

assistants. The instruments were pre-tested in six households within an urban and rural setting in Kopevi near Achimota in the Greater Accra Region to ensure that the duration of the interview was ethically acceptable and that the questions elicit the appropriate responses that will address the study objectives. Additionally, it was pre-tested to ensure cultural appropriateness and clarity.

In addition, only field assistants fluent in the local language of the people of the study area were selected to minimize translation error. This was to enable them to translate the questions accurately. It was also ensured by way of supervision that field assistants strictly followed procedures for data collection in the field. As much as possible, the in-depth interviews were recorded and later transcribed to ensure that no relevant qualitative information was lost.

3.7 Ethical Considerations

Ethics are very important considerations in conducting every research. The Ghana Health Service Ethical Review Committee reviewed the questionnaire, which was submitted in accordance with their major areas of concern with research involving human subjects, and approved the survey with protocol ID number: GHS-ERC; 14/05/2012. Supervisors of the study at the University of Ghana also reviewed the questionnaire and gave approval for the survey to be administered. The survey was administered with the help of field assistants from the Ghana Statistical Service (GSS).

As stated earlier, respondents had the right to decline participation and withdraw at any time. In addition, respondents had the right to refuse to answer or leave blank any question they found uncomfortable.

3.8 Techniques of Analysis

The responses from the structured and semi - structured interview were coded, captured and analysed using the Statistical Package for the Social Sciences (SPSS) version 17. Cross tabulations of the dependent variable (reproductive health services usage), the independent variable was done and also each of the controlled variables (age, religion, marital status, and gender roles) were done to test the hypotheses out of which conclusions were drawn based on p-values at 95% confidence level. Responses and discussions from FGDs, KIIs and IDI were transcribed. Content analysis was used to analyse data on the basis of emerging issues and sub- themes of the study. Binary logistic regression was also performed to find out if the relationships that were established at the bivariate level are still robust after controlling for other factors.

CHAPTER FOUR

RESULTS OF DATA ANALYSES

4.1 Introduction

The principal objective of this study was to examine the nature of intra-family communications with regard to reproductive health issues. As a result, 1,011 respondents were sampled from six districts in the Volta Region by means of a combination of purposive and convenience sampling techniques for a household survey. Again, two (2) focus group discussions were carried for each of the six districts. Data collected were subjected to statistical analyses and the results from the household surveys and the focus group discussions (FGDs) are presented in this chapter. This chapter is divided into three main sections: a section on initial analysis (analysis of the demographic data), section on the results of the main analysis (analysis related to hypotheses and research objectives) and a section on additional results. Chi-square analysis and binary logistic regression were carried out on the data to test the hypotheses as well as to address the research objectives.

4.2 Analysis of Socio-Demographic Data

With a response rate of 94.2%, the sample size was 1,011 respondents from the six districts participating in the study. The response rate in the Ho Municipality was greatly affected due to the fact that most of the mainly-literate respondents insisted on taking the questionnaires and answering it by themselves. To a great extent, this accounted for the shortfall in the retrieval. In the ensuing paragraphs, the sample used in this study is described relative to age, gender, marital status, educational level, religious affiliation, household headship, employment status and income.

In terms of gender as shown on Table 4.1, the sample was composed of 53% females and 45.8% males with 12 persons (1.2%) failing to state their gender; this appears to corroborate Ghana's distribution of males (48.7%) and females (51.3%) (GSS, 2011). Out of the 533 female participants, 72% reported having been pregnant before with 26.8% indicating not having been pregnant before. However, 1.1% reported that the question about pregnancy was not applicable to them. Among the females, about 73.7% representing 395 respondents also reported having ever been pregnant, whereas 26.3% representing 141 respondents answered in the negative. To probe further, those who said they had ever been pregnant were asked if they carried the pregnancy to full term. Out of the total number of respondents 395 who had ever been pregnant, 87.1% representing 344 respondents carried the pregnancy to full term and had their babies, while 11.9% representing 47 respondents said they did not carry the pregnancy to full term. Four respondents constituting 1% gave no response.

Table 4.1: Distribution of respondents by demographic, social and economic characteristics

	Percentage	Frequency
Type of Household Head		
Male (adult)	60.3	610
Female (adult)	21.4	216
Child Head (Male)	11.6	117
Child Head (Female)	1.4	14
Other	1.5	15
Not Stated	3.9	39
Age Groups		
10 - 19	21.4	216
20 - 29	22.5	227
30 - 39	18.6	188
40 - 49	19	192
50 - 59	9.8	99
60 - 69	3.1	31
70 - 79	1.1	11
80 - 89	0.6	6
Not stated	4.1	41
Educational level		
Never been to school	10.6	107
Primary	9.6	97
Middle/JSS	30.1	304
Technical/Vocational	2.4	24
Secondary/SSS	23.5	238
Diploma/Nursing/Teacher training	14.7	149
Polytechnic	3.2	32
University	5	51
Not stated	0.9	9
Marital Status		
Single	36.2	366
Cohabiting	3.3	33
Married	52.9	535
Separated	1.7	17
Divorced	1.5	15
Widowed	1.7	17
Not stated	2.8	28
TOTAL	100	1011

Source: Field Data, 2010

Table 4.1: Distribution of respondent by their demographic, social and economic characteristics (continuation)

Religious Affiliation		
Christianity	77.2	780
Muslims	4.2	42
Traditionalist	8.2	83
No religion	0.1	1
Not stated	10.3	104
Not Applicable	0.1	1
Employment Status		
Employed (Public Sector)	21.4	216
Employed (Private Sector)	8.4	85
Self Employed	34.2	346
Unemployed	27.7	280
Home-maker	5.4	55
Not stated	2.9	29
Income Levels		
< 100	30.8	311
101-300	21	212
301-500	11.9	120
501-1000	2.5	25
1000+	0.3	3
Not stated*	32.8	332
Not Applicable	0.8	8
Total	**100.0**	**1011**

* This does not imply that they did not earn any income but were simply unwilling to disclose their income levels.
Source: Field Data, 2010

The predominant age group consisted of those aged between 20 and 29 years (22.5%). Results presented in the Table 4.1 also show that majority of the respondents were between ages 10 and 49 years with very few persons aged between 50 and 89 years. From Table 4.1, most of the respondents have had some middle/Junior High School or secondary education (30.1%) with 8.2% having a polytechnic or a university education.

This probably would aid their comprehension and enable them to participate effectively in any form of communication aimed at behaviour change.

According to Table 4.1, a significant proportion of respondents were married (52.9%) while almost a third had never married (36.2%). The table also indicates that only 1.5% of the respondents were divorced. Table 4.1 also indicates that 77.2% of respondents were Christians and 4.2% Muslims. This is in line with the 2000 Population and Housing Census which indicates that 69% of Ghanaians profess the Christian religion, and this is followed by the Muslims with 15.6%. From Table 4.1 above, 346 (34.2%) of the respondents indicated that they are self-employed, whilst 280 (27.7%) stated that they were unemployed, and 216 (21.4%) reported to work in the public sector.

Table 4.1 further indicates that from the survey, 340 (33.6%) out of the total respondents do not earn monthly income, whereas 311 (30.8%) of them earn less than GH¢ 100.00 monthly. This has implication on their health seeking behaviour and their access to affordable medicine to improve their health outcomes. According to Table 4.1, 60.3% of respondents said they live in households headed by a male adult, followed by 21.4% living in households headed by female adults.

4.3 Knowledge of Reproductive Health

Reproductive health according to WHO (2004), is a responsible, satisfying and safe sexual life, the ability to reproduce, the freedom to decide about one's childbearing and the possibility to have healthy children. Good reproductive life presupposes knowledge of and access to birth control and disease prevention, and safe circumstances during pregnancy and delivery. Reproductive health is in line with the broad WHO definition of

health as a state of physical, mental and social well-being and not only as the absence of disease (Ibid).

For this study, knowledge of reproductive health was measured by the frequency of intra-family communication. Respondents were asked to assess knowledge and utilization of reproductive health services. Table 4.2 present percentages of respondents who had knowledge of reproductive health components examined in this study.

Table 4.1: Knowledge of Reproductive Health % (n = 1011)

Components of Reproductive Health	Yes	No
STI and HIV and AIDS	97	3
Family Planning	83	17
Maternal Health	78	22
Unsafe Abortion	75	25

To determine knowledge of reproductive health, questions were posed that required the respondents to indicate whether or not they were aware of each of the components of reproductive health. Results of the analysis showed that, in all, the respondents had knowledge of all the components of reproductive health examined in this study (See Table 4.2). However, the respondents reported greater knowledge about STIs and HIV and AIDS than the other components as 97% indicated knowledge of STIs and HIV and AIDS as opposed to 83% for family planning, 78% for maternal health, and 75% for safe abortion. Overall, most of the respondents had knowledge of reproductive health.

4.4 Family Discussions about Reproductive Health

Respondents were further asked to indicate whether or not their households engaged in family discussions on reproductive health. Results are presented in Table 4.3.

Table 4.2: Percentage distribution of family discussions about reproductive health

Components of Reproductive Health	Yes	No	Not stated
STI and HIV and AIDS	69	31	--
Maternal Health	45	40	15
Family Planning	42	58	--
Unsafe Abortion	25	75	--

Results showed that most of the respondents did not engage in family discussions about reproductive health. However, 69% of the respondents indicated that their families discussed issues related to STIs and HIV and AIDS. Safe abortion was the least discussed reproductive health issue among households. Though respondents were knowledgeable about reproductive health (see Table 4.3), they hardly engaged in family discussions about reproductive health issues.

Further analysis was carried out to explore the age differences in the family discussions about reproductive health. Results are presented in Table 4.4.

Table 4.3: Family Discussion by Age Distribution

Age	Family Discussion of Reproductive Health							
	Maternal Health				Unsafe Abortion			
	Yes	%	No	%	Yes	%	No	%
Adults	384	84.02	264	65.67	214	83.26	540	71.62
Children	55	12.03	122	30.34	34	13.23	182	24.14
Not Stated	18	3.94	16	3.98	9	3.50	32	4.24
Total	**457**		**402**		**257**		**754**	

Age	Family Discussion of Reproductive Health							
	Family Planning				STIs and HIV/AIDS			
	Yes	%	No	%	Yes	%	No	%
Adults	333	85.38	364	68.42	547	78.14	207	66.56
Children	32	8.21	155	29.14	125	17.86	91	29.26
Not Stated	25	6.41	13	2.44	28	4	13	4.18
Total	**390**		**532**		**700**		**311**	

"Not Stated" in the row indicate respondents who did not indicate their age.

Results show that, although adults engaged more in discussions about reproductive health, fewer children were involved in the family discussions. For instance, while 384 adults were involved in family discussions about maternal health issues, only 55 of the children were involved. Despite this, the overall pattern of family discussion among children is similar to that of the adults. Table 4.4 shows, for instance, that 547 as opposed to 207 adults engaged in family discussions about HIV and AIDS while 125 as opposed to 91 children were involved in family discussion about HIV and AIDS. This pattern agrees with the data presented in Table 4.4.

4.5 Source of Knowledge about Reproductive Health

Though the respondents hardly engaged in family discussions about reproductive health, further analysis was performed on the source of their knowledge on reproductive health. Results of the analysis are presented in Table 4.5. Results of the analysis showed varied sources of knowledge about reproductive health. Again, results revealed that the two most important sources of knowledge about maternal health came from the mass media and health workers.

With respect to maternal health, results showed that the most important sources of knowledge were mass media (52.69%), health workers (35.14%), and family members (5.70%). In the case of family planning, the three most important sources of knowledge were mass media (63.40%), followed by health workers (27.5%), and friends (2.88%). While for STIs and HIV and AIDS, the three most important sources of knowledge were mass media (51.69%), health workers (35.88%), and school (4.24%). The results further illustrated that the three most important sources of knowledge on safe abortion were

health workers (57.94%), friends (15.48%), and school (9.52%). These results imply that, among the respondents, mass media, health workers, friends, and school were significant sources of knowledge on reproductive health.

Table 4.4: Source of Knowledge on Reproductive Health

Components	Mass Media	Health Workers	Friends	Flyers	Family members	Books	School	Community Durbar	Church	Workshop	Total*
Maternal Health	**333 (52.69%)**	**222 (35.14%)**	23 (3.64%)	18 (2.85%)	**36 (5.70%)**	--	--	--	--	--	632 (100%)
Family Planning	**220 (63.4%)**	**97 (27.95%)**	**10 (2.88%)**	1 (0.29%)	9 (2.59%)	6 (1.73%)	2 (0.58%)	2 (0.58%)	--	--	347 (100%)
STI and HIV and AIDS	**474 (51.69%)**	**329 (35.88%)**	21 (2.29%)	2 (0.22%)	32 (3.49%)	2 (0.22%)	**39 (4.24%)**	16 (1.74%)	1 (0.11%)	1 (0.11%)	917 (100%)
Safe Abortion	--	**146 (57.94%)**	**39 (15.48%)**	8 (3.17%)	14 (5.56%)	2 (0.79%)	**24 (9.52%)**	13 (5.16%)	2 (0.79%)	4 (1.59%)	252 (100%)

*The totals do not add up to 1011 due to respondents failing to supply answers to the relevant questions.

During a Focus Group Discussion, participants were asked of the sources of information as a family on sexual and reproductive health issues. A male discussant and a father of five (5) said that:

> "*All information on sexual and reproductive health care, I have so far is from the mass media and sometimes from married friends*" (Male, FGD October 2010, Kadjebi).

Another participant, a female shared the same views as that of the male but added:

> "*I am a trader, wife and a mother of four children. I am always on the move travelling from one market to the other to sell my goods. Where is the time to discuss these issues with the children or my husband when my domestic roles at home are waiting for me? Due to my travels, these roles are not well attended to so the little time I have, must be well used. I meet nurses when I visit the clinic and they provide us (we the adult women) with education on sexual and reproductive health particularly family planning issues.*" (Female, FGD October, 2010, Kadjebi)

4.6 Test of Hypotheses

This section presents results of the inferential statistical analyses carried out to test the hypotheses. The section first presents the results of chi-square analysis followed by results of binary logistic regression analysis.

Specifically, the study sought to test the following hypotheses:

i. There is no significant relationship between educational level and intra-family communication such that the high level of education of individual should not

be ascribed any causative influence on the frequency of intra-family discussion about sexual and reproductive health issues.

ii. There is no significant relationship between economic status (using income as an indicator) and intra-family communication. This is to say that the economic status of a family does not promote sexual and reproductive health communication in the family.

iii. There will be a significant relationship between intra-family communication and use of reproductive health service so that higher usage of reproductive health services is correlated with greater family (household) effective communication on sexual and reproductive health issues.

The section also presents results of analysis on the aspects of intra-family communication and reproductive health decision in the surveyed districts. The assessment of communication and information sharing on reproductive health is based on the knowledge of the components of reproductive health among family members. The totals in the tables accompanying the results of chi-square analyses did not sum up to 1011 (the total number of respondents who actually took part in the study). This is due to the fact that some respondents failed or refused to provide responses to some of the questions.

4.6.1 Relationship between Education Level and Family Discussion about Selected Elements of Reproductive Health

To probe whether or not educational level was related to family discussions about reproductive health, a cross-tabulation (two-variable chi-square) was computed using SPSS v.17 to determine if there was any significant relationship between educational level and reported discussion on select reproductive health issues (see Tables 4.6 and

4.7). Table 4.6 presents distributions of frequencies for educational level and family discussions whiles Table 4.7 presents the results of the chi-square analysis performed. Results of the analysis presented in Table 4.7 indicate that educational level was significantly and positively correlated with family discussion on all the selected elements of reproductive health. Specifically, those with higher education were more likely to engage in family discussions about maternal health issues [X^2 (7) = 33.37, $p < 0.0005$], family planning [X^2 (7) = 14.19, $p = 0.048$], STIs and HIV/AIDS [X^2 (7) = 65.60, $p = 0.005$], and unsafe abortion [X^2 (7) = 32.84, $p = 0.005$].

In sum, analyses of the four components together showed that, there is a significant relationship between educational level and family discussion of reproductive health issues. The results raise relevant questions regarding the nature of the relationship. Education could influence the likelihood of family discussions directly or indirectly (perhaps as a proxy for overall gender relations in the household), or external factors like income could explain a positive correlation without a causative relationship. Predisposition to discussion of reproductive health could even influence pursuit of higher education. Regardless, education level is still a statistically significant predictor of inter-family communication.

Table 4.5: Frequency Distribution for Educational level and Family Discussions Selected Elements of Reproductive Health

Highest Level of Education	Family Discussions about...							
	Maternal Health		Family Planning		STIs and HIV/AIDS		Unsafe Abortion	
	Yes	No	Yes	No	Yes	No	Yes	No
Never been to school	52	52	43	57	59	48	34	73
Primary	31	57	21	58	44	53	9	88
Middle/JSS	151	112	122	160	202	102	79	225
Technical/Vocational	10	7	8	14	20	4	7	17
Secondary/SSS	98	110	98	124	179	59	76	162
Diploma/Nursing/Teacher training	78	39	61	78	129	20	29	120
Polytechnic	8	12	9	18	22	10	2	30
University	28	10	26	19	39	12	18	33
Total	**456**	**399**	**388**	**528**	**694**	**308**	**254**	**748**

Table 4.6: Summary of Cross-tabulation Results for Educational Level and Selected Elements of Reproductive Health

Family Discussion	X^2	Df	p*
Maternal Health	33.37	7	< 0.0005
Family Planning	14.19	7	0.048
STIs and HIV/AIDS	65.6	7	0.005
Unsafe Abortion	32.84	7	0.005

*Significant if $p < 0.05$

4.6.2 Relationship between Income and Family Discussions about Selected Elements of Reproductive Health.

Tables 4.8 and 4.9 illustrate results of the cross-tabulation between income level and family discussions about the selected elements of reproductive health. Table 4.8 presents distribution of frequencies for income level and family discussions while Table 4.9 presents the results of the chi-square analysis performed. Results of the analysis showed that, overall, income level was significantly related to family discussions about family planning [X^2 (4) = 19.07, p = 0.001] and STIs and HIV and AIDS [X^2 (4) = 28.30, p = 0.005] such that the higher the income level, the higher the likelihood of family discussions about reproductive health issues. However, the significant relationship between income level and unsafe abortion [X^2 (4) = 9.75, p = 0.045] is such that those with higher income appeared to engage less in discussions about unsafe abortion compared to those with lower income. Conversely, income level was found not to be significantly related to family discussions about maternal health issues, X^2 (4) = 4.65, p = 0.325. This indicates that income may not be a good predictor of family discussions about maternal health issues.

Data and analysis presented thus far partially support the claim that higher income is associated with a higher propensity to engage in family discussions about reproductive health. While higher income is significantly and positively correlated with likelihood of family discussions on family planning and STIs, the opposite relationship is found with regard to discussion of abortion, and the correlation with discussions of maternal health is insignificant.

Table 4.7: Frequency Distribution for Income level and Family Discussions Selected Elements of Reproductive Health

Income level (Range in GHS/month)	Family Discussions about...							
	Maternal Health		Family Planning		Unsafe Abortion		STIs and HIV/AIDS	
	Yes	No	Yes	No	Yes	No	Yes	No
< 100	165	114	119	161	88	223	207	104
101-300	123	69	119	80	73	139	163	49
301-500	67	27	51	65	28	92	106	14
501-1000	7	4	10	15	3	22	23	2
1000+	2	1	3	0	0	3	3	0
Total	**364**	**215**	**302**	**321**	**192**	**479**	**502**	**169**

Table 4.8: Summary of Cross-tabulation Results for Income Level and the Selected Elements of Reproductive Health

Family Discussion	X^2	df	p*
Maternal Health	4.65	4	0.325
Family Planning	19.07	4	0.001
STIs and HIV/AIDS	28.3	4	0.005
Unsafe Abortion	9.75	4	0.045

*Significant if $p < 0.05$

4.6.3 Relationship between Family Discussions about Maternal Health and Selected Components of Reproductive Health Usage

Chi-square analysis was performed again to examine the relationship between family discussion on maternal health and selected components of reproductive health service usage. Results presented in Tables 4.10 and 4.11 illustrate that, overall, family discussion about maternal health issues was associated with usage of the selected components of reproductive health services. Specifically, it revealed a significant relationship between family discussion and place of child delivery, X^2 (1) = 5.88, p = 0.015, such that likelihood of family discussion about maternal health is positively correlated with the likelihood that a woman will deliver at a hospital. Family discussion of maternal health is a significant predictor of delivery site.

Again, it was found that a significant relationship exists between family discussions about maternal health and ANC attendance during pregnancy, X^2 (1) = 44.40, $p < 0.0005$. This also implies a greater likelihood that women will attend ANC if they also discuss maternal health as a family.

In the case of a relationship between maternal health issues and use of family planning methods, results indicated that there was a significant relationship between family discussions about maternal health and use of family planning methods [X^2 (1) = 3.91, p = 0.048] such that engaging in family discussions about maternal health issues was associated with use of family planning methods. Furthermore, analyses on the relationship between family discussions about maternal health issues and actual use of preventive methods for STIs and HIV and AIDS also showed that there was a significant relationship, such that those who engaged in family discussions about maternal health issues were more likely to consistently use condoms and abstinence as a means to preventing STIs and HIV and AIDs, X^2 (3) = 49.98, $p < 0.0005$.

Table 4.9: Frequency Distribution for Family Discussion about Maternal Health Issues and Selected Components of Reproductive health Service Usage

Family discussion on maternal health	Place of Child Delivery		ANC Attendance during Pregnancy		Use of Family Planning Method		Mode of Preventing STIs and HIV/AIDS			
	Hospital	Home	Yes	No	Yes	No	Consistent use of condom	Abstinence	Being faithful to partner	Traditional methods (use of herbs)
Yes	152	50	203	15	167	228	186	153	71	47
No	75	45	99	51	108	201	104	128	58	112
Total	**227**	**95**	**302**	**66**	**275**	**429**	290	281	129	159

Table 4.10: Summary of Cross-tabulation Results for Family Discussion about Maternal Health Issues and Usage of Selected Elements of Reproductive Health Services

Reproductive health Service Usage	X^2	Df	p*
Place of Child Delivery	5.88	1	0.015
ANC attendance during pregnancy	44.4	1	< 0.0005
Use of family planning method	3.91	1	0.048
Mode of preventing STIs and HIV/AIDS	49.98	1	< 0.0005

Further examining the relationship between family discussions about maternal health issues and reproductive health service usage, another chi-square analysis was performed. The analysis sought to explore the relationship between family discussion on unsafe abortion and facilities where abortions were performed. Results showed a significant relationship between family discussions, unsafe abortion and choice of facility for abortion such that those who engaged in family discussions were more likely to use hospitals for abortion, X^2 (1) = 8.44, p = 0.038 (see Table 4.12).

Table 4.11: Summary of Cross-tabulation Results for Family Discussions about Unsafe Abortion and Place/ Facility Used for Abortion

Family discuss issues on unsafe abortion	Place of Abortion				
	Public Hospital	Private Hospital	Home	School	Total
Yes	10	11	5	1	27
No	2	11	11	0	24
Total	**12**	**22**	**16**	**1**	**51**

X^2 (1) = 8.44, p* = 0.038; *Significant if p < 0.05

4.6.4 Relationship between Type of Settlement and Family Discussions about Selected Elements of Reproductive Health

To assess whether types of settlement had any association with family discussions, further analyses were conducted using chi-square analysis. Results of the analyses are presented in Tables 4.13 and 4.14. Overall, the results did not support the view that type of settlement could be a predictor or determinant of likelihood of family discussions about reproductive health issues.

Specifically, it was found that there was a significant relationship between type of settlement and family discussions about maternal health [X^2 (1) = 9.354, p = 0.002] such that urban dwellers were more likely to engage in family discussions about maternal

health than the rural dwellers. However, there was no association between type of settlement and family discussions about family planning [X^2 (1) = 0.600, p = 0.438], unsafe abortion [X^2 (1) = 0.725, p = 0.395], and STIs and HIV/AIDS [X^2 (1) = 2.328, p = 0.127].

Table 4.12: Frequency Distribution for Type of Settlement and Family Discussions about Selected elements of Reproductive Health

		Maternal Health		Family planning		Unsafe abortion		STI and HIV/AIDs	
		Yes	No	Yes	No	Yes	No	Yes	No
Type of Settlement	Urban	226	160	175	230	105	335	293	147
	Rural	166	185	153	225	109	304	295	118
	Total	392	345	328	455	214	639	588	265

Table 4.13: Summary of Cross-tabulation Results Type of Settlement and Family Discussions about Selected elements of Reproductive Health

Family Discussion	X^2	df	p*
Maternal Health	9.354	1	0.002
Family Planning	0.6	1	0.438
STIs and HIV/AIDS	2.328	1	0.127
Unsafe Abortion	0.725	1	0.395

*Significant if $p < 0.05$

4.6.5 Binary Logistic Regression

To further explore whether the demographic characteristics of the respondents and family discussions together help predict reproductive health (RH) service usage, a binary logistic regression was performed. The logistic regression tests the predictive model and strengthens our confidence in identified relationships. Specifically, it was carried out to assess the predictive power of family/household discussion, education, and income on RH service usage. Unlike linear regression, where we predict an outcome or dependent variable *Y* (measured at the interval or ratio level) using one or more predictor variables (*X's*) also measured at the interval or ratio level, logistic regression allows us to predict an outcome or dependent variable *Y* (measured as a dichotomous or categorical variable – nominal or ordinal level) using one or more predictor variables that are continuous (ratio or interval) or categorical (ordinal or nominal levels).

In this research, the dependent or outcome variable (reproductive health [RH] service usage) is a dichotomous variable measured on the nominal level; that is, one either uses RH service (Yes) or does not (No). The predictor variables were measured on both interval level and nominal level; family/household discussion, education, and income level were all measured on nominal level.

As a result, the researcher found it appropriate to use logistic regression to model reproductive health services usage. The results were reported in accordance with the recommendations of Peng, Lee, and Ingersoll (2002). Peng et al (2002) recommend that the model fit indices (such as Log likelihood ratio test, Cox & Snell R Square, and Nagelkerke R Square), statistical tests of individual predictors and goodness-of-fit statistics (such as *Hosmer and Lemeshow statistic)*.

Table 4.15 presents results of the binary logistic regression analysis. Results showed that only educational level in the model had significant association with reproductive health usage. In particular, those with primary, technical/vocational, and secondary/SSS as their highest level of education were less likely to make use of reproductive health services compared with their counterparts having university level education.

Table 4.14: Summary of Model Parameter Estimates in the Binary Logistic Regression

	B	Wald X^2	p*	Odds Ratio
Income level		3.695	0.449	
1 < 100	0.02	0.008	0.927	1.02
2 101-300	-0.345	1.212	0.271	0.708
3 301-500	-1.288	2.394	0.122	0.276
4 501-1000	-0.017	0	0.991	0.984
Education		10.362	0.169	
1 Never been to school	-0.184	0.142	0.706	1.202
2 Primary	-0.768	4.661	**0.031**	2.155
3 Middle/JSS	-0.955	1.905	0.168	2.598
4 Technical/Vocational	-1.006	7.616	**0.006**	2.734
5 Secondary/SSS	-0.997	5.8	**0.016**	2.71
6 Diploma/Nursing/Teacher training	0.759	1.298	0.255	2.137
7 Polytechnic	0.863	2.55	0.11	2.371
Family Discussion (Yes)	0.389	3.703	0.054	1.476
-2 Log likelihood	333.374			
Cox & Snell R Square	0.039			
Nagelkerke R Square	0.052			

*Significant if $p < 0.05$; Reference Categories are as follows: 1000+ (Income), University (Education) and No (Family Discussion)

R Square, and Nagelkerke R Square are considered descriptive measures (Peng et al, 2002: 6). According to Peng et al (2002), an insignificant Hosmer-Lemeshow (H-L) statistic suggests that the model fit the data well. With a significant Hosmer-Lemeshow value [X^2 (2) = 0.235, p = 0.889], it can be said that the predicted model by the Logit

model adequately approximates the data gathered. This is corroborated by the values of the other model fit indices such as those of Omnibus Test was also significant [X^2 (3) = 17.18, p = 0.001], -2 Log likelihood, Cox & Snell R Square, and Nagelkerke R Square (See Table 4.15). This suggests that the three independent variables combined can improve the chances of predicting use of reproductive health services. Family discussions have minor but positive predictive power on reproductive health service usage [p = 0.054] in the model, but the model as a whole becomes much more predictive in a statistically significant way when demographic indicators are added.

4.7 Additional Findings

4.7.1 Family Planning

For this study, knowledge of reproductive health was measured against the frequency of intra-family communication. Questions were asked to assess people's knowledge and utilization of reproductive health services. The result established that about 73.7% representing 395 respondents have ever been pregnant whereas 26.3% representing 141 respondents have not been pregnant.

To probe further, those who said they had ever been pregnant were asked if they carried the pregnancy to term. Out of the total number of respondents 395 who had ever been pregnant, 87.1% representing 344 respondents carried the pregnancy to term, while 11.9% representing 47 respondents stated that they did not carry the pregnancy to full term. Four respondents constituting 1% gave no response.

4.7.2 Choice of Delivery Point

Respondents were asked to state the facility where they delivered their last child. The results show that government hospital/clinics and private hospital/clinic were the most popular delivery facilities for respondents. About 58.5% of respondents delivered their babies either in government hospital/clinic or private hospital/clinic. The findings revealed that a large number of respondents (41.5%) still delivered at home assisted by a traditional birth attendant (TBAs) or on their own.

To probe further on what informed respondents on the choice of delivery facility, they were asked to state the reasons for their choice. There were varying reasons for choice of facility such as quality of service, proper attention, cost, unavailability of hospital or clinic nearby, habitual preference to deliver at home, utilization of TBAs, or the abusive attitude of nurses at the hospitals/clinics.

Since the study seeks to investigate intra-family communication in relation to reproductive health, respondents were further asked to state who took the decision on the choice of delivery facility. Out of the total number of respondents, 37.2% representing 147 respondents took the decision themselves, 24.8% representing 98 took the decision between both husband and wife, 14.4% allowed other family members to take the decision, while 0.5% and 0.8% stated that husbands and health worker/TBAs took the decision, respectively. This implies that some amount of intra family communication went into the choice of delivery facility, although women mostly took the decision on delivery facility.

4.7.3 Decision on Antenatal Care (ANC) Attendance

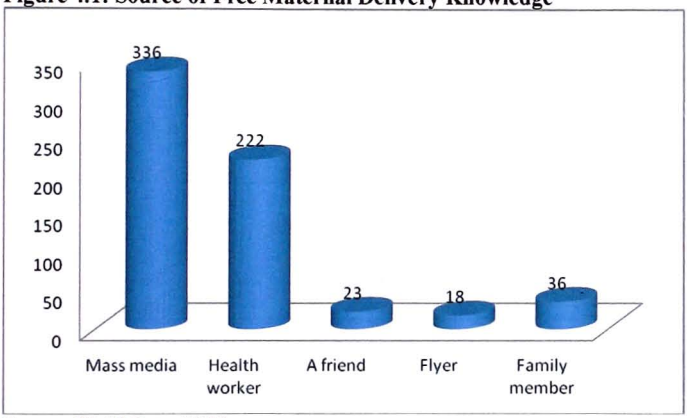
Data gathered from this study illustrated that out of a total number of 372 respondents, most receive ANC during pregnancy (82.3 %). Only 17.7 % of respondents did not receive ANC services. Respondents gave various reasons for decision-making to seek or not seek ANC services. For those who sought ANC services, they desired to have safe deliveries, they feared medical complications, and they sought immediate access to medical attention for the baby. Those who did not receive ANC services cited a lack of nearby and available medical services, costs, and rumours of other women's adverse experiences with medical personnel and facilities, and a lack of knowledge of the need to seek ANC services while pregnant, and belief in traditional medication.

4.7.4 Knowledge of Free Maternal Delivery Care Policy

To assess the knowledge of respondents on free maternal delivery services, respondents were asked whether they are aware of the government's policy on free delivery. Out of the total number of 813 respondents, more than half of respondents 78.1 % positively confirmed knowledge of the policy, whereas 21.9 % stated they were not aware of the free delivery care policy for pregnant women. This implies that nearly a quarter of those interviewed did not have knowledge of the free maternal delivery policy and available services. To further reduce the maternal mortality rate, education and sensitization of this policy and programme should be prioritized at the grass-root level to enable more pregnant women take advantage of the policy.

To further explore respondent knowledge of the free maternal delivery service, participants stating that they knew about the policy were further probed about their sources of knowledge. The most popular source of knowledge of free maternal delivery services was the mass media. Out of the 635 respondents, 53% mentioned mass media as their medium of awareness. Whereas 35% of respondents stated that they heard about the policy from health professionals, 5.7% heard through a family member, and 3.6% and 2.8% heard of the policy through a friend and flyer respectively, as shown on Fig. 4.1.

Figure 4.1: Source of Free Maternal Delivery Knowledge



Source: Field Data, 2010

All the respondents who stated they knew that delivery services were supposed to be free mentioned government hospital and clinics as the health facilities that provide this free delivery service. A female respondent shared the following thoughts;

> *"We did not know that delivery services were supposed to be free at government hospitals and clinics. Our relatives went and they were asked to pay when they attended the government facility, so we do not have the money to pay so we*

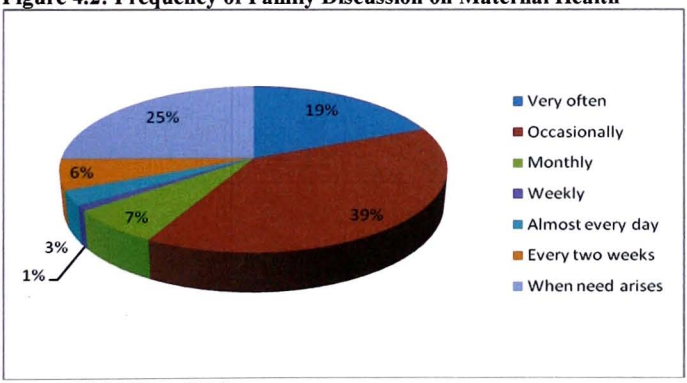
refused to go in order not to embarrass ourselves." (Female, FGD, September, 2010, Ho).

4.7.5 Family Discussion on Maternal Health

In terms of discussing issues concerning maternal health (safe motherhood), results from the study show that the number of families that engage in discussing issues concerning maternal health was no different from those families that do not engage in family discussion about maternal health issues (See Table 4.3).

When further exploring family discussion on issues concerning safe motherhood, respondents who stated they engaged in family discussion on safe motherhood were asked more details. As shown in Figure 4.2, about 39% of respondents indicated that discussions were held occasionally, whereas 25% mentioned that discussions were held when the need arose, and 19% claimed that discussions took place very often.

Figure 4.2: Frequency of Family Discussion on Maternal Health



Source: Field Data, 2010

Additionally, respondents who as a family do not engage in maternal health discussion were further asked why they do not engage in such an important exercise. Out of the 334 respondents, 25.1% attributed their family's inability to have discussions to a lack of awareness on the issue, 24% said that the discussion or communication on the matter was not necessary, 17.4% stated they had already received public education on the issue, while 17.1% were of the view that the family was not mature to engage in such discussions. The information is presented in Table 4. 16.

Table 4.15: Reasons for Not Having Family Discussions on Maternal Health

REASONS	FREQUENCY	PERCENTAGE
Not necessary	80	24.0
Taboo to talk about issues on sexuality	84	25.1
Had public education	4	1.2
Don't want to spoil my children	58	17.4
Less concern for such issues	8	2.4
Family immature for such issues	43	12.9
Lack knowledge on the issue	57	17.1
Total	334	100

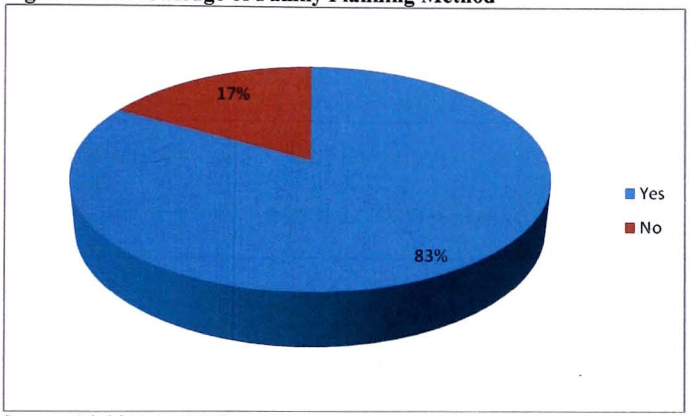
Source: Field Data, 2010

4.7.6 Family Planning Methods

The use of contraception is a personal choice for a woman and her partner, and for many, the array of options can be confusing. But one needs to know of family planning methods to enable the person choose from available methods.

Respondents were asked if they are aware of family planning methods. Out of the 991 respondents that answered this question, 83.4% of respondents answered in the affirmative, whereas 16.6% answered in the negative as shown on Figure 4.3. This implies that an overwhelming majority of respondents are at least aware of a family planning method

Figure 4.3: Knowledge of Family Planning Method



Source: Field Data, 2010

4.7.7 Use of Family Planning Method

In finding out whether respondents are currently using any family planning method, 36% answered 'yes' while 64% 'no'. This finding suggests that most people are knowledgeable about the methods but still do not use family planning methods. Cultural attitude and misconceptions surrounding a woman's use of contraceptives may weigh heavily on the decision to use or not to use them. Thus, greater knowledge of contraceptive methods is not a strong indicator of its subsequent use or its effectiveness.

Cultural beliefs surrounding social attitudes may more heavily influence decision-making.

4.7.8 Discussion of issues concerning Family Planning as a Family

As indicated in Table 4.3, most families do not discuss or communicate family planning issues, calling for the need for counselling to establish spousal communication on family planning issues. To further explore family discussion on issues concerning family planning, respondents who engaged in family discussion on family planning were then asked how often their family discusses issues concerning family planning.

As shown on Table 4.17, out of 339 respondents, 36% mentioned that discussions were held when the need arose, 28.6% mentioned that discussions were held occasionally, while 19.2% indicated discussions were held monthly, and 9.1% mentioned that discussions were held very often.

Table 4.16: Family Discussion of Family Planning

Discussion	Frequency	Percentage
Very Often	31	9.1
Occasionally	97	28.6
Monthly	65	19.2
Weekly	11	3.2
Almost Everyday	9	2.7
Every two Weeks	4	1.2
When need arise	122	36.0
Total	339	100

Source: Field Data, 2010

Respondents who did not discuss family planning as a family were then asked why they did not engage in such an important exercise (see Table 4.18). Out of the 436 respondents, 37.2% stated family planning discussions were not necessary, 30.3% claimed differences in cultural belief, 22.5% stated that they had inadequate information on family planning, while 6.2% were of the view that the issue was not useful for the

family, and 3.4% and 0.5% of respondents respectively reported that the family was not living together and assumed knowledge of family planning issues.

Table 4.17: Reasons for not Discussing Family Planning as a Family

Reasons	Frequency	Percentage
Inadequate Information	98	22.5
Not Necessary	162	37.2
Family not together	15	3.4
Beliefs and Cultural reasons	132	30.3
Not useful for children	27	6.2
Assumed knowledge	2	0.5
Total	436	100

Source: Field Data, 2010

When 947 respondents were asked if it was necessary to discuss family planning among family members, majority (70.2%) stated that it was very necessary while 29.8% answered that it was not necessary. Focus group discussion participants offered various reasons as to why it was necessary for family members to discuss issues on family planning. A female discussant said:

> "*When family planning issues are discussed, it promotes better cohesion and understanding of one another which often promote good relationships. This also leads to prevention of unwanted pregnancies, death related to unwanted pregnancies. The rate and spacing of child birth will reduce, reduce teenage pregnancy and maternal mortality and increase awareness of the dangers of early sex, abortion, etc. intra-family communication on reproductive health will also help manage family resources and build strong family ties*" (Female FGD, September, 2010, Krachi).

Other discussants agreed with their colleague and maintained that discussion of family planning helps in proper family planning, regulates childbirth, helps to prevent teenage

pregnancy and unwanted pregnancy, reduces maternal mortality, educates and promotes issues on reproductive life (Focus Group Discussion, September, 2010, Krachi).

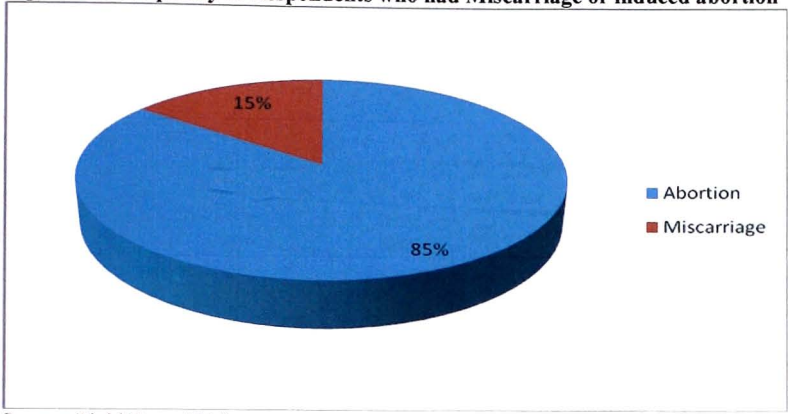
4.7.8 National Policy on Family Planning

Respondents were also asked if they are aware of any government policy on family planning. Of the 879 respondents, 352 (40%) of them stated that they were aware of a government policy on family planning, whereas 60% of respondents said that they were not aware. This means that more than half of the respondents were not aware of the country's policy on family planning. This calls for intensive education on the policy alongside the need to communicate family planning methods to create the awareness of existing policies, programmes and services.

4.7.9 Abortion

According to data gathered from the field, 377 respondents have stated that they had been pregnant. Out of this number, 299 respondents carried the pregnancy to full term. Of the 78 that could not carry the pregnancy to full term, 66 intentionally terminated the pregnancy while 12 had miscarriages (see Figure 4.4).

Figure 4.4: Frequency of Respondents who had Miscarriage or induced abortion



Source: Field Data, 2010

Lifetime Experience of Abortion

Understanding which individual in the family plays a more dominant role in the decision-making process is vital when issues of health care are concerned. One way of avoiding unsafe abortion is through communication among the partners for a consented decision as to the safest place to seek abortion services. This would deter abortion seekers from having unsafe abortions by unqualified physicians in unhygienic environments. To this end, respondents who stated they had abortions were asked to state who took the decision for the pregnancy to be terminated.

Table 4.19 reveals that out of 66 respondents, 30.3% indicated that the decision to terminate the pregnancy was taken by them, 27.3% attributed the decision to terminate to their partners, 24.2% reported that the decision was jointly taken, whereas 10.6% and 7.6% of them disclosed that their family and friends took that decision for them respectively.

Table 4.18: Decision making on Abortion

Decision	Frequency	Percentage (%)
Jointly	16	24.2
Self	20	30.3
Partner	18	27.3
Family	7	10.6
Friends	5	7.6
Total	66	100

Source: Field Data, 2010

Only 24.2% of decisions on abortion were taken jointly. Although this does not necessarily imply that partners did not communicate in other cases, the data is suggestive. When considered in tandem with the findings on family discussion on family planning (Table 4.3; pp. 81) showing relatively low frequency of communication. and data on the high incidence of unsafe abortions, these findings help to highlight the potentially important role of intra-family communication and its ability to influence health care decisions.

Reasons for Abortion

Table 4.20 illustrates respondents' main reasons for terminating a pregnancy.

Table 4.19: Respondents Reasons for Abortion

Reasons	Frequency	Percentage
Last born too young	5	7.6
No money	10	15.2
Not ready to be a mother	18	27.3
To continue schooling/apprenticeship	22	33.3
Partner refuse responsibility	6	9.0
To avoid shame of parents	5	7.6
Total	66	100

Source: Field Data, 2010.

The most common reasons cited for the abortion are to continue schooling/apprenticeship (33.3%), followed by lack of preparation as a mother (27.3%), financial hardship (15.2%), was followed by partner refusal of responsibility (9.0%), and public shame alongside spacing/timing of another child (7.6%).

Family Discussion on Abortion

To understand communication patterns in families, respondents were asked if they normally discuss issues concerning unsafe-abortion as a family. As indicated in Table 4.3 (on page 81), majority of the households did not discuss issues of abortion. This finding could reflect the treatment of reproductive health issues such as abortion as taboo. The notable absence of these family discussions can help to explain the prevalence of illegal and unsafe abortions.

Respondents who reported discussing abortion issues as a family were also asked about service and access. Out of the 257 respondents, 168 representing 65% affirmed that they discussed where to access abortion services at the family level, whereas 89 respondents, constituting 34.6% reported that this information had not been discussed among the family. The fact still remains that people are shy to talk about issues of reproductive health and even those who discuss the issue, do not cover all the topical issues such as where a safe abortion can be accessed.

Asked at a Focus Group Discussion whether families discuss issues on reproductive health and unsafe abortions, participants were of the view that most families avoid discussion on sexual and reproductive health issues because of the negative connotations

that people associate with people heard talking about sex. A female participant aged 24 years said:

> *"Family members will never engage the young ones in the family on sensitive issues like this even when they ask. Their reason was that when told the young ones will go and practise or experiment it. They consider such education as rather spoiling the young ones. In fact, discussions on pregnancy, sex, sexual organ among others is considered profane among our people here"* (Female FGD, October, 2010, Denu).

In probing further, respondents who reported having discussed abortion issues were also asked if they had ever utilized the options. About 33.8% of respondents affirmed making use of services whereas 66.2% did not make use of services. Of those who said they used the services, 62.3% stated that they had their abortion done by a qualified doctor at a hospital/clinic, 34.0% disclosed that they used a self–administered drug to induce the abortion, while 3.7% reported using a concoction or traditional medicine to abort the pregnancy. This implies that some respondents continue to use unorthodox medicine to induce abortions, causing abortion related death and damages to women leaving permanent damage to their womb and complications such as urogenital infections and infertility.

Key informant interview confirmed the above when a district director of health services in an interview said

> *"Most families feel shy to discuss issues that have to do with reproductive health. This is as a result of cultural observances and beliefs and usages such as taboos and ethics. Most families fear that when such information is given to young family*

members they may abuse themselves by indulging in deviance such as premature sexual activities but what they have forgotten is that the young people are sexually active and they get pregnant, they do all they can to abort it so they can continue their schooling." (District Director of Health Services, KII, October 2010, Jasikan).

4.7.10 Sexually Transmitted Infections (STIs), Sexually Transmitted Diseases (STDs) and HIV and AIDS

Table 4.2 (on page 80) indicated that most respondents were aware or had knowledge of STIs and HIV and AIDS. Respondents were asked if they were aware of how STIs and HIV/AIDS are transmitted. Out of 974 respondents, 97.6% answered in the affirmative while only 2.4% stated that they do not know the mode through which the sexually transmitted infections or diseases were transmitted. Even though an overwhelming majority are aware of how sexually transmitted diseases are acquired, the knowledge of it alone is insufficient.

Respondents who stated that they knew how the disease was acquired were further asked if they knew how to prevent acquisition of STIs and AIDS. Out of 922 respondents, 97.6% stated they know how to prevent sexually transmitted diseases, while 2.4% of respondents did not know how to prevent it. In conclusion, most people knew the appropriate measures to avoid acquisition of the diseases, and HIV and AIDS in particular.

Family Discussion on STIs and HIV and AIDS

For this study, respondents were asked if, as a family, they communicated amongst themselves on issues bordering on STI and HIV and AIDS. Again, results in Table 4.3 (p.

81) indicated that the majority of the respondents engaged as family members to discuss issues concerning STIs and HIV and AIDS.

Table 4.20: Family Discussion of Family Planning

Discussion	Frequency	Percentage
Very Often	65	10.4
Occasionally	182	29.2
Monthly	47	7.5
Weekly	30	4.8
Almost Everyday	123	19.7
Every two Weeks	6	1.0
When need arise	171	27.4
Total	624	100

Source: Field Data, 2010.

Of those respondents who answered yes to conducting family discussions, they were asked to state how often such family discussions occurred. Out of 624 respondents, 29.4% reported that such a discussion occurred occasionally, while 27.4% disclosed that discussions arose on an as-needed basis, while 19.7% stated that discussions occurred almost every day (see Table 4.21).

Respondents at a focus group discussion explained why they did not engage in family discussions on STIs and HIV and AIDS. Male discussants mentioned:

> "*Inadequate knowledge on the matter hampers the efforts to discuss the issue, the topic is not pleasant to discuss with adolescents and children for fear that they might practise it. In fact, I considered sexual reproductive health topics as taboo and culturally unacceptable to discuss such issues with young ones*"
>
> (Male, FGD September, 2010 Denu).

While an overwhelming majority (90.8%) of respondents agreed that it was necessary to discuss issues concerning STIs and HIV and AIDS, 9.2% considered it unnecessary.

They felt that it challenged cultural and social norms. Those who considered the issues through discussions identified various reasons why STI and HIV and AIDS issues should be discussed among families. Out of the 864 respondents, 717 or 83% stated that family discussion of such issues would create awareness of STIs and HIV/AIDS. Also, 13.0% of respondents stated that discussions would educate family members on the dangers of unhealthy and risky sex behaviour, while 3.4% were of the view that the discussions would promote and lead to good healthy living. Results are presented in Table 4.22.

Table 4.21: Reasons Why Families Should Discuss Issues on STI and HIV and AIDS

Reasons	Frequency	Percentage
Create awareness of the disease	717	83.0
Educate on dangers of risky sexual life	112	13.0
Help to reduce promiscuity	4	0.5
Promote good healthy living	29	3.4
Prevents the spread of the disease	1	0.1
Educate on how to seek early treatment	1	0.1
Total	100	100

Source: Field Data, 2010.

Factors that Informed Decisions on Reproductive Issues

Respondents were asked to state the factors that informed their decision on reproductive health issues. Out of 932 respondents, 44% disclosed that access to information was a major factor affecting decisions. This was followed by 31.8% who cited cost as a factor in reproductive health decision-making, 19.1% identified religious/cultural practices whereas 4% stated apathy.

As shown on Table 4.23, the information indicates that for most people to make informed choices on a particular reproductive health issue, they need to be well informed. Even

though most people were aware of reproductive health, they lacked the capacity in terms of finances to actualize their knowledge through access and use of available methods

Table 4.22: Factors that Informed Reproductive Health Decision Making

Factors	Frequency	Percentage (%)
Access to information	410	44.0
Cost	296	31.8
Religious/Cultural beliefs	178	19.1
Apathy	37	4.0
Proximity to health facility	2	0.2
Fear of parents	5	0.5
Healthy living	4	0.4
Total	932	100

Source: Field Data, 2010

Further analysis of the factors informing reproductive health decision-making by age is presented in Table 4.24. The results reveal similar patterns for both adults and young people. In particular, both adults and young people are more likely to cite access to information (291 adults, 92 young people) and cost (242 adults, 44 young people) as major factors informing reproductive health decision-making.

Table 4.23: Factors that Informed Reproductive Health Decision Making by Age Distribution

Factors	Adults	%	Young people	%	Not Stated	%	Total
Cost	242	37.1	44	23.4	10	45.5	296
Access to information	291	44.6	92	48.9	4	18.2	387
Religious/Cultural beliefs	102	15.7	25	13.3	7	31.8	134
Apathy	9	1.4	26	13.8	1	4.5	36
Proximity to health facility	2	0.3	0	0.0	0	0.0	2
Fear of parents	2	0.3	1	0.5	0	0.0	3
Healthy living	4	0.6	0	0.0	0	0.0	4
Total No	**652**	**100**	**188**	**100**	**22**	**100**	**862**

Adults = 20 – 89; Young people = 10 – 19

Many of the factors cited by respondents leading to sub-optimal health care, such as cost, are essentially independent of intra-family communication and discussion. However, the high incidence of reported difficulty accessing information does leave room for a possible causative role of household communication on health care decisions. Lack of communication could potentially facilitate inadequate sharing and collaborative digestion of information.

How to Improve Communication on Reproductive Health issues within the Family

Communication plays a vital role in family decision-making and the use of reproductive health services. Respondents were asked what could be done to improve upon reproductive health communication within the family. Of the 904 respondents, an overwhelming majority (79.3%) stated that there should be intensification and sensitization of public education on the values of communication within families. About 10.1% of the respondents asked that parents should initiate weekly discussions on reproductive health as a matter of urgency, 5.2% of respondents advocated for chiefs to get involved in the awareness-creation through community durbars, while 2.8% suggested that parents equip themselves with reproductive health information to share with the family during discussions. The information is shown on Table 4.25.

Table 4.24: How to Improve Reproductive Health Communication within the Family

Strategy	Frequency	Percentage
Intensification and sensitization of public education	717	79.3
Parents should equip themselves with RH information	26	2.8
Young people should encouraged to asked questions on RH	10	1.1
Parents should initiate weekly discussions on RH with family	91	10.1
Literature on RH should be translated into the local languages	1	0.1
Chiefs should be involved in the awareness creation through community durbars	47	5.2
Obsolete cultural and religious beliefs should be abolished	13	1.4
Total	904	100

Source: Field Data

Challenges Associated with Family Communication on Reproductive Health

Out of 931 respondents, 252 (27.1%) identified 'misconceptions or lack of knowledge' as top challenges associated with family communication. Then, 24.2% of respondents admitted a difficulty to talk about sex due to religious and cultural beliefs. Approximately 14.7% of respondents shared a shyness to use certain words when communicating reproductive health issues, while 10.8% shared that men do not normally participate in family discussions. These results are shown in Table 4.26.

Table 4.25: Challenges of Family Reproductive Health Communication

Challenges	Frequency	Percentages
Shyness to use certain words	*137*	*14.7*
Difficulty to talk about sex due to religious and cultural beliefs	*225*	*24.2*
The men do not normally participate	*101*	*10.8*
Limited time for discussion	67	7.2
Inadequate information/knowledge on reproductive health	65	7.0
Fear of exposing the children	32	3.4
Misconception	*252*	*27.1*
Some individuals do not take the discussion serious	52	5.6
Total	931	100

Source: Field data, 2010

Further analysis based on differences in age is presented in Table 4.27. The data suggest that both adults and children are more likely to cite the same challenges. For instance, both adults and children cited shyness, difficulty to talk about sex, and lack of male involvement as the major challenges to family discussions on reproductive health. The findings help to reinforce the potential for effective communication to boost access and utilization of reproductive health methods and services. Factors such as shyness and religious/cultural beliefs play an important role in inhibiting effective communication and their relatively high incidence reported by respondents highlights the latent potential of effective communication.

Table 4.26: Challenges of Family Reproductive Health Communication by Age Distribution

Challenges	Adults	%	Children	%	Not stated	%	Total
Shyness to use certain words	*84*	*13.7*	*24*	*13.3*	*5*	*20.8*	*113*
Difficulty to talk about sex due to religious and cultural beliefs	*161*	*26.3*	*32*	*17.7*	*5*	*20.8*	*198*
The men do not normally participate	*67*	*11.0*	*13*	*7.2*	*1*	*4.2*	*81*
Limited time for discussion	48	7.8	4	2.2	1	4.2	53
Inadequate information/knowledge on reproductive health	44	7.2	5	2.7	2	8.3	51
Fear of exposing the children	18	2.9	2	1.1	2	8.3	22
No challenges	*140*	*22.8*	*100*	*55.3*	*3*	*12.5*	*243*
Misconception	6	1.0	0	0.0	2	8.3	8
Some individuals do not take the discussion serious	45	7.3	1	0.5	3	12.5	49
Total	**613**	**100**	**181**	**100**	**24**	**100**	**818**

Experiences of Reproductive Health Communication within the Family

Respondents were asked to state their experiences of intra-family communication.

Out of 823 respondents, 274 (35.2%) disclosed that they have difficulty in understanding certain issues, 23.7% of respondents stated they had experienced increased knowledge on

reproductive health, 14.2% reported having an improved reproductive life, and 7.8% complained of their inability to use certain words during intra-family communication. The information is shown In Table 4.28.

Table 4.27: Experiences of Respondents in Intra-family Communication

Experiences	Frequency	Percentage
Increased knowledge in RH	*195*	*23.7*
Inability to boldly use certain words	64	7.8
Improved reproductive life	*117*	*14.2*
Awareness of STI/HIV and AIDS and how to prevent it	46	5.6
Increased knowledge sharing on RH issues	28	3.4
Children tend to enjoy the discussion	62	7.5
Difficulty in understanding certain issues	*290*	*35.2*
Inability to have deeper discussion due to inadequate information	8	1.0
Apathy by men	13	1.6
Total	832	100

Table 4.29 presents further analysis on respondents' experiences with family discussions and with comparisons by age. Results indicate similar patterns for both adults and children participants. Both adults and children were more likely to indicate that they have experienced enhancement in their knowledge of reproductive health issues and experienced improved reproductive life or health. Again, they were both likely to indicate that they have not had any experience because they did not practise it currently.

Table 4.28: Experiences of Respondents in Intra-family Communication by Age Distribution

Experiences	Adults	%	Children	%	Not Stated	%	Total
Increased knowledge in RH	*155*	*25.9*	*25*	14.4	8	40	188
Inability to boldly use certain words	49	8.2	9	5.2	3	15	61
Improved reproductive life	*97*	*16.2*	*18*	*10.3*	*1*	*5*	*116*
Awareness of STI/HIV AIDS and how to prevent it	37	5.4	6	3.4	1	5	44
Increased knowledge sharing on RH issues	24	4.0	0	0.0	1	5	25
Children tend to enjoy the discussion	45	7.5	4	2.3	0	0	49
No experience since we don't do it	*162*	*27.1*	*109*	*62.6*	*3*	*15*	*274*
Difficulty in understanding certain issues	14	2.3	1	0.6	0	0	15
Inability to have deeper discussion due to inadequate information	7	1.2	1	0.6	0	0	8
Apathy by men	8	1.3	1	0.6	3	15	12
Total	**598**	**100**	**174**	**100**	**20**	**100**	**792**

Source: Field Data, 2010.

Summary of Key Findings

1. A significant relationship was found between educational level and intra-family communication, such that the highest level of education of a family influenced ability to communicate effectively on reproductive health issues.
2. There was also a significant relationship between economic status and intra-family communication, such that high economic status of a family was associated with effective reproductive health communication in the family.

3. A significant relationship was found between intra-family communication and use of reproductive health services, such that greater intra-family communication was associated with greater use of reproductive health service.
4. Factors cited by participants inhibiting access and usage of reproductive health services or preventing effective intra-family communication such as low access to information, shyness to discuss words or topics, difficulty talking about sex issues because of religious/cultural reasons and non-participation of men in discussions help to highlight the valuable role of communication. The qualitative data from respondents suggest some ways in which effective intra-family communication can have a causative influence on access and usage of reproductive health services and family planning/STI-prevention methods.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This study sought to examine the nature of intra-family communication with regards to reproductive health issues. Accordingly, 1,011 respondents were sampled from six districts in the Volta Region through a combination of purposive and convenience sampling techniques from a household survey. Data were then subjected to cross-tabulation and chi-square analysis. This chapter discusses key findings of the research and relate them to the existing literature. It also highlights the limitations of the research and made recommendations for future research in the area of reproductive health services.

5.2 Discussion of Key Findings

This section is divided into three main subsections where each subsection analyzes an important aspect of the main research findings. In particular, the discussion is presented under the following headings: education and intra-family discussion; economic status and intra-family discussion; and intra-family communication and use of reproductive health service.

5.2.1 Intra-Family Communication and Use of Reproductive Health Service

As indicated earlier, the principal objective of this study was to explore the impact of intra-family communication. Analysis of data revealed that households which hold family discussions about maternal health are more likely to make use of family planning methods compared to households not holding such family discussions. Joint decision-

making increases the chance of making use of family planning methods compared to decisions made by an individual. This suggests that intra-family communication and joint decision-making are instrumental to making sound reproductive health decisions.

These findings are consistent with other studies. For instance, Furuta and Salway (2006) also reported strong correlations between a woman's discussion of family planning with her husband and the likelihood that she would seek both antenatal care and delivery services. Similarly, communication at all levels—personal, family, community, and mass media—plays a major role in individual decision-making (Piotrow, Kincaid, Rimon, and Rinehart, 1997). Although not family-focused, studies on individual exposure to mass media and family planning have found that exposure to messages increases the likelihood of practising contraception (e.g., Cammack and Heaton, 2001; Gupta et al., 2003; Stephenson and Tsui, 2002).

Furuta and Salway (2006) are of the view that this positive association could be explained by the fact that individuals who discuss family planning tend to be more open to modern ideas and, therefore, are more likely to opt for skilled maternal health care. Another plausible argument supported by recent qualitative work in Nepal (Mullany et al., 2005) is that women who discuss family planning with their husbands also communicate more about other matters, reflecting a more open, egalitarian relationship. However, communication between partners about contraception may also require greater involvement from men because such topics are traditionally identified as belonging to the "female" realm and, therefore, potentially stigmatize men (Mullay et al., 2005).

Thus, individuals who discuss family planning tend to be more open to modern ideas and are, therefore, more likely to opt for skilled maternal health care. Discussions also tend to occur in a more open, egalitarian relationship. Interestingly, 83.4% of respondents reported that they had knowledge about family planning methods. However, only 36 % indicated that they were currently using at least one family planning method. Further analysis of data from this field survey revealed that nearly half (53.2%) of all the respondents reported that they hold family discussion on maternal health. Of this group, 39.2% shared that discussions were held occasionally, 25.3% mentioned that discussions were held when the need arose, while 18.5% claimed discussions happened very often. The analysis further indicates that 25.1% attributed the inability of families to have discussions on maternal health to a lack of awareness on the subject, 24.0% remarked that the discussion or communication on the matter was not necessary, 30.3% attributed its inabilities to cultural beliefs, while 17.1% felt that the family was not mature to engage in discussions on such issues.

Similarly, 25.4% of respondents reported that issues of abortion are often not discussed among family members, while 74.6% stated that they never discussed issues of abortion. However, only 32.7% of respondents decided to abort a pregnancy jointly with his/her partner, whereas 24.5% took the decision by themselves, and 16.3% gave the decision-making authority to their partner or health workers (4.1%) or doctors (2.0%). These limited communication efforts would support WHO and UNICEF estimates that the Ghanaian woman has a one in 35 chance of dying from a pregnancy-related cause during her lifetime. Current hospital-based studies indicate that complications from unsafe

abortion are a factor in 22 to 30 percent of maternal deaths, significantly more than the World Health Organization's global estimate of 13 percent.

Additionally, gender inequality in reproductive decision-making is becoming central issue in the social context of reproductive health. Research shows that couples often disagree about desired pregnancies and the use of contraceptives (Speizer, 1999; Bankole and Singh, 1998; Becker, 1999). Similarly, a study by Furuta and Salway (2006) in Nepal found that few women reported participation in household decision-making, and even fewer had any control over their own earnings. However, more than half of these women reported discussing family planning with their husbands, of which there were significant differences among subgroups. Araoye (2006) observed that the locus of control for decision-making was commonly found with both the husband and wife, rather than only with males or females. Despite this, only 53.2% of males and 58.1% of females had actually discussed desired family size with their spouses, while even fewer; 36.6% and 35.1% respectively, had discussed family planning methods with their spouses in the preceding six months.

Though the findings of the study suggest that intra-family discussion on maternal health are positively correlated with healthcare utilization, the nature of intra-family discussions reported seems to point out that maternal health and related reproductive health issues will continue to be a serious problem for the Volta Region of Ghana if reproductive health education is not intensified and behavioral methods are not applied to modify attitudes towards intra-family discussions about reproductive health issues. Indeed, Kamal (1999) and Lozare (1976) have both reported that increased levels of

communication between partners are positively associated with increased contraceptive use.

5.2.2 Education and Intra-family Discussions

As indicated earlier, the data reveals that 83.4% of the respondents knew of at least one family planning method but only 36% indicated that they currently use at least one family planning method. The question is: Why does this occur?

In addition to examining the influence of intra-family discussion, this study also explored the statistically predictive power of education. The analysis examined the relationship between education and discussions about different components of reproductive health. This study found that more educated respondents were more likely to discuss general issues about family planning and HIV and AIDS-related issues while they were less likely to discuss issues related to unsafe abortion. Overall, empirical data support the hypothesis that a significant relationship exists between educational level and intra-family communication such that the higher the level of education, the more likely family members will engage in intra-family discussions about reproductive health issues.

This finding is consistent with results of previous studies where there is a strong relationship between women's education and use of maternal health care services (Kazi & Sathar, 1996; Sathar & Kazi, 1997). Again, it has also been reported that schooling may also increase women's receptivity to new health-related information (Lindenbaum, 1990). A study by Maine et al., (1997) found that even when women knew about their obstetric complications, many chose not to seek care because of the poor quality of care they expected to receive. This implies that the education of the woman is a key factor when it comes to accessing quality reproductive health services. However, stigmatization

associated with giving birth out of wedlock can explain why levels of education did not determine whether or not a woman would abort a pregnancy. In other words, it is rather social sanctions that prevent educated women from seeking reproductive health services.

A number of causal links has been offered to explain this strong effect. For instance, studies conducted in South Asia have suggested that this association may be due at least in part to a fostering of new values and attitudes that are favourable to the use of modern health care (Kazi & Sathar, 1996; Sathar & Kazi, 1997). Chanana (1996) also suggests that education may impart feelings of self-worth and self-confidence, which some have argued are more important in bringing about changes in health-related behaviour than exposure to relevant information. Besides, it has also been reported that greater education may reduce the power differential between providers and clients and lower women's reluctance to seek care (Basu, 1996; Jejeebhoy, 1995; Starrs, 1998). In addition to increasing the likelihood that women will value and desire skilled care, education may strengthen women's ability to act on this demand (Furuta &Salway, 2006). The results of the study by Furuta and Salway (2006) suggest that the effect of education operates in part via increased discussion between husbands and wives.

5.2.3 Economic Status and Intra-family Discussion

In order to determine why 83.4% of respondents reported that they knew of at least one family planning method but only 36% of them indicated using at least one of the family planning methods, further analysis was carried out on possible socio-economic influences.

The analysis revealed that there was a significant relationship between economic status (measured as income level) and intra-family discussion, such that higher income was associated more frequent family discussions about general family planning, STIs and HIV and AIDS. However, higher income was associated with fewer discussions about abortion issues. To this extent, the pattern of results reported above suggests inconsistencies with similar studies examining the link between health and income. For instance, DiMatteo (2004) reported that economic factors such as income have a major impact on treatment adherence, health status, and access to health care.

Another study that also demonstrates the link between income and access to reproductive health is that by Ross et al. (1989) where a link was found between the number of modern methods readily available and contraceptive prevalence. For instance, in eight out of 36 countries studied, five to six modern methods were available, and in these countries modern contraceptive prevalence averaged over 60%. In five countries, three to four modern methods were readily available, and current prevalence averaged about 40%. In seven countries, where only one to two methods were available, about 25% of couples used modern contraception. In 16 countries where no modern methods were readily available, less than 10% used modern contraception (Ross et al. 1989). The link between access (defined in their study as availability) and reproductive health outcomes (use of contraceptives) lies in the definition of availability. In the countries where modern methods were not available, this suggests that the income levels in the country may be too low for people to afford contraceptives. This, indeed, suggests that access to reproductive health services is associated with income levels.

Despite the advent of the national policy on free delivery services, there are some women who still did not know about the services. For instance, during the focus group discussions, a female discussant shared the following:

> "*We did not know that delivery services were supposed to be free at government hospitals and clinics. Our relatives went and they were asked to pay when they attended the government facility and we do not have the money to pay so we refused to go in order not to embarrass ourselves.*" (Mabel, FGD Oct. 1st, 2010, Hohoe)

In addition to the ignorance and explicit demand by some nurses, some mothers may, in accordance with the norm of reciprocity commonly held among Ghanaians, want to show appreciation by making some payment. However, as Nukunya (2003) argues, for the nurses who take such gifts they are not acting out of ignorance but out of their own selfish interests to take advantage of some of the mothers.

Also, the weak relationship between income level and family discussion about abortion is not surprising. This is because Schnittker (2004) has already indicated that income is related to educational level. In previous discussions on analysis of results from this study, we indicated that the likelihood to engage in family discussion on abortion was lower among persons with higher income. This finding is plausible since persons with higher socio-economic level are more likely to have the means or resources to take care of their pregnancies and, therefore, less likely to consider abortion. As a result, discussions about abortion may not frequently arise.

5.3 Limitations and Direction for Future Research

5.3.1 Limitations

With this survey, there were several limitations such as the need for more funding and human resources during the fieldwork. This had the potential to affect the fatigue levels of the field staff and the hundreds of people who were interviewed. Also, there is the risk of interview bias from focus group discussions and key informant interviews, where the way we posed questions may have elicited erroneous responses.

5.3.2 Direction for Future Research

There is room for further qualitative research on the role that intra-family communication plays in health care decision-making and access to services. Although this study finds a significant correlation between family communication and improved decision-making, and it also identifies some way in which discussion of reproductive health issues can actually directly influence decision-making, further research can help to explore the relationship and identify ways in which healthy communication can ultimately be promoted.

Additionally, future research is needed to assess whether comprehensive sexual and reproductive health communication within families not only increases utilization of services but results in better health outcomes. Also, abortion-related research has been relatively neglected in global sexual and reproductive health research but it accounts for a significant number of deaths. Research plays an essential role in paving the way for more informed dialogue on the nature of unsafe abortion and in facilitating changes in programmes and policies. The Ghana Health Service and all organizations with a

comprehensive mission and interest to reduce the number of maternal deaths from unsafe abortion and advance women's reproductive rights must invest in research into communication on unsafe abortion within families in Ghana.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter draws conclusions based upon the results presented within this study. Overall, this research sought to examine the nature of intra-family communications and its impact on reproductive health decision-making and subsequent usage of reproductive health services. The recommendations are based upon the conclusions.

6.2 Conclusions

Reproductive and sexual health is fundamental to individuals, couples, families and social welfare. Although there have been some progress, particularly with information dissemination on reproductive health issues in the mass media, very little has occurred at the level of the family as a unit.

Communication, although essential, is not always effective, frequent, or involving the right family members. When families discuss reproductive health issues, it holds the potential to influence decision with regards to reproductive health service usage. This research proved that intra-family discussions had an influence on the use of reproductive health services, while economic status and level of education were important predictors of intra-family discussions about reproductive health services. However, it was also found that higher economic status and higher educational levels were associated with fewer discussions about unsafe abortions within the family. Conclusions drawn from the analysis of the results of the study suggest that intra-family communication, irrespective of age, is important to ensuring that appropriate reproductive health decisions are made.

An important conclusion drawn here, however, is that further research is needed to identify other correlations between positive reproductive health outcomes and communication.

While exploring sexual and reproductive health knowledge among family members in Ghana, the study revealed that there is a significant relationship between education and intra-family communication on reproductive health issues. It is, therefore, imperative that both formal and informal educational systems are strengthened as they have implications for family members in decision-making on critical health issues.

Also, in the quest to find out the sources of information where household members normally learned about sexual and reproductive health, the study revealed that the majority of the respondents obtained their information from the clinic and the mass media. Other sources included family planning information from clinics and the pharmacy/drug stores. STIs and HIV and AIDS information also came from the mass media and health workers. Abortion information, however, came from health workers, friends, and schools in that order. This then means that information on abortion– particularly on unsafe abortion – is not often made available through health centres and the mass media.

In addition, the study revealed that a majority of the respondents felt that access to information was the major determinant in their decision-making process. This was followed by cost and religious and cultural practices. Age and sex did not affect or alter these major determinants.

Finally, more than two thirds (79.3%) of the respondents stated that there should be an intensification of awareness of health issues within families. Respondents identified misconceptions as a primary challenge within family discussions, while others had difficulty talking about sex due to religious and cultural beliefs. Also, some faced problems with shyness when using certain words in family discussions. There is the need to equip families and households with communication skills to enable them to undertake such an important task of discussing reproductive health topics effectively.

6.3 Recommendations

According to Thames and Thomason (1998), family communication is much more than just the exchange of words between family members. It is what we say, how we say it, why we say it, when we say it, and what we neglect to say. It is, therefore, important that in dealing with communication within the family on reproductive health issues, these factors are all taken into consideration. The findings of the research showed that communication on reproductive health issues in the family has been found to be empowering, such that individuals exposed to the issues took decisions to use reproductive health services for improved life. The preliminary question we were required to ask ourselves was:

> "*Is reproductive health information given and received from health workers and mass media enough to influence individuals to use health services?*"

In fact, health workers and mass media are only part of an essential package for improved reproductive health. Policy makers and implementing agencies must think "outside the box"—outside the clinic walls—and diversify interventions which should include and

specifically target households to increase communication for improved decision-making particularly at the family level.

Exposure is very critical to acquiring knowledge on reproductive health issues. The information gathered from this research indicates that when people are knowledgeable, they become empowered such that they take the appropriate decision of seeking service from the appropriate service provider. It is, therefore, proper to address reproductive health education comprehensively to ensure that the contents in school programmes and community intervention programmes have convincing and effective messages. It is also recommended that the Ghana Health Service should develop a strategy and a unified approach of communicating reproductive health issues within families, schools, mass media, religious institutions and other community intervention programs. Another recommendation is for parents to be given empowering skills through literacy classes that will enable them to discuss reproductive health matters with the family without feeling shy to mention the so-called taboo words.

Regarding sources of information on reproductive health issues, the study revealed that the family is the least mentioned source of information on reproductive health. It is recommended that the Ghana Health Service, in collaboration with the Ministry of Employment and Social Welfare, should develop curricula and informational materials translated into different local languages on reproductive health topics for use by families and household members. This informational educational tool will boost the confidence of both adults and young people to freely and effectively communicate on these issues.

Furthermore, it is recommended that families be provided with access to information through all household members since the family is the starting point for individual life skills acquisition. It is also recommended reproductive health professionals to design programmes that demystify reproductive health matters for the benefit of cultural and religious leaders.

Finally, to address some of the challenges raised in the paper, it is recommended that organisations target families and develop engaging activities at the family level when dealing with reproductive health programme interventions as opposed to the individual level. Another recommendation is to encourage and promote greater involvement of men in reproductive health communication and at the family level. Finally, evidence-based information should be prioritised and updated across reproductive health programmes to reflect the latest information shared with its target audiences.

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