UNIVERSITY FOR DEVELOPMENT STUDIES

SPOUSAL COMMUNICATION DURING PREGNANCY AND MATERNAL HEALTH DECISION MAKING IN NADOWLI-KALEO DISTRICT OF THE UPPER WEST REGION

BY:

JAMES B. DAKURAH

2021

UNIVERSITY FOR DEVELOPMENT STUDIES

SPOUSAL COMMUNICATION DURING PREGNANCY AND MATERNAL HEALTH DECISION MAKING IN NADOWLI-KALEO DISTRICT OF THE UPPER WEST REGION

BY:

JAMES B. DAKURAH

(UDS/MPH/0052/18)

DISSERTATION SUBMITTED TO THE DEPARTMENT OF COMMUNITY HEALTH AND FAMILY MEDICINE, SCHOOL OF MEDICINE AND HEALTH SCIENCES, UNIVERSITY FOR DEVELOPMENT STUDIES IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PUBLIC HEALTH DEGREE

FEBRUARY, 2021

DECLARATION

Candidate

I hereby declare that this thesis is the result of my own original work and no part of it has been presented for a degree in this University or elsewhere.

Candidate's Signature..... Date 07/09/2020

Name: James B. Dakurah

Supervisor

I hereby declare that the preparation and presentation of this thesis was supervised by me in accordance with the guidelines on supervision of thesis laid down by the University for Development Studies.

Supervisor's Signature..... Date 07/09/2020

Name: Adadow Yidana (PhD)

DEDICATION

I dedicate this thesis first to Almighty God for the Knowledge, Strength and Guidance granted me throughout my study.

Secondly, I had the inspiration and support from my brother Mr. Prosper Dakurah, who stood by me during all difficulties I encountered before and during my course of study, my immense gratitude to you Brother.

ACKNOWLEDGEMENT

As I complete this thesis, I would like to extend my sincere thanks to the following persons for their advice, support, assistance, and encouragement without which I could not have completed this research:

My parents, Mr. Lazurus Dakurah and Ms. Christiana Nanyele, My family has been my backbone in terms of emotional, spiritual, financial and moral supports especially to Mr. Prosper Dakurah who was always there whenever I needed him through my educational sojourn.

Dr. Adadow Yidana, Head of Department, Community Health and Family Medicine, School of Medicine and Health Sciences, who spent sleepless nights just to guide me through this work.

All the lecturers of the MPH course, for all that I was taught

Mrs. Phoebe Balagumyetime the Nadowli-Kaleo District Director of Health Service, for granting me the permission, support and time to conduct the research along with her entire staffs.

Mr. Thomas Gando for his immense role played in helping me in the data analysis.

To all others, especially colleagues' students, too many to mention names, but one- way or the other helped me, I sincerely say thank you!

ABSTRACT

Despite all the interventions put in place with the quest of improving upon maternal and child health nationwide, little has been done in the aspect of spouses' communication during pregnancy and how it imparts on maternal health decision makings. The study sought to unravel the influence spousal communication during pregnancy has on maternal health decision making in the Nadowli-Kaleo district. A mixed method approach was applied, 218 pregnant women, 6 midwives, village health volunteers from three communities and three health facilities in the District respectively were interviewed. In-depth interviews were conducted with the midwives and VHV selected purposively, interviews were also conducted with pregnant women at the three health facilities selected using stratified sampling in the Nadowli-Kaleo district. This study found out that majority of respondents (96.8%) indicated that they often discuss with their husbands about issues concerning their health while only 3.2% did not. Majority of respondents (97.2%) stated they often discuss with their husbands about their pregnancy while 2.3% did not and 0.5% did not remember whether they did or not. According to respondents, barriers to spousal communication were generally as a result of quarrels, shyness and husbands' jobs responsibility making them have little time to communicate. About 64% of respondents scored high in male involvement in maternal health decision making during ANC period while about 36% of males scored low in maternal health decision making during ANC period. Age was found to influence male involvement in maternal health decision making. Practical steps must be taken by the DHMT to encourage and support the formation of father to father support groups (FTFSGs) in the district, just as there is mother to mother support groups (MTMSGs) and ensure that such groups are sustainable and functioning.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS/ACRONYMS

ANC	Antenatal Care
CHPS	Community-Based Health Planning and Services
CIDA	Canadian Development Agency
DDHS	District Director of Health Services
DHD	District Health Directorate
DHMT	District Health Management Team
FIDA	International Federation of Women Lawyers
FP	Family Planning
GHS	Ghana Health Service
GSS	Ghana Statistical Services
HCs	Health Centres
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
ICPD	International Conference on Population and Development
IPPF	International Planned Parenthood Federation
JHS	Junior High School
MCH	Maternal and Child Health
MDG	Millennium Development Goals
MOH	Ministry of Health
MVMS	Multivitamin and mineral supplements
NHIS	National Health Insurance Scheme
NKD	Nadowli-Kaleo District
PNC	Postnatal Care
RHMT	Regional Health Management Team
SDG	Sustainable Development Goals
SHS	Senior High School
TBAs	Traditional Birth Attendants
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
UWR	Upper West Region
VHV	Village Health Volunteer
WHO	World Health Organization

CHAPTER ONE

INTRODUCTION

1.1 Background

Healthy conversation between spouses during being pregnant is a central measure of maternal and toddler wellbeing however is often not noted with the aid of fitness programmes in developing nations and it's considerably an under-researched vicinity globally (Ebba, 2010**).** Although communication exists between spouses during pregnancy, it is not clear the kind of communication that exists between them and how that affects male taking part in maternal well-being choice making.

The physical problems during pregnancy including anxiety disorders are said to have formed a large share of health problems (Rubertsson, Hellström, Cross, & Sydsjö, 2014). On the other hand, good contact and partnership between partners during pregnancy and beyond is important for maternal and child health. For partners who participate in contact even during pregnancy, parenthood is the greatest and most rewarding experience of their lives, (Kiecolt-Glaser & Newton, 2001). High level of constructive communication will lead to spouses and their kids' psychological wellbeing, and spouses' good connection can also have a protecting effect against stressors including worry during pregnancy. Men ought to have healthy communication coupled with accompanying their spouses during pregnancy services since this is vital for the development of both mother and child, but this sometimes is often lacking, (Tuo, 2017).

Many scholars have conducted studies including "Male involvement in maternal health Decision-making in Nkwanta South District (Georgia Tammy Mitchell, 2012**),** Factors Influencing Male Participation In Antenatal Care In The Kumasi Metropolis, (Sham-Una Umar ,

2015), Analysis Of Maternal Mortality In Wa (Salifu, 2014), Men's Involvement In Care And Support During Pregnancy And Childbirth in Gambia (Ebba, 2010) Understanding Couple Communication and Family Planning in Zambia (Lydia et al.,2016)" among others, all these areas are around the subject matter but none has come out clearly to talk about the subject area been discuss currently by this study. The study is targeted at examining the prevalence and kinds of communication that exist between spouses during pregnancy and how that might influence male involvement in maternal health decision making.

According to Hoppmann et al. (2011), increased literature delved into how spouses collectively contribute to each other's psychological and physical healthiness routes (Christiane A. Hoppmann, Denis Gerstorf, 2011). Healthiness and well-being attitudes of the spouses are usually same and tend to meet per a period, (Leong, Rahme, & Dasgupta, 2014). This is partly due to assorted copulating: humans usually select a partner that is same in outlooks and characteristics, as well as fitness-related habits such as meal, physical exercise, smoking, liquor intake, and BMI (Leong et al., 2014).

According to Meyler et al. (2007), the shared assets hypothesis take a chance that agreement can be a purpose of the point that spouses pair a life habit as well as similar worries; partners usually will have a joint existing surrounding, they gather possessions, they eat collectively, and they share a common linkage. Shared central and trivial life activities add to the merging of behavior. Spouses' day to day activities are entangled and each partner's own traits, disposition, approaches, conduct, fitness, anxiety, and life habit affect each other. Thus, the shared control of couples can be favorable or harmful to fitness and well-being, (Meyler, Stimpson, & Peek, 2007).

The International Conference on Population and Development (ICPD) in Cairo 1994 was the revolving theme in strategizing the vital part of men in procreative wellbeing (United Nations, 1994). Global attention was paid to men's duties on reproductive fitness at the ICPD and the 4th Women's Symposium in Beijing in 1995, (WHO, 2001). Hence the good documentation of male contribution in reproductive fitness issues ever since the 1994 Cairo International Conference on Populace and Development (ICPD), which identified the essence of working with men for real transformation,(United Nations, 1994).

As enshrined in the third Sustainable Development Goals (SDGs) "Ensure healthy lives and promote well-being for all at all ages" refining healthiness status remains a worldwide and nationwide agenda. In precise, is the wellness state of mothers and offspring, this is also reflected in the first two targets of the third Sustainable Development Goal, "reduce the global maternal mortality ratio to less than 70 per 100,000 live births and preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births by 2030" respectively.

According to Parker (2009) factors that may result to lack of male spouses' interest in maternal and child wellbeing include lapses in communication among researchers and policymakers, health practitioners, and the final consumers of the service delivery. Lapses could be from a failure to identify the various levels of interaction with the target populace to design communication tools that are specific, appropriate and appealing to them. The situation in Ghana is similar to what pertains in other African countries. The men seen at the ANC tend to be health workers and very few men brave the odds to accompany their partners for ANC.

The rate of conversation between spouses, as reported by one or both companions is generally defined as communication in the marital dyad (Beckman, 2012). Resolution making and seeking of care is the act where good conversation concerning partners is required, whiles there's often a lack of communication between couples result in husbands being ignorant of their wives' health care seeking plans which led to men's inadequate understanding of the procreative needs of women, (Ebba, 2010).

It has been established that people who are married have a better emotional health and bodily safety than those individuals who are without a wife, on the ordinary (Kiecolt-Glaser & Newton, 2001; Robles, Slatcher, Trombello, & McGinn, 2014). Infirmity and death are actually lesser for the marital than for the unattached in a multiplicity of dire and protracted conditions, comprising such varied healthiness fears as tumor , emotional seizures, and operation,(Aizer et al., 2013; Engström, Hedblad, Rosvall, Janzon, & Lindgärde, 2006; Neuman & Werner, 2016).

Nonetheless, the mere existence of a significant other is not essentially protecting; worried matrimony is itself a primary basis of worry and, at the same time, limits the ability of a partner to strive for aid in extra connections, (Coyne & DeLongis, 1986). The connection amid life gratification and nuptial excellence is indeed resilient to that of existence fulfillment's relations, to either one's work or one's fitness (Heller, Watson, & Ilies, 2004). The quality marriage beautify one's complete sense of safety, and nuptial grief raises fitness risks, (Kiecolt-Glaser & Newton, 2001; Robles et al., 2014)

1.2 Problem Statement

Ghana is classified as a male-controlled country where issues surrounding perinatal period and childbirth are mostly seen as a domain of women**.** Males are, to a large extent, household and political leaders and decision-makers, (WHO, 2001).

Furthermore, separation of errands is drawn based on sex and it favors manhood, which ultimately makes them dominating in the administrative route at the domestic level , parting ladies with little or no say in issues affecting their procreative being, (WHO, 2001).

Even though there have been numerous efforts to solve motherly and neonate health defies in the nation, most of these issues including late attendance to Antenatal Care still exist and not all the contributory factors to these Maternal and Child health issues have been identified, making it difficult to find a solution to the issues.

Efforts to reduce maternal and child health complications have given rise to the institutionalization of national guidelines and programs in the form of interferences, such as putting up of many motherly and child healthiness (MCH) facilities from corner to corner the nation; the equipping of traditional birth attendants (TBAs); safe motherhood etiquette development for all stages of health establishments; the organization of unrestricted antenatal care (ANC) services; and the setting up of National Health Insurance Scheme (NHIS), among others (Salifu, 2014). All these put together, scarcely will you see male spouses with their partners in various health facilities encouraging them to seek health care in the Upper West Region.

In spite of these efforts by various governments, non-governmental organizations and other interested parties in executing these guidelines, many researchers have also made attempts to

investigate the decreasing trends observed in antenatal coverage by evaluating the dynamics influencing antenatal attendance (Arthur, 2012; Donnell, 2007; Oppong, 2008), yet motherly and child fitness is still a key trial in the districts where pregnant women are left to their fate during pregnancy.

Despite all these interventions put in place with the quest of improving upon motherly and child fitness nationwide, little has been done in the aspect of spouses' communication during pregnancy and how it imparts ANC attendance. The study sought to unravel the influence spousal communication during pregnancy has on male involvement in maternal health decision making in the Nadowli-Kaleo district.

1.3 Research Questions

The following research questions were asked

1. What is the prevalence of spousal communication on health during pregnancy in Nadowli–Kaleo District?
2. What are some of the issues and barriers to spousal communication during pregnancy in Nadowli–Kaleo District?
3. What is the level of male spouses' involvement in maternal health decision making during pregnancy in Nadowli–Kaleo District?
4. What are the social and cultural factors that influence Male involvement in Maternal health decision making during pregnancy in Nadowli–Kaleo District?

1.4 General Objective

The general objective was to assess spousal communication during pregnancy and maternal health decision making in Nadowli-Kaleo district of the Upper West Region.

1.4.1 Specific Objectives

The specific objectives of the study are:

1. To determine the prevalence of spousal communication on health during pregnancy in Nadowli–Kaleo District.
2. To ascertain some of the issues and barriers to spousal communication during pregnancy in Nadowli–Kaleo District.
3. To examine the level of male spouses involvement in maternal health decision making during pregnancy in Nadowli–Kaleo District.
4. To explore the social and cultural factors that influence Male involvement in Maternal health decision making during pregnancy in Nadowli–Kaleo District.

1.5 Justification

In many cultures, it is uncommon for a man to go to the antenatal clinic and it is unimaginable to see men escorting their companions throughout ANC and delivery, (Babalola & Fatusi, 2009). Men, however, hold societal and financial authority and have a huge control above their partners, particularly in emerging nations. They agree on the timing and situations of sexual intercourse, the size of the family and whether or not their other half will use existing fitness care services (Bhatta, 2016) Plans to include men in motherly healthiness services will target at nurturing cognizance and involving them in birth plans and preparation for complications regarding emergency obstetric conditions (Allisyn et al., 2006). The Ghana Maternal Health Survey (2017), had it that 36% of women are currently married and 21% are living with a man as if in a relationship in Nadowli-Kaleo District. The outcomes of this thesis will be pertinent to all stakeholders concerned with upholding maternal and child healthiness, aid in reproductive planning and implementation in the District and Region at large. The result of the study will

recommend concrete ways by which motherly and child fitness obstacles associated to Spousal Communication can be done away with to warrant improved access to excellence maternal and child healthcare service area in the Nadowli-Kaleo District.

Also, it will help the government to make policies concerning motherly and child healthiness in the Upper West Region. It will also provide relevant data on early Antenatal Care situation concerning health-seeking behavior in the district. To end with, the thesis will build on writings motherly and child fitness decision making in the region and function as a root for extra research.

1.6 Conceptual Framework

The study is focused on the premise that exceptional determinations should be made to underscore the mutual obligation of men and to encourage active engagement in responsible parenthood, sexual and reproductive activity, contact between spouses and maternal health concerns, (United Nations, 1994). The International Conference on Population and Development also called for male inclusiveness in procreative health programs to aid overcome gender biases and advance the health of both spouses and their children as well. Including males is critical to achieving good maternal health decision making during pregnancy and specifically investigates the situation of husbands' contribution in maternal health (reproductive health during gestation, labor/delivery, and post-delivery) in the Nadowli-Kaleo District, Ghana. As numerous studies have indicated, male participation and support can lead to good maternal health outcomes. Such involvement and support as shown in Figure 1.1, can include providing emotional and physical support to women during and after pregnancy, knowing and supporting women's maternal health needs (including maternal care visits to health facilities), communicating with a partner, providing financial support, planning for delivery, and exhibiting responsible sexual behavior by not allowing the pregnant wife to sleep in a separate room.

On the other hand, low husbands inclusiveness can lead to pitiable motherly and child fitness results for both mother and child which can be as a consequence of the low knowledge level of women's reproductive/maternal health needs, manifested by unhealthy communication or no support for maternal health needs during and after pregnancy-inadequate emotional and physical support, limited nutritional support, limited financial support, among others. While the study will seek to explain the situation/level of spouse's communication during pregnancy by examining such indicators mentioned in the preceding paragraphs, it will also seek to find out the factors that impact the level of communication between partners when it comes to maternal and child health matters.

As shown in figure 1.1, this will include such independent variables as age, level of education, awareness about women's maternal health needs, marital status/type, culture/tradition, and access to reproductive health services, among others. It will also look at the effect of such intervening variables as the overall community situation (including the general socio-economic condition and gender norms and relations, etc.) and the family and community influence, among other variables.

The model also shows that there are two likely outcomes from the male spouse participation, depending on the level of such participation. It shows that high male partner participation which can be in any form exhibited through such activities as bodily and expressive support, monetary provision, can lead to decent maternal and child health effects, in which case the vice versa can be possible for little partner participation.

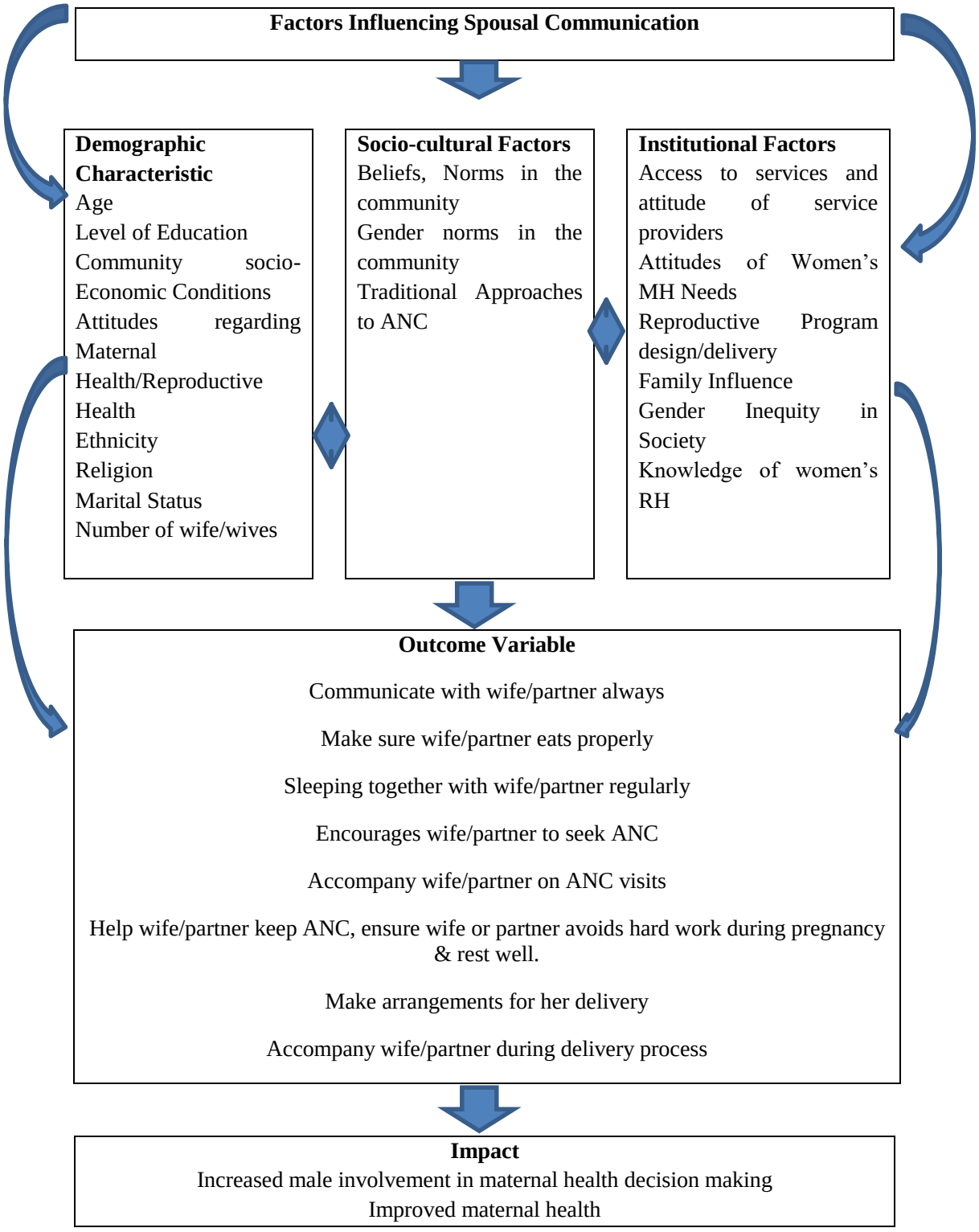

Figure 1.1: Graphic Presentation of Conceptual Framework
Source: Developed by the Author: Dec. 2019

1.7 Definition of Terms

Spousal communication: Usually communication in the nuptial dyad is distinct as the occurrence of conversation among partners, as reported by one or both couples.

Pregnancy: refers to a state of carrying a developing embryo or feotus inside the uterus; the interval of time starting while an egg and sperm unite and ending when a child is born. A complete-term being pregnant lasts 9 months (38 to 40 weeks).

Maternal health: refers to the healthiness of mothers through conception, delivery, and the post-delivery period.

Spouses: refer to a person partner in marriage (where the bride price has been paid)

Barriers: refer to the things that will stop spouses from talking about the affairs of their health during pregnancy.

Male involvement in Maternal Health decision making: This has been operationalized as the direct assistance provided by husbands to improve the antenatal attendance of their wives during pregnancy.

1.8 The Outline of Chapters

The study is organized into six chapters. Chapter one deals with the introduction which comprises the background, statement of the problem, research questions and objectives of the study. The significance of the study, conceptual framework and the organization of the chapters are also dealt with in this chapter. Chapter two deals with the literature review on Spousal communication. Chapter three focuses on the methodologies the study employed to come out with the study findings. It also covers the study design, data collection techniques and tools, data analysis and ethical considerations. Chapter four describes the study results and chapter five discusses the results and limitations of the study. Chapter six give conclusions and recommendations.

CHAPTER TWO

Literature Review

2.0 Introduction

Pregnancy is a time of happiness, enthusiasm, and anticipation but for both expectant spouses, it may also be a time of worry, anxiety, and even fear. Support for a pregnant woman during conception can have numerous effects on her psychological and physiological well-being, affecting the mother and the unborn child's wellbeing (Akinwaare, Ogbeye, & Ejimofor, 2019).

Studies of the relationships between partners during pregnancy and health have found that a strained relationship between her and the spouse is one of the key causes of emotional distress for expectant women. As Jang, Hsiao and Hsiao-Wecksler (2008) put it, an expectant woman who feel valued will have less psychological health concerns. She is less likely to be destructively impacted by job commitments and financial worries. This is because a bad friendship with a better half during conception is the main indicator of pregnancy trauma. It is revealed that husband and wife are supposed to offer support physically, which might include going to doctor's appointments with the pregnant woman, escorting her for required tests at the various stages of pregnancy, (Jang, Hsiao, & Hsiao-Wecksler, 2008). It is also prudent to help her come out with the necessary decisions. During pregnancy is also very important to provide emotional and psychological support. Throughout the gynecology manuscript of John Hopkins Handbook Of Obstetrics And Gynecology (2012), it described such types of expressive care to include appropriate reassurance, showing love such as a simple embrace, walking in company, encouraging the lady to take the necessary sleeps and snacks, helping her to make lifestyle modifications, including reducing the consumption of alcohol and caffeine, assisting throughout

home chores to help her save her strength, making required changes in woman's energy-based sexual behaviors, (Johns Hopkins University School of Medicine, 2012).

The definition of marriage has been modified historically, from a ceremonial institute supporting the economic stability of family to a means of attaining affection and friendship. Recently it is distinct as a course of seeking individual choices and personal fulfillment (Cherlin, 2004).

Social aid is the belief and reality that one is taken care of, has the support of others, and when she or he is considered a part of a social community that is compassionate. Such supporting services could be emotional (e.g., nurturing), real (e.g. provision of monetary assistance), informative (e.g., giving information) or friendship (e.g., a feeling of been part to a group) and elusive (e.g. personal counsel). Societal aid can be calculated by the belief that one has the help offered, the real amount of help received, or the degree to which the individual is incorporated into the collective network. Help may emanate from several places, including family, friends, pets, neighbours, colleagues, and organizations. Relations are mostly required to provide the necessary support needed for the positive arrival of the baby and postnatal care (Akinwaare et al., 2019).

According to Akinwaare et al. (2019), women with high pre-pregnancy stress and at the same time with no or little support had the highest chances of losing the pregnancy, difficulties with baby and emotional imbalance. People who received a lot of support from various personalities will experience a diverse level of satisfaction. And where the support came from will lead to understanding and knowledge of what it entails.

The literature revealed that giving support can be done in a form of physical existence during the various stages of conception. Feeling emotional or empathetic, giving real gifts through the

provision of money and materials things that are relevant to help cope with the pregnancy and labour. It could also in addition to be informational guide with a view to help the pregnant lady comprehend the various hassles of each stage of been pregnant. The sources of assist could come from a spouse whom usually women will consider highly valuable or circle of relatives, buddies and the fitness care workers. In supporting someone, it could either be imaginary, that is when the woman feels that she was offered help or could be in a form of a gift support when there are physical traces of evidence of help such as a visiting at the antenatal clinic, assisting with household chores etc. it could also be in the form of monetary support, (Akinwaare et al., 2019).

Communication in the marital dyad according to Beckman (1983) is defined generally as the rate at which discussion occur between husband and wife, as reported by either of them or both of them; "*Communication today is a sine qua non of everyday life, communication influences and shapes how people conduct their daily lives''*,(Paula J.Beckman, 1983).

When it comes to making decision and care seeking, the process requires good interaction between husband and wife. It is revealed that often lack of conversation between spouses often led to a male partner being naive of woman's healthcare seeking plans. It may also lead to the limited understanding of women's procreative needs by men, (Ebba, 2010).

Where there exists communication, spouses engage in practices or behaviors freely that are able to improve upon their lives. For example, spouses might go in for medical advice and checkups to correct problems or complications that could arise from the use of Family Planning. Interaction between husband and his wife could be influence by several factors. Reviewing literature, religion is one of the factors found to have been impacted hugely on conversation between spouses in some portions of Africa and somewhere else in the USA (Bawah, 2002;

Lehrer, 2004; Ngom, Akweongo, Adongo, Bawah, & Binka, 1999). In study carried out by Alio et al. (2010) on in utero neonate healthiness, they admitted that patriarchal behaviors during the time of conception could have a lifelong effect on the baby's wellbeing.

According to McFarlane et al. (2005), in countries wherein history, defined gender roles impede male engagement in sexual procreative healthiness; male inclusion in procreative fitness is always a challenge (McFarlane et al., 2005). This is especially true in environments where contact between partners is limited and male dominance is expressed, including violence against women, high-risk sexual activity and alcohol consumption. As an African country, Ghana faces the same socio-cultural challenges that affect the involvement of men in procreative health making only very little progress over the years.

The function of guys to making sure that their pregnant women get hold of right care all through and after pregnancy cannot be over-emphasized. This is located in Specific additives of antenatal care (ANC), especially with those who have scientific, dietary and psychosocial goals. It has been proven to advance childbirth effects and ease maternal headaches, especially in less endowed nations, (Carroli, Rooney, & Villar, 2001; Lumbiganon, Hofmeyr, Gülmezoglu, Pinol, & Villar, 1999). It is, however, observed that the most essential constituents of making sure a wholesome pregnancy and delivery won't be within the conceived woman's ability to manipulate, but alternatively the control of the household, typically the significant other (Beegle, Frankenberg, & Thomas, 2001).

Antenatal Care was revealed to be the period that gives exquisite possibilities to attain pregnant ladies with prophylactic remedy, vaccinations, analysis and treatment of infectious illnesses, in addition to with fitness training packages, (Gross, Schellenberg, Kessy, Pfeiffer, & Obrist, 2011).

According to Gross et al. (2011), Serologic testing for syphilis, setting up of malaria stoppage, anti-tetanus vaccination and avoidance of mother-to-child spread of HIV are all proven to be effective antenatal interventions. Provision of recommendation all through prenatal period about likely conception headaches and risk symptoms, and facts on how to look for hospital treatment, are considered as key techniques to lessen delay in search of professional care (Gross et al., 2011). There is a need for healthy conversation between spouses having husbands governing the household assets in many surroundings, their role is very crucial. It is an undeniable fact that during each studies and project implementation, however, ANC and pregnancy fitness interventions have since on account been centered only closer to women due to their extended need for assets across the time of been pregnant, but additionally due to the slowly changing belief that men are only loosely worried within the women fetus package, (Inhon & Dudgeon, 2004).

Reviewing the literature accessible, it was realized that the utmost effective gestation-born nervousness variable is marital pride and matrimonial happiness holds a fine dating with the pair's conversation. On the alternative hand, some research have also found out a high-quality relationship between pregnancy tension & marital satisfaction; for instance, women playing extra effective protection mentioned less tension of their mid-being pregnant and reduced tension from mid to overdue gestation as determined in their study, (Rini et al., 2011). Plus these studies, it turned into additionally determined that ladies having a less nice relationship with their partners experienced higher unease compared with those with much less terrible dating; in truth, Psychological adjustment all through the transition to parenthood of each of the ladies or men and the companion is impacted with the aid of the companion dating, (Figueiredo et al., 2008).

However, other researches disclosed that pregnancies that are not planned for, low personal belief & short perceived upkeep are of the factors ensuing large mental threat for apprehension signs and indications throughout first been pregnant trimester. In some different studies, it has been emphasized that little educational stage, small profits earnings, joblessness, loss of collective help, matrimonial problems and absence of companion's aid are kind of the dangerous causes of hysteria in pregnancy, (Nasreen, Kabir, Forsell, & Edhborg, 2011). In a research performed by Bussel et al. (2010), it's also said that Socio-demographic traits (age, marital fame, financial popularity), intrapersonal (self-worth, neuroticism terrible existence stories), societal (marital frustration, loss of community aid) and been pregnant-related medical (chance standing of been pregnant, preceding gestation experiences) are the variables associated with unease stages in expectant women, (Bussel & Spitz, Bernard Demyttenaere, 2010).

On the other hand, other evaluations by Esmaeilpour et al. (2013) and Lavner et al. (2017) discovered the link between matrimonial satisfaction and conversation skills; many studies established the affirmative correlation between these two variables that conversation skills can surge marital satisfaction and/or stimulate the satisfaction of married couples. (Esmaeilpour, Khajeh, & Mahdavi, 2013; Lavner, Karney, & Bradbury, 2017). Another study conducted by Litzinger et al. (2005), confirmed that conversation can independently envisage marital pleasure and the couples being greater a success in-effective conversation record better marital delight including them been healthy, (Litzinger & Gordon, 2005). In addition to that, other studies also specified that coaching couples on conversation skills have a constructive effect on spicing relationship & heightening couples' bargain to issues concerning them, (Yalcin-Siedentopf et al., 2020).

A study conducted in Zambia by Murithi et al. (2016) on Understanding Couple Communication and family planning revealed that while many of the respondents agreed that it is crucial for husbands to accompany their wives to the clinics to gain a better know-how of own family planning methods, as well as provide emotional guide to their spouses, the sentiment that guys who escort their wives to clinics are "weak'' and manipulated by their better halves was common among many guys that were interviewed, (Murithi et al., 2016). It was also realized that an evaluation between responses on a sequence of probes relating to fecundity aims inclusive of the desired range of children and toddler gender possibilities, own family planning usage, timing and spacing of kids, shows conflicting explanations between husbands and other halves for most of the couples. But opposing answers suggested that intra-spousal conversation about these matters were not existing, uncommon or unproductive.

In Ghana as in many other African countries, programs on maternal health focus on women than their male partners. The few programs that target men tend to emphasize more on the use of condoms and treatment of sexually transmitted diseases. However, men undoubtedly play critical roles in areas of procreative health once they are regarded as heads of every household. It can be said that their health seeking-behaviour will either complement or impede efforts aimed at improving maternal and child health. Strategies aimed at encouraging communities to participate in safe motherhood activities should take into consideration the need to involve men as well as appreciate the importance of the cultural and social aspects of making motherhood safe (Motherhood Demonstration Project, 2004)

In her report on "the role of WHO in addressing inequities between women and men", the WHO Director-General in 2005 stated the need "to involve the fathers and other male decision-makers as well" in attempts at decreasing child death and promoting mother's healthiness.

Unfortunately, the role of male partners is still largely unknown and untapped in many regions around the globe (Inhon & Dudgeon, 2004). Decades after the ICPD and the Beijing meeting, men's involvement in procreative health in developing countries remains a new phenomenon and Ghana is no exception.

There have been several attempts to engage people on the continent in sexual and reproductive health, the global determinations intended at attaining the Millennium Development Goals 4 and 5. Studies in Lesotho and Uganda have defined barriers such as customary sexual category roles, fear of not having respect from pals, lack of adequate conversational skills, absence of understanding and high opinions of maleness to engage people on sensual and procreative fitness, (International Planned Parenthood Federation, 2015). From these studies, organizational attempts to reach men bare very small, and not the local governments, donor agencies, NGOs, and researchers have yet provided high priority.

The “Nepal Demographic and Health Survey”, (2001) revealed that the male spouse is mostly the head of the household, and woman’s monetary reliance on the husband gives him superior power on key domestic choices, as also sighted by Britta and others (2004) somewhere halve of the ladies had their ultimate choice about their wellbeing care decided by their spouses (Ministry of Health, ERA, & Macro, 2002). Studies have proposed that man contribution in maternal fitness leads to a better aftermath for both the expectant woman and the yet to be born baby. Reporting their assessment findings, Pagel et al. (1990) and Mutale et al. (1991) stated that, societal backing; especially from the man or family has positive repercussions on the development of the foetus (Mutale, Creed, Maresh, & Hunt, 1991; Pagel, Smilkstein, Regen, & Montano, 1990). It is observed in least developed countries most of whose society is a patriarchal one, intensification of male inclusion during conception has remained understood as a

likely indicator in decreasing the number of kids giving birth to with low birth weight. Besides all the significance of male participation in reproductive healthcare services, the chunk of interventional services to enhance Sexual Reproductive Health upkeep during conception and child birth in most nations have stood earmarked solely for womenfolk, (WHO, 2002). Meanwhile it is paramount to adopt that for all the processes leading to mother's health there is at all times a man standing by to support the spouse before, during and after each pregnancy but which is not the case.

2.1 Prevalence of spouses communicating on their health during pregnancy

Conversation between Spouses is a critical element in the approval and continuous use of most reproductive health services. Since it has been observed to allow pairs to interact and share thoughts that might transform their said opinions, (Roudi & Ashford, 1996). Also, clear conversation on family planning suggest to couples chances to talk about family likings and ways to achieve them (Bertrand, Mathu, Dwyer, Thuo, & Wambwa, 1989). There is a common mindset in our part of the world that spouses don't talk about planning of their family and procreative matters together (Musalia, 2005).

Literature suggested that data from least developed countries depict that communication between couples is more often than not on family planning. Implying all communication is related to couples contraceptive use (Roudi & Ashford, 1996). According to Demographic Health Surveys' figures sighted in seven African countries namely: "Botswana; Burundi; Ghana; Kenya; Senegal; Sudan and Togo", the rate of females who practiced current contraceptives use is found to be greater amid those who have had discussion on planning of family with their spouses than those who did not (Roudi & Ashford, 1996).

In most of the literature reviewed, communication between husband and wife has remained tied with contraceptive usage. Then Blanc (2001) elaborated it clearly that once a friendship exist doesn't necessarily imply that conversation surges contraceptive usage, the contrary might also be a reality, (Blanc, 2001). In another piece of work, it was indicated that spouses who have already made up their minds to use contraceptives might then be apt to discuss procreative fitness (Salway, 1994). It was additionally stated that Ghanaian ladies who had discussed FP with their male counterparts were probable to be existing customers than folks who did not. In China, it is revealed that female factory workers and their husbands were given family planning education emphasizing on spousal communication and shared responsibilities. The resulting effect was that most were not becoming pregnant frequently and practicing abortion frequently compared to those couples whose fellows were educated about spousal conversation alone, (Wang, Vittinghoff, Hua, Yun, & Rong, 1998).

Some other studies have publicized that males are extra probable to use protection in chance affairs as prevention of Sexually Transmitted Infections (STIs) and pregnancy. Analysis of data collated from completed questionnaires by almost nine hundred women who reported having one partner in a study conducted in Rwanda revealed that, communication among couples was linked with improved contraceptive use. If only the dialog was precise such as chatting on protection against STIs, (Pile et al., 1999). Once talking about fecundity concerning couples, contraceptive use and safe sexual practices usually caused unease and conflict, it is argued in literature that consideration be given to interactive affairs. And then conversation will come to be part of the general policy of family planning activities. A recommendation was made that plans for improving spousal conversation should comprise efforts to solicit the contribution of men. That is by making available to them informative training and abilities needed in family planning

communication. It has existed that topics regarding procreative problems, females in numerous little endowed groups don't have any say, (Bawah, 2002).

Almost 75% of males in the Western part of Africa reported that they had certainly not discussed planning their family when it was sought in a study with their partners, whilst in Eastern Africa, less than 40% indicated they at no time discussed family planning and in Northern Africa, the proportion was even lesser indicating that countries are improving in terms of FP discussion between spouses (Ezeh, Seroussi, & Hendrik, 1996; Lasee & Becker, 1997b). In circumstances where men talk about family planning inclusive their spouses, it's paramount to understand that conversation can also be nonverbal particularly when at hand is no custom of chat among the spouses concerning erotic contact or contraceptives use (Balmer, Gikundi, Kanyotu, & Waithaka, 1995). According to a study conducted in Bamako, Mali on Family Planning, refusal to talk about sex and other procreative matters was revealed to be a leading cause of disappointment on the part of spouses to act on frequently said preferences. Subject to how choices are made hence this can also mean that behavior will remain unchanged, (van de Walle & Maiga, 1991).

A study in Uganda by Blanc et al. (1996) also assessed how negotiations occur among the sexual partners. Comprehensive questions were probed concerning how couples communicate and how they settle their disputes. Then comparisons had been made among companions. The evaluator noticed that mutually conversations and argument were not common, 1/3 of the interviewees had conversation on sizing their family or birth spacing with spouses inclusive. Most of the study participants believed that there exist a clear comprehension of their partner's wants and needs. Husband and wife were inclined to take blame for choices and wife was more probable than

husband to recognize deviation with her man over procreative matters, (Greene & Biddlecom, 2000).

Review of literature indicated that a scholar of communication, David Berlo (1960), talked a lot about communication as been a changing, unending, always varying and a nonstop process, (Berlo, 1960). Two psychologists, Bernard and Huckins (1971) also wrote that ... "*Things are easier to manage. Things do not ascribe meanings or accord status. They neither judge nor evaluate. They place no pressure to impress or to convince. This happens only as a result of the interaction patterns which one has with other individuals. These patterns and interpersonal relationships are established, maintained and mediated through communication*''(Bernard & Huckins, 1971). Barnlund (1968) stated, "Man is not a passive receptor, but an active agent in giving sense to sensation. Interpersonal communication is a complex process of creating meaning in the context of an interpersonal relationship", (Barnlund, 1968). Researchers therefore tried to find out what will happen when personal communication takes place among contrary sexes. There is the tendency that Men and women use verbal messages differently. Editors Canary and Dindia (1998) elaborated, "Understanding these differences is just another way in which one can enhance interpersonal communication with others", (Canary & Dindia, 1998). Timmerman (2002) observed, "Research does suggest that there are differences between masculine and feminine styles of communicating in that, feminine styles are more geared to establishing and maintaining relationships and masculine styles are more geared toward reaching task-related goals". Ordinary, interpersonal conversation is a multifaceted technique that we undertake every day. It's far vital when the connection is with the partner than when it is not. Several researchers and family counselors claimed that one of the middle elements within the appreciation of the marital relationship is conversation. Conversation isn't most effective

contributory to marital happiness however also one of the most critical contributing factors to it. Esere et al. (2011) endorsed the above, more than half of the broken friendships are owing to a serious absence of contact among couples. To have a long and lasting connection with someone, one must have tremendous communication abilities, (Esere, Yusuf, & Omotosho, 2011). In stabilizing a marriage, communication is very essential, (Jamila, 2011). Without it, it is nearly not possible to resolve conflicts or grow a partnership. Through verbal exchange numerous issues are added up, looked after and selections are made. In a marriage, verbal exchange and its satisfactory decide how nicely the couple is in track with each other's wishes and whether their bond has any outcomes on the form of parenthood they practice. Various researches in growing nations of the globe have been conducted on this subject matter. For instance, it is realized that researchers in Bangladesh and Pakistan in Asia, Nigeria and Ethiopia in Africa, have used numerous variables (demographic, socio-economic, attitudinal or behavioral, and space) with one-of-a-kind tools (questionnaires, interviews guides and FGD guides) to study (the use of bivariate, regression and different analyses were employed) the issue of communication between spouses but most of them dealt with Family Planning. Family planning conversation among husbands and wives is a necessity for improved and responsible procreative wellbeing behavior (Chaudhury, 2018). Couples could make better procreative choices in the event that they discuss own family making plans subjects more brazenly and frequently with partners (De Silva, 1994). Whether to practice circle of relatives planning or no longer, which techniques to pick out whilst to start contraception, and the alternatives regarding the number and timing of children are all effects of inter-spousal conversation (Feyisetan, 2019).

The regularity of inter-spousal conversation is sometimes viewed as an sign of safe planning of family practice, where couples practise contraceptive use correctly and constantly without facing

any side effects (Sarwatay & Divatia, 2016). Pairs who deliberate on matters of planning the family are likely to chat and comprehend the prospective advantages and disadvantages of diverse contraceptive devices (Shahidul, Alam, & Hasan, 2014). Islam, et al. (2005) wrote, "Better communication between husbands and wives can also facilitate joint decision-making and balance gender roles in a family"(Islam, Padmadas, & Smith, 2005). Because of the dearth or absence of couple verbal exchange about planning the circle of relatives, many wives trust that their husbands oppose family planning while in reality the husbands approve, (Biddlecom et al., 2019). Studies advised the nearer a male and female are in their stages of education, and extra training they have got, more probable are they to discuss and use own family making plans (Silva & Indralal, 1991).

An observation on women in Togo, Africa unraveled that if a lady has a few command over money then she is more possibly to discuss own family making plans together with her husband. Alternative study on Yoruba men (Nigeria, Africa) found that elderly women partake more in planning of family making choice than their younger counterparts (Adewuyi & Ogunjuyigbe, 2018).

Inter-spousal conversation can be viewed as a crucial step toward surging men's input in family planning and procreative wellbeing (Lasee & Becker, 1997b). Since each ladies and men play key roles in procreative fitness, couple conversation is essential for making accountable, healthful decisions, particularly in a socio-cultural setting wherein knowledgeable alternatives are not there. However, male inclusion does not necessarily refer to the usage of male methods only. It also includes assisting lady technique use which implies that husbands need to speak about family making plans subjects with their other halves. Enough pressure cannot be laid on the fact that effective conversation between couples leads to a better fatherhood practice. Not

only does the couple know precisely what and a way to do, they also have the freedom to chart out the future direction of their parenting experience by means of making plans for a baby.

In the context of motherly fitness, an assessment in Tanzania found that families headed via males have been related to greater domestic-based deliveries (Exavery et al., 2014). In Pakistan, the powers of extraordinary assessment making by men was associated with little utilization of pre-birth and delivery care services (Hou & Ma, 2013).

The role of men as family caregivers not merely clashes with modern demands to involve them in childbearing care, but also acts as an obstacle to helping their significant others in motherly health care. In a research, certain males reported being too full of activity for things such as escorting their other halves to receive antenatal care and after-birth treatment. In view of this, most men, particularly those from countryside settlements, thought it was waste of their time to escort their helpmeets to seek check-ups in the course of pregnancy, (Ganle & Dery, 2015). This was also compounded by the fact that the bulk of the study partakers were mostly small scale farmers and thus excessive demands on their time, especially at the time of the rainy period, forced to skip escorting their wives to motherly healthiness care service. Surveys using ladies mostly supported the comparatively negligible contribution of men in motherly healthcare, (Ganle & Dery, 2015).

More so, women and health care providers have indicated that men frequently perceive antenatal care and other motherhood care facilities as intended and earmarked for ladies. Males are therefore are therefore not confortable in such “female” places anytime they find themselves there. Fascinatingly, some women were reported to have said that they do not want to be seen with their husbands attending antenatal clinic, (Ganle & Dery, 2015).

Literature also revealed that there is a robust, progressive correlation (r = 0.75) among the success of conversation between companions. Meanwhile near partial of the men (48%) had ineffective conversation. Precisely half of the ladies fall in one of the categories been effective and ineffective (Sarwatay & Divatia, 2016). More highly educated, nearly two-thirds were spotted to have operative interpersonal conversation in a study carried out by Sarwatay et al. (2016).

A study in Bangladesh indicated that Family Planning activities are women oriented and are probable that man's consent of, couple conversation regarding Family Planning and existing usage of contraception will affect each other alongside with other socio-economic and demographic variables. Husbands might settle on Family Planning after a series of birth control usage instigated by wives (particularly, female methods) and as an outcome of regular couple conversation concerning family planning. Present-day usage of any birth control devices and subsequently experiencing any side effects may start couple discussing about family planning within a couple or if it previously exists it may upsurge the regularity of couple conversation. Support of planning of family by husbands point to plainness from the man's side to deliberate on different family planning associated problems and hence may stir couple conversation. Lastly, both man's acceptance of Family Planning and couple chatting regarding Family Planning is possible to impact the existing usage of contraception, which might be deciphered into proficient usage of the existing routine or substituting to extra operative technique (Islam et al., 2005).

A study in Nepal also discovered that stages of companion's contribution effects in motherly wellbeing care were said to be fairly extraordinary. That is a chunk of the women comprising 80% ever chatted with their men in the course of their previous gestation about their health. Females were queried if they and their companions put in place any delivery readiness plans and

the responses included financial arrangements, transport to the health facility during an emergency, how to prepare for delivery and prearrangement for someone who might provide lifeblood in event of a crisis. A considerable section (82.6%) of females responded to have discussed any of the four arrangements for birth collectively with husband inclusive. Likewise, 40.7% of the ladies have been escorted by their other half to antenatal care clinics and their male counterparts were present for many of the times in one-third of the cases. It was revealed that in 78.2% of cases, husbands were present at delivery, while this figure was 59.3% for deliveries at health facilities, (Lewis, Lee, & Simkhada, 2015).

Some couples stated “that husbands give advice about which provider to see and at what particular time”. It has been revealed that in most instances, significant others instructed them to go to the health facility and see a therapeutic care provider whereas “mothers-in-law”, in other circumstances, favored to consult TBAs. Men will sometimes recommend their other half to see an up-to-date health service worker, more frequently than other female family members like mother-in-laws. Further instruction found given to females by their mates were on taking a nap, been cautious, avoidance of the lifting of weighty things, eating balanced foods frequently, taking iron tablets, and visiting of the fitness facility, (Thapa, 2012).

Literature also revealed that couple therapy might have provided males and females with an occasion to initiate discussions regarding things they have not been accustomed to publicly addressing. However, in a setting where men are rarely open to counsel from health professionals, action might have made it possible for them to be more educated when taking part in such discussions. It was also revealed that a husband's consent might have allowed wives to select long-acting, flexible contraception and eliminate established obstacles, such as monetary

restrictions and the concern that a reproving spouse may realize the implant's insertion site, (Marina et al., 2018).

Although husbands have been found to help their wives during conception and to be readiness for childbirth, just a small number of them escort their helpmeets to the wellbeing facility for antenatal appointments. The study revealed that very few of the participants who participated, re-counted companions escorting their partners to the fitness facility for antenatal care appointments, although utmost of them settled on the significance of male partners going to health facility in company with their wives. Ladies assumed it was at ease to interact with the healthcare staff when their partners were there and giving moral support, (Thapa, 2012).

For instance "My husband frequently suggested to me to visit the midwife when I was pregnant, but neither did I ask him to go with me nor did he go. When I returned from the visit, my husband used to ask me what happened and what the midwife told me. Sometimes, there were so many things that it was hard to remember everything she [midwife] suggested. It would be better if my husband was there to talk with the midwife……" were some of the responses gathered from the qualitative data conducted by Deependra Kaji Thapa (2012).

The literature indicates that discussions with the provider vendors have proven that it's typically younger and educated male partners who escort their other halves during prenatal care visits. These younger and educated husbands are regularly interested in energetic conferences with midwives to talk about the fitness of their other halves and unborn kids.

2.2 Issues spouses communicate more on and barriers that hinder communication during pregnancy

The role of manhood in guaranteeing the welfare of their companions during pregnancy cannot ever be overemphasized. Many assessments conducted relating to the subject matter have

pointed to the constructive effects of masculine contributing in numerous procreative healthcare issues (Tweheyo, Konde-Lule, Tumwesigye, & Sekandi, 2010). It is therefore paramount that the relationship between spousal communication and outcome of pregnancy also be investigated to help increase maternal and child health.

Literature shows that facts shared via couple interaction can make women appreciate how and when to contact pre-birth and post-delivery upkeep services. Females who need such service areas but do not have any idea as to how to get them can go to their colleagues or husbands for the direction relating to the procedure of getting it. Adequate interaction may also allow for persuading. Females who are unclear as to how and when to utilize such services may go to their friends and these friends might encourage them to access services.

A study conducted in one region, one of the significant findings was that, there exist association between access to birth facility, usage of a trained birth assistant and communication with males and those having little training. There are two inferences right here: One is that in this area at that time ladies were reliant on guys for suggestion before getting admission to prenatal associated facilities, therefore once more establishing a considerable obstacle to care (Dougherty, Stammer, & Valente, 2018).

An important network characteristic found in literature from the network point of view is the kind of association whether it is a significant other, circle of close relatives, friend, or health staff. It was expected that interaction with associates will have the greatest association with admittance to services (Dougherty et al., 2018). Close friends usually shared comparable traits and have more friendly conversation which hypothesized hints to more convincing and improved communication (Dougherty et al., 2018).

In cultures that are dominated by men, their reassuring posture is also noted to be an essential element in maximizing the usage of maternal and neonate healthcare services (Sinha & Chattopadhyay, 2017). Literature reasoned that poor or inadequate interaction among couples and gender stereotyping restraint women to have access to healthcare services. On that note, violence in marriage can be thought as an indicator of uneven control dealings among men and women in their union, (Sinha & Chattopadhyay, 2017). Violence between spouses is referred to as in the literature, any cruelty or fierce act that takes place between two persons in a close relationship similar marital and has countless types comprising bodily hostility or physical attack, carnal and emotive exploitation, adjusting or dictatorial (WHO, 2012). Women suffer denial of equality with men in cultures with a resilient basis of "patrilineal-patrilocal-patriarchal" system**.** Astonishingly, literature revealed that only 2.7% of decision as to seeking health care comes from husband and wife and the rest 97.3% is a combination of personalities found in the family (Ganle, Otupiri, Parker, & Fitzpatrick, 2015)**.**

It was also found in the literature that Knowledge pertaining to childbirth and all it laid down processes was lacking. Reactions from the female respondents and their male partners in addition to the health specialists, factor to the truth that male companions do no longer have adequate expertise of childbirth and the delivery manner. Concerning male companions now not having or demonstrating having any know-how of childbirth and delivery process, a 22 year old mom in a study by Saah et al. (2019) revealed that, *"My partner did not do anything to show that he knows something about childbirth and the processes involved in it".* A male respondent, 33 years of age also said, "*I don't have much knowledge on it (skilled birth), and I don't need to know because the doctors are there to help us"* (Saah et al., 2019).

An assessment carried out by Dougherty et al. (2018) shows that in sum, only 39.8% out of the 92.5% response rate of participants indicated they have ever discussed conception related topics with not less than one person. The major findings recounted in that study is that ladies who stated chatting with their friends or even a health worker, conception related issues were most probable to have gain access to a health centre and had a trained birth assistant. They were also in good position to have gain access to post-delivery attention within the hours of 48 of their most fresh delivery as compare to those who testified chatted with their companion. This can be attributed to the lack of their partners in-depth knowledge in maternal reproductive health issues, (Dougherty et al., 2018).

Communication is a very common concept in daily life and takes place in any environment, organization; area or region, no work or activity or task is carried out without effective means of communication. In the communication process, it is clear that there are obstacles and obstacles which can be avoided and which cannot be avoided; thus, a person should instill in each other all the skills, attitudes and characteristics needed to overcome all barriers to communication, (Kapur, 2019).

There are always obstacles within the communication processes, no matter how strong the communication system might be. Whether it is an institution, contact between family members, or social network, an agency, and so on it will depend on how well-formed and well-developed the system is to overcome these obstacles. Barriers within communication structures are very disturbing and undesirable; every person wants his or her functioning to be carried out smoothly short of any hindrances. For instance, when a friend discusses a vital issue with someone, or when two relatives have a family chat and the bell at the door rings, or when a stranger move in, in several instances once the doorbell rings, the whole chat will be disrupted, (Kapur, 2019).

Basically, just a few respondents from literature revealed that making of decisions and seeking of care are mechanism that involves coordination between individuals, but this is hinders by tradition and the individual temperament, which made men's inadequate awareness of women's reproductive needs. Several respondents felt reluctant to speak to their partners things pertaining to their pregnancy and childbirth problems, and this subsequently compounded women's apparent worries in telling their husbands of their planned visit to receive antenatal treatment, (Ebba, 2010). It was revealed that few informants regarded the limited reproductive contact between spouses as a good morality in some societies, and the revision of that morality depended on how one was socially raised. And others thought like they were only afraid to speak to their husbands about reproductive issues.

More so, absence of interaction also meant that men were indifferent to women's well-being seeking wishes, as not many men often reserved themselves in await for the woman to lay a demand. Poor spousal interaction among partners also was evident in women's experience in pursuing services for family planning services. Hence women shun from their husbands and sought contraceptives services because they believe that men are hesitant to help their efforts to obtain family planning services. Men's seeming hesitation might have been a signal of insufficient awareness of women's reproductive wants due to inadequate husband and wife procreative interaction, (Ebba, 2010).

As revealed by Ebba in 2010 in an in-depth interview, "If my wife is pregnant ... she never tells me ... I learn only by watching her pattern of menstruation ... a tree flowers before bearing fruit (literally looking for pregnancy signs) ... most women conceal reproductive problems from their husbands ... and you know that one can offer support with something only one knows about ... that's why we (men) also hold our own," this was from a male participant. And similarly from a

midwife in the study, reported that she do perform Intra-Uterine Contraceptive Device (IUCD) insertion a type of contraceptive type for clients in her facility, but several times people will meet her in the facility and tell her that they were recommended to the procedure by their friends and it's really good hence their interest but really do not want their husbands to beware of it, they will put it that if their husbands were in the know, they will not allow them to come for the service, and if he (husband) learns about the contraceptive, he might demand that they withdraw it. The decision makers are the men and always they need to be told everything, (Ebba, 2010).

However, given the limited reproductive contact between partners, the male spouses often advised their pregnant spouses to take the iron containing tablets supplements given at the facility. Males also claimed that sometimes is the women that will refused to take their tablets due to side effects they experienced after having taken them and such effects might include: nausea and vomiting, (Ebba, 2010).

Every society wants a child right after marriage. Womanhood and motherhood are gained on this basis. Each married woman is expected to perform this role. Women reach their desired positions in this way. Family and relative bonds that are developed as a result of the harmonization process are important factors that encourage or limit to having children. The need for children in the country is increased by the continuation of the family as a social structure and transfer of heritage, the need for manpower in economical actions, the increasing power in the relative groups according to the number of people and some opportunities (social, financial or emotional in a group or outside the group support, etc.) gained with this power (Artun, 2012, s. 150).

The beliefs and practices relating to pregnancy and birth start with the desire of being pregnant and affect the woman, her family and surroundings. In some societies, pregnant women are expected to adopt many beliefs and traditions during the period that starts from the beginning of

pregnancy and continues until birth. Couples right after marrying, are expected to have babies in many parts of Anatolia. A young child is given to the bride's arms on the first day she comes to the groom's house with her bridal dress to make her pregnant immediately. The desire for children is expressed to the bride with these actions. Another expression for the desire for children is the first meal that the bride has in the groom's house. There is the tradition of cooking eggs for the bride as her first meal in the groom's house. All these instances only come with a form of communication during the marriage rites but might not happen during pregnancy.

Other traditional factors are equally seen to have inhibited men's effective contribution in maternal wellness issues. So is not just only that, men felt their roles opposed with the needs to be concerned in maternal fitness care. In most instances, traditional values were recognized as obstacles that prevented men's active contribution. The negative insights towards men attending antennal care, delivery and post-delivery examination services have been noted in several studies by participants. For instance, it has been reported that men who are seen escorting their significant others to ANC services were tagged as being controlled by their other halves at home, (Ganle & Dery, 2015). Five main obstacles hampering men's contribution in maternal fitness care including, masculinity and male role conflicts, traditional beliefs, unfavorable opening hours of services, limited facility space for visited and then poor attitudes of health staff among others were reported in the literature to have been mentioned by most participants. It was also reported that the high cost associated with one escorting his pregnant wife to seek maternity care (Ganle & Dery, 2015). However these studies do not report on communicating during pregnancy and how that can influence male involvement in motherly health decision making.

There have been recently several studies carried out in Ghana which also showed that men's dissatisfaction of issues relating to their wives is a main obstacle to women's using health

facilities that are meant for offering trained maternal and neonate healthcare services at, (Ganle et al., 2015).

When various studies from different parts of our country are analyzed, cultural practices during pregnancy are found to be generally about the diet of pregnant women and the gender of the children. Cultural practices related to diet occur as having some of the food abundantly and limitations on eating some other food. As for nutrition during pregnancy, food craving is a behavior that originates from physiological changes in the earlier times of pregnancy, has had cultural importance in time and has become a subject of learning and practising. According to a research conducted by Erbil and Saglam in (2008) on 213 women; it was determined that 16.1% of women have traditional beliefs about guessing and determining the gender of the baby and 34.0% of them have tried traditional practices to determine the gender of the baby, (Erbil, Senkul, Saglam, & Ergül, 2008).

It is believed that the food that pregnant women eat affects the gender of their future babies, and if a pregnant woman wants to eat sour things, she will have a girl and if she wants to eat sweet things, she will have a boy. Accordingly, the riddle meaning 'Eat sweet give birth to a horseman, and eat sour give birth to an 'Ayse' (a girl name in Turkish)' is said to the women very often in Havza, Samsun, however all these are communicated to the woman before marriage by an elderly person and not the husband. Differently, in some part of the world, it is believed that pregnant women crave for hot food when it's a girl and sweet food when it's a boy. As a different practice, wheat and barley are put in the urine of pregnant women in Amasya. It is believed that if it's a girl the wheat, and if it's a boy, the barley would turn green.

According to a study conducted by Capik et al., (2012), it is observed that women eat to have beautiful or dimpled babies the most (14.4%) when they are pregnant. In these practices, 11.7%

of women eat to have dimpled babies and 2.7% of them eat to have a beautiful baby, (Çapik & Çapik, 2014).

In that study, it is believed that if the pregnant woman could not eat the food she craved for, the woman would have disabled, squint-eyed children or the child would have a body mark on him/her, and if she ate, the child would be smart.

It is also believed that when pregnant women eat food that is perceived to be harmful such as liver, strawberry, blackberry and rose leaf, babies would be in colors that are special to these foods.

There is also a belief revealed in the literature that if the pregnant women eat an egg, the baby would be bald, and if she eats rabbit or camel meat, the lips of the baby would be separated.

And it was revealed that there is a belief that the eye color of the baby would be affected when green or black food is eaten (Çakırer & Çalışkan, 2010; Işık, Akçınar, & Kadıoğlu, 2010).

There is no problem for pregnant women in eating the desired food that they crave. However, it is important to not exaggerate. If they eat too much of only one food, it means that they probably don't eat enough of the other food that they should eat. And this may cause pregnant women or babies to have an insufficient amount of the nutrition required. Being rich in vitamin, minerals and protein of the food considered to be harmful shows that culture can be problematic at some point and nutrition training is required to be given to the pregnant women by the nurses, (Yalcin-Siedentopf et al., 2020).

Another important aspect of pregnancy is the gender of the baby. Except for the mother's and father's desire for a boy or girl, the pressure of their family, group, community or society may be felt more. When the value and supremacy of men in our traditional culture are considered, the common thinking of at least having the first child as a boy is easily understood. There are various

practices applied within the framework of cultural beliefs in our country to guess the gender of the baby, (Ezgi & Hotun, 2018).

Traditional practices related to the perinatal period continue to be sustained by societies, even though they show intercultural differences and change over time in the same cultures. Despite its potential beneficial effects, it should not be ignored that cultural practices during pregnancy may have harmful effects on both mother's and baby's health. The pregnant woman or her babies sometimes lose their lives as a result of cultural practices such as asking for prayers from a preacher, or incense (Sahin & Sahin, 2003).

Therefore it was recommended that the use of practices that don't negatively affect health in line with medical treatments should be provided. The health care professionals should also know well such and evaluate the cultural factors of the society, the pregnant women and their families they give health care and plan their education accordingly (Sahin & Sahin, 2003).

Literature has it that there is a direct link between the number of babies ever given birth to and the mother's fitness. In the cultural and societies dominated by males, predominantly men do not put the wellbeing of the woman into thought and so most women might pass on while giving life due to their poor well-being status, (Menken, Duffy, & Kuhn, 2003). So, interacting frequently in all cases will have the lives of women and kids saved since health issues would have been recognized on time and the right action needed taken to save the lives of these womankind and children, (Menken et al., 2003).

Statistics from South Africa (2006) indicated that there is a great number of break ups in marriages, projected at 526 per 100,000 married peoples and a total fertility rate pegged at 2.7 in 2006, based on that a research was conducted to have a fair idea of the impact of couples'

interaction on Family Planning and procreative attitude. This is as a result of males and females making vital contributions to child bearing and nurturing of their children. Yet maximum fecundity research holds to recognition on ladies to their own, the hypothesis of girl's dominance in procreative and birth control usage has commonly been softened and regularly males' roles are disregarded in research of fecundity and family planning, (Kunene, Beksinska, Zondi, Mthembu, & Mullick, 2004).

In the previous few many years, girls' actions have stimulated an assessment of troubles of strength and spousal verbal exchange or approval in phrases of procreation. This method has accelerated the demographic attention from the person to households with the close circle of relatives as the context in which dialogs are made. The significance of spouses verbal exchange and settlement in the usage of family planning, for instance, cannot be overemphasized considering the fact that most people of male partners are nonetheless workout authority over their spouses as indicated inside the literature, (Nahar, 1994).

For instance, in Bangladesh where Muslim religion is extra important, ladies are not considered to go out in the open. Hence husbands and kids do a lot of outside activities which includes going to clinics to get medicinal drug for the ladies, (Nahar, 1994).

Sociologically, there's a precept that community linkages have an impact on the socialization of characters and additionally within how they attend to and clear up their troubles. For example, on troubles associated with intercourse, fertility and childbearing techniques, girls speak exquisite deal among themselves and the effect among them is remarkable and the effect can far surpass any stage of conversation that they have got with their significant others, (Behrman, Kohler, & Watkins, 2002; Freedman, 1987).

According to Jejeebhoy (2002), few studies matched the attitude of ladies and their companions on ladies' rate and the quantity to which they have and need to have a voice for her very own live, (Jejeebhoy, 2002). The extent of spousal approval stated in some studies that explored spousal meeting has targeted on procreative attitude and options, (Bankole & Singh, 1998). The current evaluation of studies reporting outlooks of women and their husbands regarding procreative fitness showed that regarding fecundity and planning of the family, the proportion of bargain between companions throughout the variety of studies stood at 60-70%, (Lasee & Becker, 1997a).

In Asia, Mason and Smith (2000) determined that spousal approval on the choice for extra kids' was found to be from 70-90%. While the evaluation carried out in Pakistan explored assertiveness and views of women and their husbands concerning factors of procreative fitness and female non dependence and counseled enormous variance in spouses point of view about women's self-sufficiency, (Sathar & Kazi, 2000).

It is also revealed in a study by Jejeebhoy (2002) in India that, there has been known situation of unequal gender relations (Jejeebhoy, 2002). Men are presumed to "own women and have the right to dominate them." Universally , women are categorized as lesser, traditional and area dissimilarities are found in females' dilemmas and susceptibility, (Dyson & Moore, 1983). Since these unsatisfactory gender existence, family members reject women choice making function in planning of the family, it prevents them from shifting round freely, impede their get right of entry to fabric assets and present them for violence inside the household.

Many researches emanating from the literature emphasized on giving education as a key effective factor in fecundity decline. However, a few also quizzed the wisdom behind choices

made to give birth to kids in the household. Hence it is said that having a child is "bio-and socio-cultural" (Omari, 1988). It is bicultural due to the fact that, during the childbearing period, the baby must move through the womb of the mother and through modern reproductive expertise. Somehow, there must be human nature in sperm and ovaries. The way human nature evolved and ultimately brings forth a child into the globe requires choice making and couples talking about fecundity control, which is a social mechanism.

In Ibadan, Nigeria, literature revealed that, a review conducted by Akinwaare et al. (2019) unraveled some obstacles to societal support during prenatal period, these included: poor family proceeds, the nature job of spouses do, unsupportive extended family, just as has observed in other studies conducted by various researchers, hospital rule does not allow a man's presence in antenatal room, health care workers been unsupportive, Stress from in-laws, Pressures of job and the number of kids already given birth to, which most respondent indicated.

Results from this study observe a display of massive affiliation between marital reputation and degree of social aid discovered among pregnant women going to prenatal clinics in decided on hospitals in Ibadan metropolis. The end result also points to the truth that many pregnant ladies who're married and continue to be with their husbands obtained insufficient social aid from a few of the respondents. It became understood from other findings that there's a big effect of marital popularity on community assistance received among prenatal women going for antenatal clinics in the decided on hospitals in Ibadan town in keeping with Akinwaare et al. (2019).

A study conducted in Nepal by Deependra Kaji Thapa (2012) indicated that intra-spousal conversation was noted to be linked with the existence of the husband at the delivery in health care facilities, along with the education of the husband, the understanding of the woman with

criticisms during gestation and the adequacy of ANC visit in the last model. Each single unit improved in the score for intra-spouse contact amplified the probability by 38% (OR=1.38, P<0.05) (Thapa, 2012)

A study in the rural Gambia indicated that, while the respondents stated they wish to be part of the issues of prenatal and delivery, the overall concepts connected with prenatal period and delivery posed a substantial challenge to them to be part. The respondents in numerous focus groups discussion stated that when it is time for their visit to access antenatal care, men will usually get in to provide transport or settle any debt that can hinder them from accessing the service. Meanwhile, it was hard to involve them in unplanned normal or caesarean deliveries involving protracted birth or loss of blood. In any case, expectant women were normally sent to fitness facilities by traditional birth attendants. One of the respondents clearly gave more explanations to situation in the following:

"*I sometimes take my wife to the clinic for antenatal check-ups, but to be honest when it comes to the delivery it is usually the traditional birth attendant who takes her to the clinic*". Another participant added: "*I think that pregnant women should be taken to the health facility by their fellow women, especially during delivery. It is better to leave it that way since pregnancy and delivery is not our (husbands') responsibility*" (Lowe, 2017).

A study conducted by Ganle et al. (2015) indicated that, once pregnant, a Ghanaian woman will supposedly make good use of "prenatal period, antenatal care, delivery and post-delivery care services in a wide range of settings". That is from the home with own family members, buddies and traditional birth attendants (TBAs) to village clinics and ultra-present day hospitals with nurses, midwives, doctors and specialized obstetrical professionals. This is not only because of the special value placed on giving birth to a child by couples in Ghana. But also because of the

anxiety that comes with giving birth to a child, that might cause the woman to pass away in the process of bringing new life. Thus it is the blend of the need for procreation, the happiness and the personal fulfillment that emanates with having a child and the horror that a wife can lose a life during childbirth that sometimes warrants them to seek care. The study revealed that interaction and key interviews with ladies and staff of healthcare showed that in reality, there are cultural dynamics that suggestively prejudiced women's decisions regards to whether to "seek care, place of birth, birth position, and even how the mother may or may not behave during this period", (Ganle et al., 2015).

One sociocultural trait that was unraveled in the literature to have great limits on ladies' access to and use of experienced maternal healthcare services has to do with women's self-sufficiency concerning making of decision and physically movement freely within the family setting. The chunk of texts analyzed from women during the focus groups discussion and interviews revealed that women were not able to access or used expert maternal or newborn healthcare facilities because they are not independent to make their own decisions even in the event where they felt they needed care urgently. Many of the women pronounced that even though they have been often predicted to nurture their pregnancies and correctly deliver normal everyday kids, the strength to proffer those choices concerning how and when to look for pregnancy and delivery services frequently was not absolutely their own. Accordingly, such authorities are vested among a chain of actors, with husbands and mothers-in-law championing the process and being seen to get the finest share of power as final selection-makers, (Ganle et al., 2015).

"The problem is that as a pregnant woman, I can't just get up on my own and say I'm going to the hospital to check my pregnancy. I have to consult my husband because he is the one taking care of me and he is the one who made me pregnant. So even if I don't feel fine and my man says

no I can't go to the hospital, there's nothing I can do. That is why some of us don't go to the hospital to check our pregnancy" (Pregnant Woman, FGD, Tidrope), (Ganle et al., 2015).

Another participant according to Ganle et al. (2015) said:

"Sometimes it is not our fault that we don't deliver our babies in the hospital…When I was pregnant I didn't go to the hospital until it was 8 months. I wanted to go but my mother-in-law didn't agree. When it was time for me to give birth too, she said I should deliver at home. I was thinking of delivering at the hospital, but she and my husband were not in support; so I had no option. I didn't want any problems".

The literature also revealed that religion has a role to play when they decide to seek care;

"I haven't gone for check-up yet because I believe the best medicine comes from the creator [God]. As a believer [Christian] I know strongly that no medicine heals better than God's. That is why I pray, and my church members, we all pray to God to protect my baby in the womb from all evil and infirmity; and when it is time for me to give birth, I pray that God will grant me safe delivery without any problems. For me, I believe everything depends on God and my faith…I can go to hospital thousand times, but if God wishes my pregnancy or delivery not to be successful, no medical doctor can help me" (Ganle et al., 2015).

Cultural factors were found by Mitchell (2012) to be a hindrance to male participation in maternal wellbeing. For example, it was realized that men saw the problems of maternal wellbeing as the responsibility of women in that study. In other words, their perception about antenatal issues was cultural, it is women affairs and that men are not supposed to get mingle with it. It is rare to see men unless in the circumstances that the healthcare provider asked them to come to the antenatal care clinic with their wives. The men perceived that their only role was

to make sure provision for money is done and also make sure a male relative from either their family or partners' family escorted their wives or partners to the health facility (Mitchell, 2012).

2.3 Level of male spouse involvement in maternal health decision making during pregnancy

A qualitative study by Alio et al. (2013) described male inclusion at some stage in been pregnant as being reachable and engaged all through pregnancy and displaying duties in the direction towards the arrival of the baby via supporting the mother. Therefore, the connection between the two, mother and father is of extreme significance and determines the level of inclusion. High father taking part might buffer potential risks for marital clashes, at the same time as low taking part may lead to or result from these conflicts. When childbirth is approaching, it may also make stronger the connection between companions. Particularly, according to international researches, childbirth is observed as a desirable and progressive life occasion and as such might additionally have a wonderful effect on dating pride, (Vanassche, Swicegood, & Matthijs, 2013).

Recent research in least developed nations uncovered that men inclusion was substantially correlated with enhanced standard of being present at birth and increased use of after birth treatment, (Yargawa & Leonardi-Bee, 2015). Other scholars have additionally shown that male inclusion during pregnancy is linked with a decreased risk of their wife experiencing postpartum depression. Men's participation has also been shown to be effective in supporting and motivating women to breastfeed, (Doyle & Kato-Wallace, 2016).

A recent investigation on the role of paternal inclusion on satisfaction of life at some stage in the move to parenthood also suggests that both dad and mom seem to make the most out of daddies` inclusion (Agache, Leyendecker, Schäfermeier, & Schölmerich, 2014). As a likely interpretation of that outcome, the writers suggested that daddies` inclusion might be directly connected to the

first-class of the relationship. High daddy inclusion would possibly buffer potential risks as a result of marital struggles, at the same time as low inclusion would possibly lead to or end result from those fights.

The value of male involvement in procreative healthiness is known worldwide and Ghana is not an exception. At a conference in Tamale organized by the International Federation of Women Lawyers (FIDA) Ghana in alliance with the United Nations Population Fund (U.N.F.P.A), to discuss steps leading to male contribution in promoting gender fairness and reproductive wellness in (2011). The Regional program coordinator of FIDA responsible for Northern and Upper East, Ms Mahama, Speaking on the subject matter assumed that “men play a dominant role among couples, fertility decisions, family size, and other significant issues related to sexual and reproductive health”. Nonetheless, in spite of the key role perform by males; they habitually remained unnoticed in procreative fitness programming and also their task in procreative health is restricted due to customary and social beliefs. This results in undesirable reproductive health outcomes and it is fairly shown by the country‘s high motherly death rate.

According to Green et al. (2006), there is a rising form of ethnographic and anthropological qualitative exploration that have been underpinning the approvals after the 1994 United Nations International Conference on Population and Development (ICPD) on male involvement. Assessing even greater carefully the influence of males, as people, as social gatekeepers and as powerful circle of relatives individuals who put in force cultural practices, regularly to the neglect of ladies‘ procreative well-being. Their result is consistent with what Ms Mahama stipulated in (2011), “Women cannot achieve gender equality and reproductive health without the cooperation and participation of men". According to Sabakati (2011), Malawian women will often “point their fingers at men and say, we are willing to access and use family planning, but

these people prevent us from doing so". This emphasizes the vital part men play and their impact on women's procreative health needs. Which is agreed by all that it can be adverse if men do not have ample awareness about and also making contribution in support of and interacting with their companions. Amusingly, studies demonstrated that men are anxious about women's procreative health, and are often eager to get involved in making of decision, according to the 2018 State of World Population's report by the UNFPA. However indicated by the report, the challenge might be one of conversation gap: the man and mate might need similar thing, but they do not inform each other out of shyness, fear and so on (UNFPA, 2018). So it has been observed by the UNFPA that, communication between man and other half concerning procreative health, as well as contraceptive use, has been getting better over the past ten years. Nonetheless, a great group of men still regard erotic and procreative health to be solely females' thing - so they don't even mention it in their routines.

A study conducted by Mitchell (2012) in Nkwanta South had the qualitative data revealed time as one of the Socio-economic issues hindering men contribution in ANC and the financial responsibilities placed on men to adequately care for their families, they didn't find the time to show up at ANC and PNC with their wife/partner. They said they found it difficult leaving their responsibilities to spend what is usually an entire day at the antenatal clinic with their wives/partners. As far as socio-economic variables were concerned, what the study generally found, nevertheless, was that such key elements as degree of training, career, and income have been found to have no any sizable effect on male contribution (Mitchell, 2012).

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

This was confirmed during the key informant interviews with the structure and policies of the health system blamed for the problem. The health system tries to protect other women's privacy because the delivery room is dependent in a manner that consists of many birthing beds and there are always different women inside the room. But men said this and the attitude of service providers made them unwilling to attend a clinic with their wives/partners, even if they had the time. The situation was found to be similar to findings in many other studies (Mitchell, 2012).

Searching for collected works in Med-line, Google scholars and other catalog has identified research with important results on males' participation from various parts of the global world adopting diverse study methods, comprising but not limited to interventional studies. It is revealed in the literature that a observational study carried out in the US in 2002 with a sample of about 5404 pregnant women and their spouses looked at the consequence of a father playing a role during conception on prenatal care and maternal smoking, (Martin, McNamara, Milot, Halle, & Hair, 2007). The results of the research work found women whose spouses have been contributing in their maternity care to be 1.5 times probable to undergo antenatal care in the first three months. Smoking was also decreased by 36% compared to those whose partners had not been taking part in their maternity care, (Martin et al., 2007). Similarly there was an assessment piloted in 2007 in two countryside facilities in Tanzania that target to explain the rate and predicting factors of a husband's participation in HIV deliberate therapy and screening, as well as it impact on partner involvement and HIV antenatal interference (Msuya et al., 2008). Results of the study show that seropositive mothers that have their partners showed up willingly for therapy and screening after being advised to educate and call their partners were three times more probable to use the prophylaxis Nivarapine, four times extra probable to stop breastfeeding, and six times more possibly to follow the preferred type of feeding as compared to those whose

husbands did not show up, (Msuya et al., 2008). The review of literature showed that many interventional studies conducted in Pakistan from 1985 and 1993 that had their funding from the "Canadian Development Agency (CIDA) and Path Finder International (A United States-based organization)" included males after the appeal was made by females during the execution of the missions on "safe motherhood", since they were viewed as basic decision-makers in the household. Males were included by training them on the danger signs of eclampsia and haemorrhage known to be the two main causes of maternal mortality, the training was done through meetings, presentations and showing of films as well as cheering them to offer their attention and aid to their partners. The outcomes in these studies showed an affirmative impact on the two of the three delays of maternal mortality, which are delaying to decide to seek health care and delaying to access health care services. However they were restrictions to examine the effect on the death of mothers. Initially the findings showed rise in women going for prenatal services and men's curiosity in knowing about conception related issues. This was no longer anticipated from Muslim guys, (Damji & Lee, 1995). Another experimental investigation carried out in Andhra Pradesh, a community in rural India from 2004-2006 was to improve mothers' health and conception related care services by making available support to women who have conceived to access health care services through family inclusion, in particular the husband. The study result indicated a surge in the use of government health facilities and increased facility delivery, (Dipa, 2008). It was also reported by women to have been more likely to be in the company of their husbands and mothers to use pregnancy care services, to consume adequate balanced diets and to reduce their diet workload.

A study conducted in 2006 on males' inclusion in the South African relation entitles causing alteration in the AIDS time sought to explore the types of role playing by all household

members, not excluding men, by participating in the reflection of 20 home loving for at least one grown up with symptoms of TB or AIDS. The records from a small household sample affected with HIV and AIDS were also reviewed in rural Kwazulu for 2 and 1/2 years. The outcomes of the assessment exhibited that absolutely men are part and parcel of their blood relations and household in a wide range of ways. Some of which included taking care of the sick and kids, giving out monetary upkeep, offering their company and support at household, give women chance to be able to involve in different household chores. Equally, the same piece of work found out that these behaviors remain not understood and the popular view of two female participants and data collectors appears to be that, people should not be responsible on behalf of their relatives and profligate. Lessons have been additionally learnt in a qualitative assessment carried out in Bangladesh in 2005 through attention group discussions to discover why men now are not participating in procreative fitness services. The results of which indicated that men aren't stimulated and historically no longer advocated to take part in procreative health services, (Islam et al., 2005). Other issues such as poor husband and wife collaboration, making it tedious for men to comprehend women's procreative difficulties, unmet men's procreative wellbeing needs, male disquiet in visiting treatment center in the company of their wives due to traditional myths, and male uneasiness in discussing procreative health matters with service suppliers have also been recognized. A study in rural Guatemala, 2002 also explored the taking part of Husbands in mother's health using separate surveys and focus group discussions reported that, there was a rather desired and exceptional contribution by male spouses in mothers healthcare, but rather impacted by factors such as marital care of wife, job responsibilities, commercial anxieties, the duration of understanding of men in maternal health. Review of literature also revealed a similar scenario in Kathmandu Nepal, 2006 exploring the views of spouses and health staff on

understanding the obstacles to male inclusion in mother's health revealed some of the obstacles that thwart men from partaking in mothers wellbeing to include low levels of understanding, social humiliation, feeling shy and awkwardness, work obligation, space issues, and people who are not married welcoming them to maternal health services and facility plan limitations, (Mullany, 2006). Besides, hospital policy constraints are factors considered to hinder men's involvement in labor just as Mitchell reported in 2012. A cross-sectional analysis of the reaction of Greek fathers to their involvement and engagement in neonate and infants activities investigated 4 to 6 weeks post-delivery revealed that just 10 % of the 157 daddies surveyed were present when their spouses delivered, and that hospital limitations were due to non-attendance. Hence those fathers, who were there on time, made a revelation that their presence resulted in a close passionate relationship with their wives and their newborns. The above confirmation points out that a person can have a decent procreative responsibility that can add to promoting the wellbeing of both mother and her baby if they were told and included in procreative fitness matters, but rather that involving them could also be limited by a number of factors.

It was also revealed from a study that, there was the issue of switching from all women only procreative fitness services to a male welcoming, spousal facilities, and then to abolish restrictions on health care/government inadvertently isolate/discourage people as of constructive participation in maternal health programmes, (Yargawa & Leonardi-Bee, 2015).

The search of the literature revealed several reasons for involving male spouses in maternal health decision making. Men having been regarded since as heads of the family owe it as an obligation to protect their wives and kids. Male backing is vital and needed for females to journey through prenatal period and giving birth and hence offer couples with the better opportunities of having a fit baby. The choices of male spouses make a significant effect on their

ladies' well-being. So men have a concrete task to carry out in making sure that their spouses receive appropriate care during and after conception. Precise targets of conception care have been shown to advance birth aftermaths and decrease maternal difficulties. Most especially those with medical, nutritional and psychosocial bench marks, are proven to be helpful in resource poor locations (Carroli et al., 2001; Lumbiganon et al., 1999). Nevertheless, there is another school of thought that these most vital components of guaranteeing a healthy gestation and a safe delivery might not be in the expectant woman‘s power. But somewhat in the control of the household, most importantly the significant other, (Beegle et al., 2001).

For most sub-Saharan Africa, issues about prenatal period and giving birth are tagged to be the primary obligation of the wife. It is not common therefore to see men accompanying their wives to prenatal care and been present for delivery (Kakaire, Kaye, & Osinde, 2011). Even in developing countries, men can be a little difficult finding a place for their involvement. Commenting on European attempts to include people in prenatal period and childbearing. Plantin et al. (2011) submitted that most people feel disadvantaged and inadequately educated because the bulk of health education was female, with small space to answer their demands and concerns. (Plantin, Olukoya, & Pernilla, 2011)

Nevertheless, in Kenya, a strong correlation concerning male being present to at least one pregnancy care visit and delivery by a trained birth assistant has been demonstrated. Besides, there were several Studies which explore antenatal care, delivery and postpartum space for men (Singh, Lample, & Earnest, 2014). In particular, men may invite their partners to come and go together with them to antenatal treatment, aid to plan and save cash for birth and transportation arrangement, among other duties, concerning the birth centre (Bhatta, 2016).

Singh and his colleagues have revealed that it might not be strange for men to feel reluctant to push gender tasks. Nevertheless, their study revealed a willingness to step afar the existing old-fashioned roles in the midst of men. Further so than in Maligita, where manhood accepted and sensed that they had a bigger obligation to add and sustenance their significant others and those they were fascinated in finding ways to do so. The study noted that there was a longing amid the males and females who participated for more contribution in motherly fitness care. Female spouses would also want males to be more included, and then males too would also like to know details around pregnancy and childbirth. This could be a case of supplying men with a lot of details so that they can appreciate the established advantages of accessing prenatal care and assisting their spouses in delivery with an experienced birth assistant. Their research found that traditional expectations can seem to build intractable stumbling block to modify while culture is flexible and permits change over a period (Singh et al., 2014).

From a focus group discussion, it was revealed by Singh et al (2014) that "Most of the people here don't want to accompany their wives. Often we don't have the means to do so, so we have to spend the entire day working to do it. If we have to work, we don't have time to accompany our wives. " and that "The issue is with our traditions, for a long time ago, our fathers and our great grandparents were not escorting their wives to prenatal care or even going to delivery. As it's conventional, it's very hard to change that now. ” So in most cases, it was not that men did not appreciate the significance of pre-birth treatment, but instead it was not a standard training for them, (Singh et al., 2014).

A study conducted in Nepal indicated that traditional beliefs could also hinder male contribution. These included but not limited to the idea that delivery problems can be faced if the present of husband was felt at the time of childbirth. Another practice followed is post-delivery isolation,

where bodily connection has to be prevented with a postpartum lady for between one and two weeks post-delivery. This also consists of constraints from cooking of food and the state of adherence to this custom varied between households. “The culture stops men being involved; the culture is not to touch the woman who has just delivered not only the husband but the mother-in-law and father-in-law too. No one should touch the woman for up to seven days”(Lewis et al., 2015).

It was also realized in a study by Koski et al. (2011) that, quarrels at the time of pregnancy can be linked with undesirable outcomes of pregnancy through its restrictive impacts on women's access of preventive or therapeutic care services (Koski, Stephenson, & Koenig, 2011). The study revealed that mothers who had once suffered physical trauma at the time of pregnancy were more possibly not going to receive antenatal care, a health worker visiting home to conduct prenatal checks, not less than three antenatal care appointments, and less probably to start seeking for care early in gestation (Koski et al., 2011). The goals of these antenatal care facilities are to uplift the health impacts of the mother and that of the unborn child. Appropriate and right services are given to the mother and health educational topics given to the woman throughout gestation which are very vital to guarantee progressive impacts on the health of the mother as well as good gestation impacts.

The outcome of the pregnancy is an indicator for healthiness position of both the child and the mother. This is determined using many bench marks, including but not limited to pre-conception body weight and height of the mother, her nourishing and fitness status before and during conception, and conception care and counselling (Tayie & Lartey, 2008). These together coupled with the associated biological changes, such as weight gain during conception and blood volume increase, come together to define pregnancy outcome (WHO, 1984). The biological

modifications that occur in conception are necessary for the growing of the foetus, regulation of maternal breakdown and planning for parturition and lactation. Conception may result in discomforts such as "antenatal nausea, oedema, gestational goitre, anaemia and gestational diabetes" (WHO, 1984). The total effects of these distresses can lead to unfavorable change in food ingestion and overall nutritional habits. To meet additional nutritional needs multivitamin and mineral supplements (MVMS) are given to pregnant women on their first visit to antenatal care clinic. This is to ensure good health of both infant and mother, (Parul, Raiten, Picciano, & Coates, 2003). This is sustained by making sure that pregnant women are dosed daily with the supplements continuously and receive regular counselling till parturition. The challenge is that pregnant women who sought antenatal care late might not receive the right doses of these supplements and will face the necessary repercussions. Whilst those who will report early with the support of their partners are likely to be cared for and be on prescribed nutrient supplements for a longer duration. Maternal and Child Health facilities administer MVMS to pregnant women who visit the facility for care. The compositions of most of these supplements are: iron, folate and vitamin B12. The physiological effects of iron and vitamins supplementation include improved haemoglobin concentration and weight gain. Hence the levels of Haemoglobin in pregnant women have since been used as an indicator to measure the effectiveness of the MVMS programme (Parul et al., 2003). Haemoglobin levels of pregnant women are checked regularly, typically monthly, during conception visits to prevent maternal anaemia and to ensure favourable outcome of pregnancy (Zavaleta, Caulfield, & Garcia, 2000). The research explored correlations between maternal educations, early conception care and pregnancy outcomes using birth weight and maternal haemoglobin as signs and the above were some revelations. Literature had it that

the delay in seeking antenatal care might be due to outmoded traditional norms and taboos of pregnancy, poverty, lack of support or mere indecision, (WHO, 1984).

A significant Survey of married ladies with at least one baby carried out in seven sites throughout India anticipated that 28% of respondents had professional psychological and/or bodily violence in the course of pregnancy, (Koski et al., 2011).

Literature indicated that in talking about pregnancy and childbirth in many societies comes with considerable stigma. They are especially perceived as gender procedures and there may be as a result societal ridicule that lead to male been shy and embarrassed on the subject of discussions issues associated with them among husbands and better halves, (Lewis et al., 2015).

There is however a steady shift towards improving participation of males in motherly fitness. As noted by Sternberg and Hubley "although perhaps no longer seen as part of the problem, men are yet to be seen as part of the solution". One of the shocking revelations of the study was that there was a positive yearning by both husbands and wives in Nepal for there to be more male inclusion.

However, there is a changing trend since perceptions towards customary norms are also recognized in Brunson's (2010) study that women are now more voiced in soliciting for assistance in the process of birth from their husbands even "though historically" there has been no male involvement in birthing activities.

Although traditionally women's roles are known, literature have shown changing in willingness of women for their husbands' contribution in every aspect of their life, including during labor (Lewis et al., 2015). Mumtaz et al. (2009) suggested in their piece of work that there is the need for women to sway away from tagging men as "oppressors" and rather recognize them as

companions in this domain. However, largely the contribution of males in motherly healthcare is not fully grasped and there have been not much exploration done compared to other areas of sexual and procreative fitness.

At the 1994 Cairo International Conference on Population and Development (ICPD), it was realized that involvement of male in the activities of reproductive health and doing work with all men is required for effective transformation; hence it was well recognized in there. The effects of fellows and the socio-cultural production of manhood on ladies' procreative fitness outcomes also are recognized. There have been researches and interferences that have integrated men but these have been in the field of planning family, HIV, and sexually transmitted infections. The impact of male inclusion on the wellbeing of the neonate has also been recognized. A study conducted by Alio et al. (2010) on "feto-infant health", admitted that the fathers' behaviour in the time of the pregnancy can have a long lasting negative or positive effects on the baby's well-being.

Nepal is one of the developing countries with the highest maternal death ratios in Asia, at 281 deaths per 100,000 live births. Multiple risk elements had been identified such as the absence of trained care at point delivery, delayed fitness-seeking and absence of access to fitness facilities. These risk factors are prominent in rural regions and particularly applicable for Nepal as 90 % of the populace resides in country areas and nationally only a 3rd of deliveries takes place in fitness facilities. The majority of deliveries occur at domestic and plenty of women deliver with family, pals, untrained conventional delivery assistants, or even on their own, with its consequent dangers. Currently, being pregnant and childbirth in Nepal are seen very much as a lady's fitness problem. It is a traditional practice for the daughter-in-law to reside with the husband's own family after marriage and for choices about maternal fitness care to be made by using the mom-

in-law. It is also the belief for females to be assisted with participants of the equal gender in the course of labour. Consequently, maternal fitness activities interventions have considered addressing cases of terrible nutrition, lack of know-how, and fitness seeking-attitude primarily via this gender lens.

Furthermore, the significance of support and livelihood given to female spouses during pregnancy by their partners is undeniable. The literature have shown that involving male partners in Family planning counselling have a rippling effect in contraceptive does adoption, the clients satisfaction, more prudent use of the contraceptives, and the continuance use of contraceptive (Terefe & Larson, 1993). Husbands' disagreement have been stated as the core reason why contraceptive usage is not allowed among married women in Turkish, not even a single method, (Sahin & Sahin, 2003). The role of friends, mothers-in-law, and the aged in making decision on contraceptive apart from husbands, is well acknowledged in South Asia, (Kansal, Kandpal, & Mishra, 2006). There is also the same view in Pakistan where urban women are to a much extend probable to use contraceptive if their mothers-in-law have conferred it with them as a choice for their relations, (Kadir, Fikree, Khan, & Sajan, 2003).

In the assessment of the core result yielding ways for activities to upsurge male contribution in family planning, for instance, it is helpful to improve upon an understanding of the extent to which men and women reach agreement on fecundity likings. In a multi-country assessment of couple evaluation conducted in sub-Saharan Africa in 1996, the average stages of spousal compliance on family planning acceptance and the urge to have additional children were 79% and 75%, respectively (Becker, 1996). Literature revealed that results were same to that from a different assessment using data from the 1988 Ghana Demographic and Health Survey (DHS), which showed that, among couples in the country, consensus between a man and his wife on the

liking for more children was 76% (Salway, 1994). A data within 18 countries' demographic health survey, the mainstream in sub-Saharan Africa subsequently found out that conflicting couple likings are common with the men repeatedly fancying more offspring and more frequent births than their wives; in every 10% to 26% of couples, there was no agreement on the wish for more children (Bankole & Singh, 1998).

A study found out that most informants indicated that it was mainly women who began pursuing antenatal treatment, but men welcomed the proposed visits and gradually took decisions. Men's (male spouses) decision-making powers existed to have stemmed from religious duties, traditional and social influences and the common perception of men as providers. For example, a study in Gambia showed that it is primarily a Muslim country, and most people have expressed the view that women were required to ask for guidance from their husbands before they can embark on most of the issues that included their choice to pursue health care, (Ebba, 2010).

It was view as a divine duty and is understood to be part of the teachings of Islam. As a result, most women were justified in obtaining approval from their significant other before attending the clinic. For situations where companions fly or are not around for certain reasons, women's visits to clinics have also been postponed. The quotations below have referred to this. "Your wife is just like your dad... she (wife) should have her husband's permission to do something... even before going to the clinic to seek treatment... this is in line with our faith (Islam) and our tradition and culture" (Ebba, 2010).

A similar viewpoint has been clarified by a female midwife that, "Many women were going to start antenatal care late and the main reason they said was ... my husband's going to farm. I wanted to get permission, I was waiting for my husband to send me money and the business doesn't work, men provide and determine for women to get health care"

A few men according to Ebba (2010) also clarified that "Despite how much education a woman might have, she should be behind men ... men will agree on everything in the household" These traditional opinions of mankind tend to add to the weakening of ladies' supervisory powers. It could limit ladies' independence of speech, which can advance the process of inhibiting their liberation to free them from their rights to health. Nevertheless, the impact of men on the resolution to seek treatment in the delivery process was hugely limited, as this aspect was perceived to be the area of women and they were to be in charge, (Ebba, 2010). The traditional birth attendant was first to be contacted by either the mother-in-law or the elderly female relations. After a woman's assessment, she generally chooses to take the next step of treatment. Once decisions are made, people are consulted to plan for transportation and to provide help for access to the closest health centre. Often, these traditional birth attendants are likely to work afar their limits and often give a try to cases outside their reach, thus preventing refers. Experience from a 47-year-old husband in the study was shared as followed: "My last child, while my wife was in labour, my mother called the TBA and I was sent out of the house, because I sat outside for hours without any improvement (didn't hear the baby cry) I called their attention by knocking on the door and begged them to go to the health center, but my mother refused, and I was trying to persuade her to get us to go, guess what happened next? Once we arrived at the health center, we were further taken to the Hospital and operated, if we had stayed at home, she (wife) would have died" (Ebba, 2010)

Several studies from literature proved a strong affirmative link between spousal conversation and the usage of contraceptive devices. For instance, it was also found out that man and mate communication about planning of family and the preferred number of kids is closely associated with positive contraceptive choice and practice in Mali, (Kaggwa, Diop, & Storey, 2008)

However, men's decision-making powers were found to largely focus on religious duties, cultural and social considerations, and husbands were the key providers and custodians of money for women's transportation to access antenatal care. Nevertheless, the decision of women to pursue the provision of treatment was primarily decided by traditional birth attendants, mothers and mothers-in-law in the community and aged women within the community. The choice on labour treatment is found to be affected primarily by women and they were making all the decisions on that. This clarified the clear separation of liability in decision-making surrounding the conclusion to pursue antenatal treatment and the resolution to seek delivery treatment. More clearly, men were said to have been influence by the resolution to look for antenatal care, while the idea to look for antenatal care was determined mostly by women. At times, however, advice is sought by TBAs from health staff in the community and the village health volunteers, if available. When choices are made, the men are then involved and called upon to organize for transportation and, at times, to pay for the travel costs for women to be given treatment, (Ebba, 2010).

A study conducted by Marina and her colleagues revealed that their intervention to involve male companions in maternity care was related to a boom in attendance at postnatal care sessions, within the duration of distinct breastfeeding and the usage of postpartum birth control, in particular lengthy-performing, reversible contraception. The interference has had a positive impact on the relationship between couples and joint making choice on procreative health. The quantity of participants who took the prescribed action improved between 6.4% and 11.7% topics for each of the three basic effects; for secondary effects, the change was between 4.8% and 8.7% points, (Marina et al., 2018).

The results have been finished inside the context of a high level of adherence to intervention in regions in which men were no longer historically engaged in maternity care, (Kunene et al.,

2004). Other trials in sub-Saharan African country involving pleading with male partners to visit fitness care facilities have typically recorded response rates below 50%. In their sample, participation at the post-natal therapy session was lowest, perhaps because 1/3 of women preferred to be delivered in a non-participating appointment hospital, (Marina et al., 2018). Men's presence has also been shown to be effective in motivating and encouraging women to breastfeed, (Doyle & Kato-Wallace, 2016).

Interventions to encourage male involvement during prenatal period, childbirth and post-birth were suggested to facilitate and endorse better self-care for mothers, better home-based care practices for mothers and newborns, and increased use of professional upkeep during gestation, delivery and post-natal periods for mothers and their neonate was a recommendation given by WHO, (WHO, 2015)

2.4 Social and cultural factors influencing male involvement in maternal health decision making

According to literature on the subject, numerous factors influencing male involvement in women‘s reproductive health choice making were reviewed. And these include socio-cultural, socio-demographic factors and health system factors as well as men‘s knowledge of and attitude towards women‘s reproductive health needs, in general, and maternal health needs, in particular.

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

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

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

Several factors related to the health system were also identified as barriers to male participation in the ANC. The first major factor consistently identified by all the focus groups was rudeness and rough handling of the pregnant women by the health-workers in the antenatal clinics, as reflected in the following men's responses: *"Medical personnel handling pregnant mothers are very rough especially when it comes to examination of the abdomen"*, said a respondent from Bongokho sub-county. Another one from the AIC focus group said, "*During check-ups midwives over-press the pregnant mother's abdomen. We are fed up with the female health-workers. These midwives are very rude to the mothers. They are too harsh and abuse the pregnant women"*.

According to Jooste & Amukugo (2012), much of the reproductive health problems women face could be prevented if male partners were equipped with adequate knowledge and skills in respect of RH. Like knowledge, attitude, on the other hand, can either be positive or negative as far as male involvement in maternal health issues is concerned, (Amukugo & Jooste, 2012). It also determines how men respond to the reproductive health needs of their partners and heavily influenced by the socio-cultural environment of the male. For instance, Roudi & Ashford (2006)

found that negative attitude is more prevalent among men in rural settings. Their study showed that those who live in rural areas tend to manifest negative attitudes towards RH as compared with young, the educated and those who live in the city, (Roudi & Ashford, 1996).

CHAPTER THREE

STUDY AREA AND RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes in sequence the methods used in the study. It encompasses; the methodology, study area, study type and study design, study population, sampling technique, data collection tools, sample size, data analysis as well as ethical clearance for the study.

3.1 Study area

The study was undertaken in the Nadowli-Kaleo District of the Upper West Region of Ghana. Nadowli-Kaleo district is one of the eleven districts in the Upper West Region.

3.1.1 Geography and history of the district

Nadowli-Kaleo District (NKD) is located in the heart of the Upper West region of Ghana. It lies between latitude 10’ 20’ and 11’ 30’ north and longitude 3’ 10’ and 2’10’ west. It is bordered to the south by Wa Municipal, west by Burkina Faso, north by Jirapa and Lambussie-Karni Districts and to the east by the Sissala West district. It covers a total area of 1,132,02 km2 and extends from the Billi Bridge, 4 km from Wa to the Dapuori Bridge and almost 12 km from Jirapa on the main Wa-Jirapa-Hamile road. It stretches from the West to the East from the Black Volta to Daffiama. The Nadowli-Kaleo District was carved out of the then Nadowli District in June 2012 under Legislative Instrument (L.I) 2101 with Nadowli as its capital.

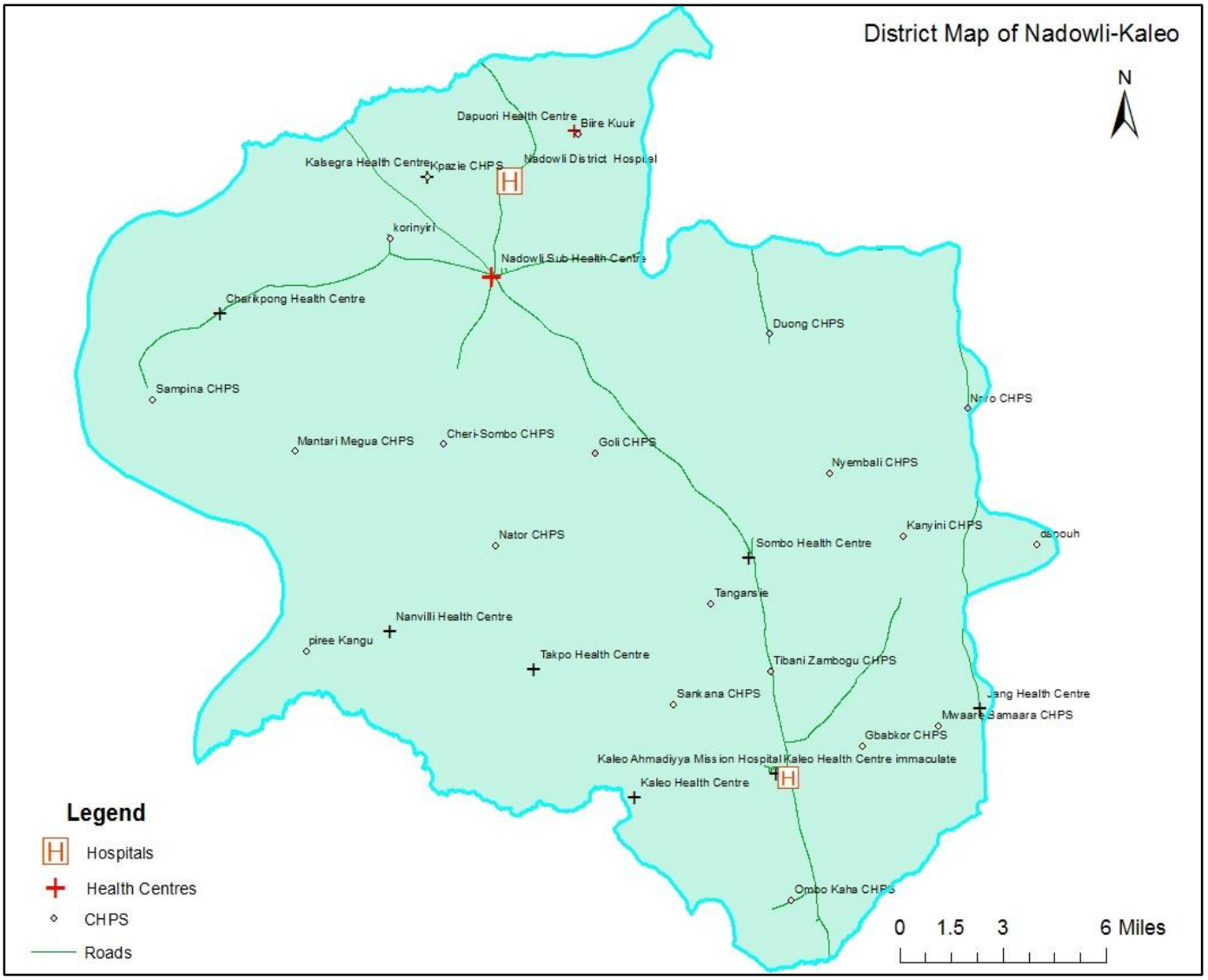

Figure 3.1: Map of Nadowli-Kaleo District

Source: Survey, 2020

3.1.2 Demography of Nadowli-Kaleo district

The inhabitants of the Nadowli-Kaleo District, according to the 2010 populace and housing survey district analytical report stands at 61,561 with 28,753 males and 32,808 females. The district has a projected population of 74213, with a growing rate of 1.9% per annum. The population density is about 32.8 persons per square kilometre, living in about 138 settlements. The locality has two main ethnic groups, the Dagaabas and Sissalas. Other clans from the Northern and Southern ancestries are also occupant in the district. Available religious groups are three in the District, Christians, Islam and Traditional religion with 68.8%, 17.0% and 9.9% respectively. (GSS, 2014)

3.1.3 Climate and environment

The District lies in the tropical continental area and annual rainfall is limited to six months, this is from April to September and is also erratically disbursed. Mean annual rainfall is about 1100 mm with its height in September. Between October and March, there's surely no rain and this lengthy dry season is made harsh by using the dry North-Eastern harmattan winds. The relative humidity is between 70% and 90% at some point of the wet season but is as low as 20% at some point of the long dry season. Human activity, mainly annual routine bush burning, irrelevant farming practices, indiscriminate tree felling for fuel wood and charcoal and poor animal husbandry practices have brought about increasing lack of the vegetative cowl of the district, which in impact, has given way to soil erosion and depletion of soil fertility.

Farming along and in watercourses has also added about the silting of water bodies like dams and ponds and destruction of the plant life protecting the water bodies. In addition, road production coupled with sand and gravel usage has triggered a splendid dent within the natural surroundings. These human activities are noticeable to poor attitudes towards sanitation and

personal hygiene practices, terrible planning, horrific waste control, susceptible enforcement of byelaws, inadequate sanitation facilities, and insufficient water and sanitation centers. With the absence of effective development control machinery in the District, bodily improvement has been haphazard and uncoordinated essential to incompatible land use specifically in the important settlements. Worse nonetheless, the absence of drains within the District has exposed most communities to immoderate erosion. Thus an extended way, rills, gullies and exposed foundation of buildings are commonplace abilities inside the District's built surroundings.

3.1.4 Roads, transport and communication

The road network is poor and the major occupation is subsistence farming. Respectively farming alone contributes to about 85% of the entire labour force. Commerce or service and industrial work also account for 14% and 1% of the labour force. The main means of transport include minibuses and pickup trotros to the major settlements of the District. Most communities still depend on non-conventional means of transport such as bicycles and motorbikes, and currently the use of tri-cycle popularly known as "nyaaba lorry" and head loading to transport their goods to major market centres.

Except for Nanvilli sub, and some other scattered communities in the district the telecommunication has improved in the district. There is poor distribution of electricity in the District and only eight (8) communities have unlimited coverage under their being connected to the national electricity grid, wiring has been done in most communities awaiting connection to the national grid.

The District is covered by the airwaves of the region and district FM stations precisely Radio Upper West, W FM and a private FM station Radio Progress all stationed in Wa - the regional capital and Tompani FM station in the District capital. There is one post office in Nadowli

Township the District capital. Currently, accessibility to newspapers and other publications is still a big challenge in the District.

Internet connection in the neighborhood has improved. Currently the populace of the district access internet services by use of the internet modems as against going to the District ICT centre, which was almost always crowded or out of services. Internet services available include MTN, Vodafone, Tigo, and Airtel. The networks are often interrupted by especially when one is around Charikpong and Nanvilli these sub-districts are closer to Burkina Faso

3.1.5 Education

The Locality has 126 learning institutions consist of; 15 Day Care, 70 primary schools, 32 Junior High Schools (JHS), 5 Day Nurseries, 2 Technical or Vocational, 3 Senior High Schools and 1 Teacher Training College. The school dropout rate is high especially for the girls. The estimated dropout rate is as follows; primary school: boys are 1.9% and 4.7% for girls, JSS: boys are 3.3% and girls 16.1%.

3.1.6 Religion and festivals

The people belong to different religion mainly Christianity, Islam and Traditionalist. Nadowli-Kaleo district has several festival namely Zumbenti, Wulla, Kalibe to mention a few. These festivals are celebrated for various reasons**.**

3.1.7 Health facilities

The district has two hospitals, one Government hospital located in Nadowli and a private hospital located in Kaleo (Ahamadiyya Mission Hospital) with 138 outreach points. The District is divided into eight (8) sub-Districts and each sub-District has at least one Health Centre. There are 10 static health delivery outlets in the District; 28 functional CHPS zones with 138 outreach

points. These Health Centres provide a comprehensive package of health services; however, no patient is detained for more than 48 hours. The District Hospital has a total bed capacity of 110.

3.2 Study approach

A mixed-method approach was applied to carry out the data by holding discussion with midwives, village health volunteers using a guide and administering of structured questionnaires to antenatal care attendees. Where applicable the questions were explained verbally in the requisite local language, which is Dagaare for those who cannot understand English. Two research assistants were trained and involved in the data collection.

First, it's far frequently argued that human beings might not necessarily inform the reality in any objective experience when it comes to sensitive matters consisting of fitness and sickness within a group context, hence Oppermannt, (2000) suggested methodological triangulation in which more than one research method is used in measuring the same object of interest. Other researches, for that reason, have cautioned the need for a blended statistics series technique in the social factors of disorder and fitness studies (Østergaard & Samuelsen, 2004). The researcher, as a result, triangulated the surveys by carrying out In-Depth Interviews (IDIs). Secondly, IDIs were instead used because it was simply impossible to organize Focus Group Discussions with Midwives, Traditional Birth Attendants (TBAs) and or Spouses. This nearly created a special recruitment problem but was suitably overcome by holding individual interviews sessions. A key advantage of this technique was that it addresses sensitive concerns such as peculiar experiences of giving birth and obstacles to communication, having access to, and usage of childbearing care services (Ganle et al., 2015). Administering of the structured questionnaire was necessary since that was used to elicit information from all ANC attendees who took part in the study. This technique was used to get quantitative responses to the study.

3.3 Study type and study design

The study was a descriptive cross-sectional hospital-based. This approach was deemed useful because it utilizes the strengths of both qualitative and quantitative data (Østergaard & Samuelsen, 2004). This design allowed for the gathering of information from a carefully chosen sample of which the population was represented and based on that sample, extrapolations were made about the attitude of the whole populace, and data is collected through interviews and In-depth interviews. The qualitative aspect allows study participants to express their opinions on the issues especially the cultural barriers affecting spousal communication in the district, region and the country as a whole.

3.4 Study Population

The study participants comprised all married but expectant women who were living with their husbands, midwives, traditional birth attendants and village health volunteers.

3.4.1 *Inclusive criteria*

All married pregnant women attending ANC at the two hospitals and one health Centre. Six village health volunteers from three communities under the study area, and six midwives, two each from each health facility also participated in the study.

3.4.2 *Exclusive criteria*

Pregnant but cohabitating women, pregnant women whose spouses were not within the study catchment area were excluded from the study.

3.5. Sample size determination

The sample size was determined using the Cochran's formula; $n=\frac{z^2 p\,(1-p)}{e^2}$

Where:

n = the minimum required

z = standard normal deviation corresponding to 95% confidence interval,

P = Proportion of incidence of cases

e= the margin of error

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

1. Half of the pregnant women attend ANC Clinic. So (P) was assumed to be 0.5. (Which gives the maximum variability) since it will be difficult to obtain the prevalence from previous studies.

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

3. The maximum margin of error of 5%

Substituting into the formula, the sample size will be computed as follows:

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

N=385

So a sample size of 385 pregnant women who were married in the target population was deemed enough to give the confidence levels needed.

But according to the District Health Information Management System (DHIMS), total registrant pregnant women for 2019 excluding December were 404 for health facilities, 271, 75 and 58 for Nadowli hospital, Ahamadiyya Mission hospital and Nadowli sub-Health Centre respectively. Given this, according to Bartlett, (2001) there will be a modification of the formula since the population is smaller by using the equation below, (Bartlett, Kotrlik, & Higgin, 2001).

$$N=\frac{n}{1+(n-1)/N}$$

Here (n_0) is Cochran's sample size recommendation, N is the population size, and n is the new adjusted sample size.

Hence using last year registration, it is assumed that 404 pregnant women in the target population.

Substituting into the formula, the sample size will be computed as follows:

385/ [1+ (384/404)] =197.4=198

NB- Compensation for non-response=10% = 10 % of (198) =20

Hence n=198+20=218

Therefore calculating the probability proportional to size 58/404(218) =32, 75/404(218) =40 and 271/404(218) =146 for Nadowli Health Centre, Ahamadiyya Mission hospital and Nadowli hospital respectively.

3.6 Sampling Technique

The researcher used stratified sampling to first classify the health facilities into strata, the two hospitals were considered stratum one and the health centres were considered stratum two. Both hospitals in stratum one were considered in the study *(because the two facilities serve as referral centres in the district and were having much of registrants pregnant women)* whilst one health centre was also selected from stratum two which contain ten (10) health centres using a technique of simple random sampling. Probability proportional to size was used to sample participants who participated in the study in the three health facilities. Purposive sampling was implored to select six each of traditional birth attendants, village health volunteers and midwives in any three communities and the three health facilities in the District respectively.

3.7 Pre-testing

The questionnaire and interview guides have all been pre-examined at the Wa Regional sanatorium for precision, uniformity and tolerability of questions to interviewees. Following this, the required adjustments were inputted and questionnaire readied for the real fieldwork.

3.8 Data collection techniques and tools

The techniques for data collection were survey and interview. The tools that were used in the data collection were structured questionnaires which were used in a face-to-face interview with pregnant women to gather quantitative data whilst In-Depth Interview guide was used to gather qualitative data, and a tape recorder was also available for recording the conversation of the In-Depth Interview. The In-depth interview was used to elicit information from village health volunteers (VHVs) and midwives within three communities in Nadowli and Kaleo and three health facilities respectively. The researcher used both Dagaare (which is the main local language spoken in the study area) and English in the data collection process.

3.9 Data processing and analysis

3.9.1 Quantitative data

The details in each questionnaire were extracted and loaded into the computer using Excel and the Statistical Package for Social Sciences (SPSS) version 25.0. The interview process was tracked to certify that the team of researchers adhered to the study protocols. After each interview, the questionnaire was verified for comprehensiveness and internal consistency.

Quantitative data was analyzed using SPSS Software, version 25.0. Descriptive and analytic statistics have been used. Frequency tables, mean, percentages, charts and cross-tabs were used to explain the results, while bivariate analyzes were performed using the Chi-square test to

evaluate the correlations between the dependent variable (male involvement with each independent variable). There was a multivariate analysis involving binary logistic regression methodology, with male involvement as an outcome variable. The odd ratios (OR) and their 95 % confidence interval (CI) were used to determine the strength of the relationship.

3.9.2 Qualitative data

The data analysis took place immediately after each In-depth interview was conducted. The facilitator and the note taker met to review the main themes of each interview and summarized the patterns of responses to avoid any conflicting ideas that may emerge from participants and then confirm consensus.

All audio recordings data from the discussion was transcribed from vernacular (Dagaare) into English and typed by the researcher, following the proceedings of the In-depth discussions and grouped into themes for easy-to-follow format.

After which the data were then analyzed using content analysis. Responses were analyzed by arranging them into themes, identified in the discussion guide.

Qualitative data were used to amplify quantitative results and also to evaluate different elements in line with quantitative findings.

Qualitative data were analyzed using methods such as constant comparison content analysis methodology, after defining common themes that would address research questions, based on field notes and transcripts from In-depth interviews, (Glaser, 1965).

3.9.3 Limitations of the study

Lack of financial support was a big challenge in conducting the research, since it was daunting for me to trace husbands to their various communities to have interviews with them.

COVID 19 poses a serious challenge to the quality of data collection since a few pregnant women were allowed at a time at the facility and virtually delayed the process. Another shortfall of the study is that the study looked at only pregnant married spouses.

3.10. Ethical clearance

Ethical clearance was obtained from Kwame Nkrumah University of Science and Technology Committee on Human Research, Publication and Ethics' (CHRPE) Board with reference number CHRPE /AP/089/20 before data collection commenced.

Approval to carry out the study was also obtained from the Department of Community Health and Family Medicine of the University for Development Studies before conducting the survey.

An introductory letter from Ghana Health Services (GHS) with reference number GHS/UWR/TP-51 was sent to the study area too for approval before administering questionnaires.

The objectives and purpose of the study were clarified to the interviewees, they were guaranteed of privacy and all interviewees were permitted to make an autonomous judgment to willingly take part in the study with no coercion. Interviewees have been allowed to either consent verbally or thumbprint at the consent form that's steady with ethics rules. They had been knowledgeable of their privacy and made known of their authority to decline to answer any of the queries they felt discomfort with or opt out entirely from participating. Only respondents who gave consent were interviewed individually in the study. Data collected was kept confidential and used exactly for issues related to the research and nothing else.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

The chapter presents findings from the study. The findings include the socio-demographic characteristics of the respondents, the spousal communication and male involvement in maternal fitness decisions during pregnancy.

4.1 Socio-demographic Characteristics of Respondents

The table below shows a summary of the socio-demographic characteristics of study participants. About 62% of respondents were aged 20 to 30 years, 11.5% were less than 20 years while 26.1% were above 30 years. As high as 38.5% of respondents have a level of education below JHS or Middle school, 33.0% were in Junior High School (JHS) or Middle school while 28.4% were Senior High School (SHS) or Vocational and above. It also revealed that 86% of women were found in a one husband one wife marriage while the remaining 14% were in a bigamous marriage. In terms of ethnicity, most of the respondents were Dagaabas constituting 98.2% while the remaining tribes which include Kassenas, Akans and others constituted only 1.8%. In terms of religion, 87.2% were Christians, 11.9% were Muslims and 0.9% of them practice African Traditional Religion. Respondents were into various categories of Occupation of which 29.4% were farmers, 24.3% were housewives only, 11.9% were petty traders and 10.6% were public servants.

Table 4.1: Socio-demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Age		
<20 Years	25	11.5
20 -30 Years	136	62.4
>30 Years	57	26.1
Total	218	100.0
Level of Education		
Below JHS/Middle School	84	38.5
JHS/Middle School	72	33.0
SHS/Vocational and Above	62	28.4
Total	218	100.0
Marital Type		
Monogamous	188	86.2
Polygamous	30	13.8
Total	218	100.0
Ethnicity		
Dagaaba	214	98.2
Others	4	1.8
Total	218	100.0
Religion		
ATR	2	.9
Christian	190	87.2
Muslim	26	11.9
Total	218	100.0
Occupation		
Farming	64	29.4
Housewife only	53	24.3
Petty trading	26	11.9
Public servant	23	10.6
Vocational	52	23.9
Total	218	100.0

Source: field data (2020)

4.2 Prevalence of spousal communication on health during the pregnancy period

Communication is a very important ingredient in every relationship or marriage. The figure below indicates whether respondents often discuss with their husbands about their health and pregnancy during the period of gestation. Majority of respondents (96.8%) indicated that they often discuss with their husbands about issues concerning their health while only 3.2% did not. Also, the majority of respondents (97.2%) stated that they often discuss with their husbands about their pregnancy while 2.3% did not and 0.5% did not remember whether they did or not.

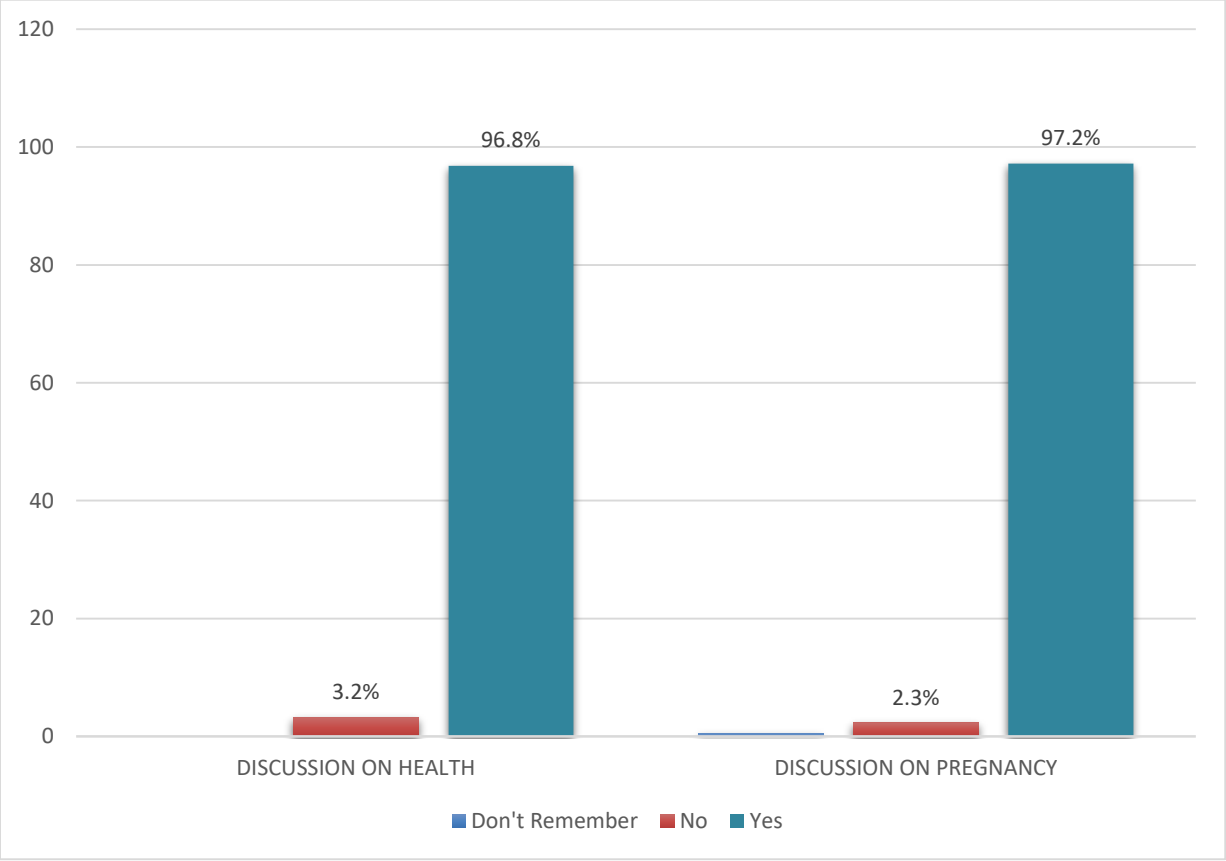

Figure 4.4: Prevalence of spousal communication on health during the pregnancy period

Source: Field data (2020)

4.3 Issues Couples often communicate on or discuss other than on health matters

The pie chart below shows the various subject matters on which spouses often communicate on other than on health matters. 42.8% indicated they often discuss issues relating to farm work, 14.3% of respondents often discuss on issues relating to finance and 14.3% discuss on matters relating to household provisions. Also, 14.3% of respondents indicated they don't usually have a discussion with their spouses and 14.3% discuss on romantic matters or play most often.

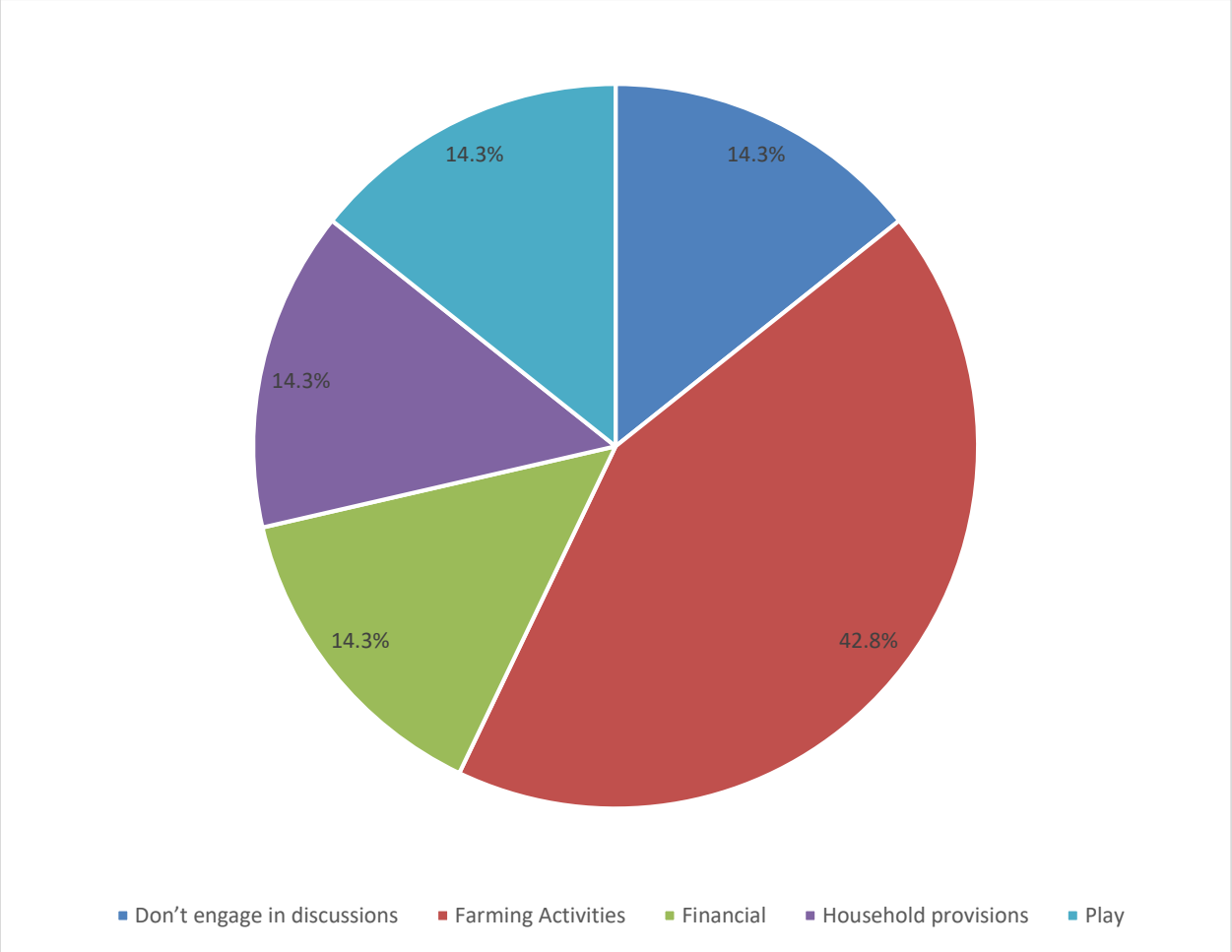

Figure 4.5: Issues couples discuss on other than on health matters

Source: field data (2020)

Similar to the results obtained from pregnant women in the pie chart above, an In-Depth Interview held at health facilities and communities, some participants expressed their view on issues couples often discuss other than on health which is as follows:

> *"They concentrate more on how to care for the woman in terms of getting logistics, finances, how to get the money to cater for the woman instead of talking about their health"*
>
> -----A midwife with five years' experience.

"Men are always communicating more on foodstuffs since she is pregnant, and most of them concentrate on their work and after they come back from farms they are only interested in what to eat and after having eaten they are outside again with their men colleagues drinking".

-----A village health volunteer with over five years' experience.

4.4 Barriers to spousal communication on health during pregnancy

Respondents gave various reasons for not discussing their health and Pregnancy with their spouses. Six respondents representing 2.8% either did not discuss their pregnancy with their spouses or cannot remember. Also, 3.2% of respondents did not have a discussion with spouse about their health. The following reasons were cited as barriers to spousal communication:

Investigator: "what prevented you from having a discussion with your husband about your health and pregnancy"?

Pregnant woman 1: *"Because of the kind of work (mason work) my husband does, he does not have time for me to have a serious conversation with him. He normally comes late and he is tired. Also, he is not the talkative type" [smiling].*

Investigator: "what prevented you from having a discussion with your husband about your health and pregnancy"?

Pregnant woman 2: *"you don't know my husband. Anytime I just complain about my health or pregnancy, he will say I am lazy and he does not like me to talk about anything that has to do with money. Talk to him, he is inside the room. Should I call him"?*

Investigator: "what prevented you from having a discussion with your husband about your health and pregnancy"?

Pregnant woman 3: "my husband does not understand these things. If it is my mother-in-law, he will understand but my husband, he will not even ask"

Investigator: "what prevented you from having a discussion with your husband about your health and pregnancy"?

Pregnant woman 4: "nothing. I just did not feel like talking to him"

Generally, village health workers/volunteer midwives and TBAs recruited for In-Depth Interviews were of the view that there is inadequate spousal communication during pregnancy, contrary to results from pregnant women. From the In-Depth Interviews, some barriers to spousal communication were discussed and views of participants recorded as follows:

"During pregnancy, most women have mood swings which put their husbands away from them but this is the time they need someone to be closer to them"

---A midwife with 9 years' experience.

"I cannot tell whether there are cultural or religious beliefs affecting spousal communication during pregnancy, but I believe there are none. Lack of spousal communication can lead to inferior psychosis, so communication is very necessary during pregnancy. If the communication is well established during pregnancy, I think everything will be okay. The husband will be able to

provide everything the woman needs and there will be nothing hidden. We know that during pregnancy, what the mother gets is what the baby gets (nutrients). If there is proper communication and the husband can take care of the woman well, it will translate into a healthy baby".

----ANC In-charge with over 10 years' experience

"Some women are not able to have a discussion with their husbands on their pregnancy and health especially when there is the need for financial commitment because their husbands believe it is a cook-up between their wives and the nurses. One day I invited a client's husband over to discuss with him about the need to care for his wife and he told me his grandfather does not know about that. He went forth to cite an incident where he was away in Babile market drinking when he heard that his wife has given birth all by herself. To tell me he does not believe in the health facilities' care".

-------A TBA with three years' experience.

"I think spouses always have more healthy communication during courtship than during pregnancy. This is because during pregnancy they find women to be very annoying beings and also because of men's ego they would not want to follow their wives to ANC. There are no taboos regarding spousal communication during pregnancy, it is just egos".

---A village health volunteer with over 20 years' experience.

"Most women are the cause of lack of spousal communication during pregnancy. Some women mouths are like a dog, they bark at everything around them. How can you have healthy communication with your husband"?

--------A midwife with four years' experience.

4.5 Male involvement in maternal health decision making during ANC periods

Males are expected to be involved in decision making concerning matters related to maternal healthcare. Involvement of males is expected to be toward improving their spouse's access to healthcare during pregnancy. Males involved in ANC by encouraging women to attend ANC, encourage them to take their medicines, going to ANC with them and others. The graph below explains males' involvement in the ANC of women. Higher majority of males (83.9%) did encourage or asked their spouses to attend ANC while the lower minority (16.1%) did not. However, the majority of males (67.0%) never attended ANC with their spouses while only 33.0% of males did. Also, the majority of males (59.2%) do support their spouses with transportation to ANC either with fares or provision of means of transport while 40.8% never did.

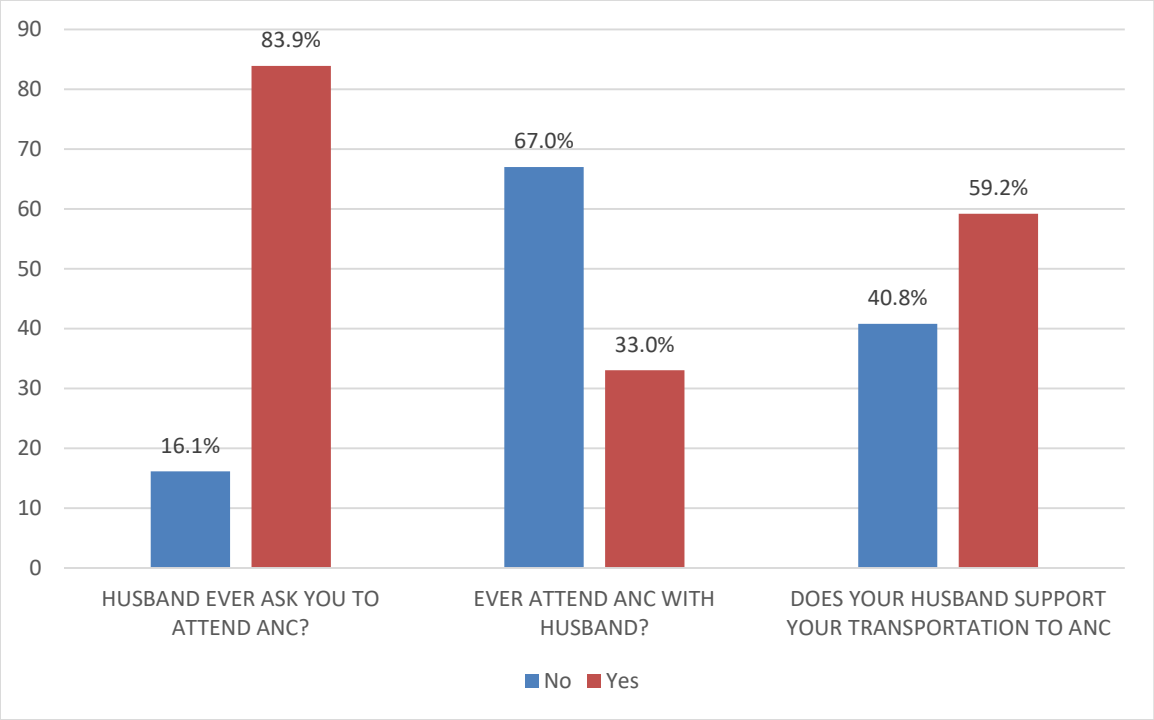

Figure 4.3: Male involvements in maternal health decision making during ANC periods

Source: field data (2020)

From the In-depth interview with a midwife at one of the hospitals, the following views were expressed regarding male involvement in motherly healthiness choice making during ANC period:

"In terms of male involvement (males accompanying wives to ANC), some are trying. hmmm there has been an improvement, I can say at first it was somewhere 6% but now it is 10% and I hope they will be improvement''.

------ A midwife with 9 years' experience.

"Most men don't accompany their wives to ANC and I think is due to ignorance, most of them don't know the importance of ANC"

---------ANC In-charge, antenatal unit

4.6 Level of male involvement in maternal health decision making during pregnancy

A simple composite index on male involvement in motherly healthiness choice making during ANC period was developed by adding, for each study participant, the scores on three indicators of male involvement. This was measured by the total number of positive responses to the three roles in male involvement. Each indicator of male involvement was given a mark of 0 for a negative response and a mark of 1 for a positive response of participants. The sum of the three indicators for each participant was computed. Participants with a sum score of the three indicators equal to 1 and below were considered having a low male involvement in motherly fitness choice making during ANC period while the sum score of the three indicators of 2 and above was considered as having high male involvement in motherly fitness choice making during ANC period.

The distribution of respondents, according to the level of male involvement in maternal health decision making during ANC is given in the figure below. About 64% of males scored high in involvement in motherly fitness choice making during ANC period while about 36% of males scored low in motherly fitness choice making during ANC period.

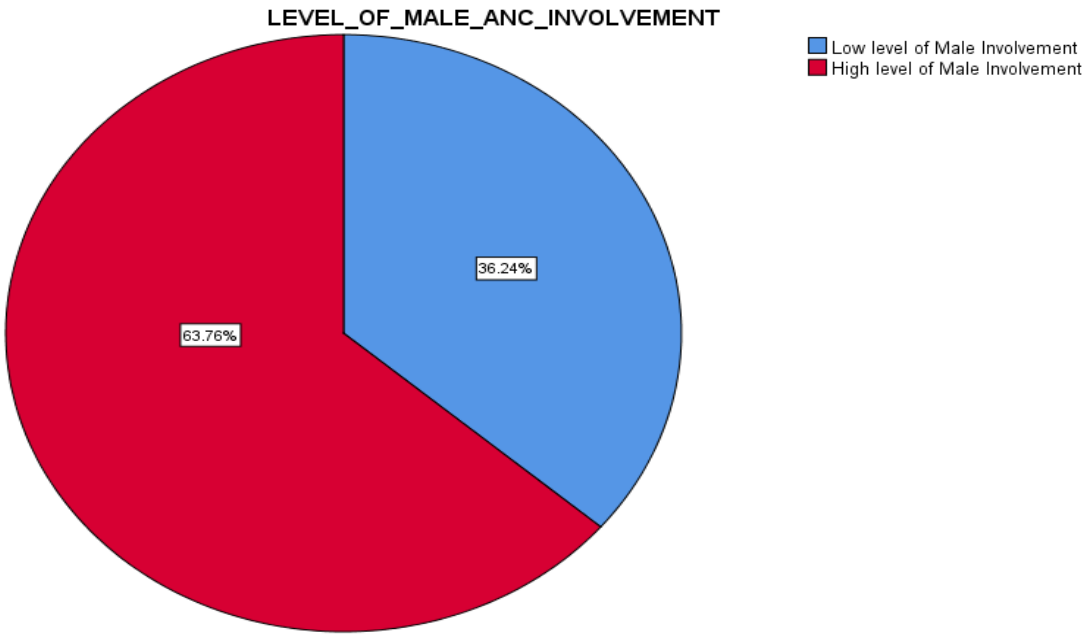

Figure 4.6: Level of male involvement in maternal health decision making during ANC periods

Source: field data (2020)

4.7. Factors influencing male involvement in maternal health decision making during pregnancy

Factors such as socio-demographic characteristics, various forms of spousal communications and health characteristics were measured and analyzed to see how they impact the level of male spouses' involvement in motherly fitness choice making during ANC periods.

4.7.1 Bivariate Analysis

In this study, a bivariate analysis was carried out by using cross-tabulations in SPSS version 25.0 program. Each independent variable was cross-tabulated with the dependent variable (i.e. level of males involvement in maternal health decision making during ANC period) to investigate the

association between two variables. The power of the association was tested by the χ^2 value and the statistical significance of χ^2 was tested by the P-value of 0.05 as a criterion.

4.7.1.1 Relationship between Age and Level of Male Involvement in maternal health decision making during ANC period

As illustrated in the table below, the Age of respondents and Level of male involvement in motherly fitness choice making during ANC period. The two variables showed a strong (χ^2=6.432) and a statistically significant relationship (p-value = 0.040). Women in the age group of 20-30 years were more probable to have their spouses involved in maternal health decision making during ANC period compared to other women in age group <20 years and age group >30 years.

4.7.1.2 Relationship between whether or not respondents discussed with a spouse on the number of children to have and Level of Male Involvement in maternal health decision making during ANC period

It can be seen from table 2b, that there is a strong (χ^2=8.755) and significant (p=<0.003) association between whether or not respondents discussed with a spouse on the number of children to have and Level of male involvement in motherly fitness choice making during ANC period.

Respondents who did not discuss with spouses/partners on the number of children to have were more likely to score high in their male counterparts' involvement in motherly fitness choice making during ANC period compared to those respondents who did discuss the number of children to have.

4.7.1.3 Relationship between whether or not respondents discussed ANC visit with spouse and Level of Male Involvement in maternal health decision making during ANC period

According to the results, there is strong evidence (χ^2=22.089) of a relationship between the two variables. Respondents who discussed their ANC visits with their spouses and with their in-laws were more likely to score high in terms of their male counterparts' involvement in motherly fitness decision making during ANC period compared to those who discussed with Health staffs, their Mothers and none with a statistically significant p-value of 0.000.

The rest of the measured variables as recorded in table 2a and 2b below did not show significant relationships with males' taking part in motherly fitness choice during ANC period.

Table 4.3a: Factors influencing male involvement in maternal health decision making during pregnancy

Variable	Male involvement in maternal health decision making during pregnancy		χ^2 (P-value)
	Low Involvement	High Involvement	
AGE			
<20 years	10 (40.0%)	15 (60.0%)	**6.432 (0.040)**
20-30 years	41 (30.1%)	95 (69.9%)	
>30 years	28 (49.1%)	29 (50.9%)	
Level of Education			
Primary and Below	36 (42.9%)	48 (57.1%)	3.058 (0.217)
JHS/Middle School	25 (34.7%)	47 (65.3%)	
SHS/Vocational and Above	18 (29.0%)	44 (71.0%)	
Type of Marriage			
Monogamous	71 (37.8%)	117 (62.2%)	1.379 (0.240)
Polygamous	8 (26.7%)	22 (73.3%)	
Ethnicity			
Dagaaba	77 (36.0%)	137 (64.0%)	0.334 (0.563)
Others	2 (50.0%)	2 (50.0%)	
Religion			
ATR	1 (50.0%)	1 (50.0%)	0.530 (0.767)
Christian	70 (36.8%)	120 (63.2%)	
Moslem	8 (30.8%)	18 (69.2%)	
Occupation			
Farming	26 (40.6%)	38 (59.4%)	1.959 (0.743)
Housewife only	19 (35.8%)	34 (64.2%)	
Petty trading	7 (26.9%)	19 (73.1%)	
Public Servant	7 (30.4%)	16 (69.6%)	
Vocational	20 (38.5%)	32 (61.5%)	

Source: field data (2020)

Table 4.2b: Factors influencing male involvement in maternal health decision making during pregnancy

Variable	Male involvement in maternal health decision making during Pregnancy		χ^2 (P-value)
	Low Involvement	High Involvement	
Discussed about number of children to have			
Yes	50 (45.9%)	59 (54.1%)	**8.755 (0.003)**
No	29 (26.6%)	80 (73.4%)	
Discussion of your health with spouse?			
Yes	75 (35.5%)	136 (64.5%)	1.368 (0.242)
No	4 (57.1%)	3 (42.9%)	
Discussion of pregnancy before getting pregnant?			
Can't remember	11 (32.4%)	23 (67.6%)	4.209 (0.122)
No	15 (53.6%)	13 (46.4%)	
Yes	53 (34.0%)	103 (66.0%)	
Which of the following persons do you often discuss ANC visits with?			
Health staff	14 (77.8%)	4 (22.2%)	**22.089 (0.000)**
Husband/Spouse	50 (33.3%)	100 (66.7%)	
In-laws	8 (20.5%)	31 (79.5%)	
Mother	4 (57.1%)	3 (42.9%)	
None	3 (75.0%)	1 (25.0%)	
Is today your first time of coming to ANC?			
No	64 (36.0%)	114 (64.0%)	0.034 (0.854)
Yes	15 (37.5%)	25 (62.5%)	
Outcome of your previous pregnancy?			
Life birth	18 (33.3%)	36 (66.7%)	4.331 (0.115)
Still birth	2 (13.3%)	13 (86.7%)	
Is this your first time pregnancy?			
No	61 (37.2%)	103 (62.8%)	0.262 (0.609)
Yes	18 (33.3%)	36 (66.7%)	

Source: field data (2020)

4.7.2 Logistic regression analysis

The Logistic regression analysis aimed to get the best model or the true determinants of male taking part in motherly fitness choice making during ANC period based on the information obtained on the factors recognized in this study. In this model, all the independent variables were matched against the dependent variable using Binary Logistic Regression. Those independent variables which have shown statistically significant relationships with the dependent variable in the bivariate analysis were included in the multivariate model.

Table 4.3 below shows the factors that determine male involvement in maternal health decision making during antenatal periods. The results showed a NagelkerkeR-square value of 0.221 and this means that about 22.1% of the variation in male involvement in maternal health decision making during antenatal periods is explained by the factors in the model while 77.9% is explained by other factors. The results showed that there is a significant relationship between the respondent's age, whether respondent discusses several children to have with a spouse, who respondents discuss ANC visit with and their male counterparts' level of involvement in maternal health decision making during ANC period. The odds of respondents in the aged >30 years group whose spouses have a high level of involvement in Maternal health decision making during ANC period is almost three times the odds of belonging to the <20 years group [(AOR: 2.896, 95% CI: 1.396-6.010, p=0.004)]. The odds of respondents who discussed with their spouses on the number of children to have, whose spouses have a high level of involvement in maternal health decision making during antenatal periods is less than half times the odds of respondents who did not discuss the number of kids to have with their spouses [(AOR: 0.328, 95% CI: 0.170-0.633, p=0.001)]. Also, the odds of respondents who discussed their ANC visits with their Mothers, whose spouses have a high level of involvement in maternal health decision

making during ANC period is about fifteen times the odds of belonging to respondent groups who discussed their ANC visits with a health staff [(AOR: 15.257, 95% CI: 1.204-193.395, p=0.035)].

Table 4.3: Determinants of male involvement in maternal health decision making during ANC period

Exposure variable	High level of male involvement during in Maternal health decision making during Pregnancy		
	AOR	**95%CI**	**P-value**
Age			
<20 years **(RC)**	1		
20-30 years	2.666	0.893 - 7.958	0.079
>30 years	2.896	1.396- 6.010	**0.004**
Discussion on the number of children to have			
No **(RC)**	1		
Yes	0.328	0.170- 0.633	**0.001**
Who do you discuss your ANC visits with?			
Health staff **(RC)**	1		
Husband/Spouse	1.148	0.079- 16.597	0.919
In-laws	8.043	0.707- 91.505	0.093
Mother	15.257	1.204-193.395	**0.035**
None	3.068	0.173-54.442	0.445

Source: field data (2020), *RC denotes Reference Category

CHAPTER FIVE

DISCUSSION

5.0 Introduction

The study is intended at assessing spousal communication and male involvement in maternal health decisions during Antenatal period. The chapter discussed the findings of the study, comparing with other studies.

5.1 Socio-demographic characteristics of respondents

The majority of respondents (62.0%) were within the age bracket of 20-30 years with few respondents older than 30 years. Most respondents (61.4%) had at least JHS/Middle school level of education and understand basic grammar. A great majority of pregnant women (86.0%) were in a monogamous marriage with few (14.0%) in polygamous marriages. Almost all respondents (98.2%) were indigents (Dagaabas). The dominant religious group among the respondents was Christians (87.2%), with few Muslims (11.9%) and ATR (0.9%). In terms of religion, 87.2% were Christians, 11.9% were Muslims and 0.9% were ATR. A great proportion of pregnant women were farmers (29.4%) followed by Housewife only (24.3%), Petty traders (11.9%) and Public Servants (10.6%).

5.2 Prevalence of spousal communication on health during pregnancy period

The study revealed a high level prevalence of spouses communicating about their health and pregnancies during pregnancy. Aside recording a high prevalent in communicating on the health and pregnancies, others however do not remember holding any discussion during pregnancy and that is a cause to worry.

Reviewing the literature, most of the studies conducted were looking at communication and family planning practice, not much has been said on the prevalent of communication during pregnancy. But the current study results supported what was revealed by Sarwatay et al. (2016) that the occurrence of inter-spouses conversation is occasionally considered as an indicator of safe family planning activity, where pairs practise contraceptives usage correctly and regularly without suffering any side effects thereby improving upon their health, (Sarwatay & Divatia, 2016).

Similarly, in a study conducted in Nepal, most of the womenfolk indicated they ever had a conversation on their pregnancy with husbands during last pregnancy. A significant percentage of them also responded to have discussed their health with the husband as reported by Lewis et al., in (2015) but as to whether discussing really translated into the husbands been involved in the discision making process is an issue.

Just as was reported by Litzinger et al. (2005) that communication can self-reliantly envisage the joy of marriage and the man and woman will become more of a success in effective conversation reported a higher marital gratification including them been healthy, it was revealed that all those respondents who reported having been communicating reported been supported financially to access ANC services though not all the time in the company of the husband.

Lasee & Becker, (1997b) also observed that conversation between spouses is a central step toward growing men's contribution in family planning and procreative health, (Lasee & Becker, 1997b) which supported the views of VHV's that once there is communication there is peace and that alone will translate into the pregnant woman been healthy and will deliver successfully.

5.3 Ascertain the issues spouses communicate more on and barriers to communication during pregnancy

The study found out that the most communicated issue by spouses during pregnancy is farm activities followed by other several issues including: financial issues, play, household provisions. However, others too do not engage in any discussion about anything concerning their wellbeing during pregnancy and this is detrimental to the male spouses taking part in decision making process towards the pregnant spouses' health. This was confirmed by qualitative data gathered from village health volunteers in an In-depth interview which indicated that; "*they concentrate more on how to care for the woman, how to get logistics, finances, how to get the money to cater for the woman instead of talking about their health''. (*Female village health volunteer).

Another village health volunteer had this to say: *"Men are always communicating more on foodstuffs since she is pregnant, and most of them concentrate on their work and after they come back from farms they are only interested in what to eat and after having eaten they are outside again with their men colleagues drinking, sometimes too the husband and wife might not even engage in any discussion during pregnancy just because of little quarrel."* (Male village health volunteer) This shows that much emphasis is on how to feed the pregnant spouse while placing little attention on the decisions that can influence her pregnancy outcomes.

Interestingly, even though there were limited studies that assess issues spouses communicate on more during pregnancy and the barriers to these communications, the study found out that once there are no discussions whatsoever, female spouses will tend to confer in friends and hence limiting male spouses' knowledge in maternal health, this result was found to be similar to other study findings by Dougherty et al., 2018.

What this means is that once there is no communication on health during pregnancy, little or even no decision will be made by both spouses together even though most pregnant women tend to obey their husbands on what they say and this confirms what was found by (Ganle et al., 2015) that just 2.7% of the decision to pursue health care comes from husband and wife, and the remaining 97.3% is a mixture of characteristics present in the family. According to the data gathered, barriers to spousal communication were generally as a result of quarrels, mood swings, shyness, and the nature of husbands' jobs making them have little time to communicate.

Generally, health workers recruited for In-depth interviews were of the view that there is inadequate spousal communication during pregnancy, contrary to respondents' claim. They were of the view that respondents were usually not properly prepared for delivery and could be as a result of inadequate communication with their spouses. Mood swings among pregnant women and husband's fear of financial commitment were viewed as barriers to spousal communication which is contrary to the study findings by Gnale and Dery who reported that men who are seen escorting their significant others to ANC services were tagged as being controlled by their other halves at home, (Ganle & Dery, 2015). In that report, five main obstacles hampering men's contribution in maternal fitness care were outlined, including masculinity and male role conflicts, traditional beliefs, unfavorable opening hours of services, limited facility space for visitors and then poor attitudes of health staff among others were reported in the literature to have been mentioned by most participants. However, male spouses fear of financial obligation as revealed in the qualitative data corroborated with the aspect of high cost associated with one escorting his pregnant wife to seek maternity care reported by Ganle and Dery, (Ganle & Dery, 2015).

The study result on barriers to spousal communication, however, was not different from what was revealed by Mullany (2006) in Kathmandu Nepal, whose study discovered views of couples

and health workers on their comprehension of the boundaries of fellows' contribution in maternal fitness said that some of the obstacles that bar men from partaking in motherly well-being included low level of knowhow, societal disgrace, being shy and embarrass, task obligation, area hassle, non-couple pleasant maternal health offerings and hospital coverage restrictions (Mullany, 2006).

But contrary to a study by Mitchell (2012), who reported cultural causes as hindrances to male participation in maternal wellbeing. For instance, it was realized that men saw the issues of maternal health as women's responsibility. In other words, their perception about antenatal issues was that cultural, it is females' affairs and that they are not permitted to be a part of it, except that in circumstances where the health worker requested them to come in company with their companions to the antenatal clinic. The men understood that their only manly duty was to provide money to pay off any debt that might arise and make sure a male relation from either their family or partner's family escorted their wives or partners to the fitness facility (Mitchell, 2012).

5.4 Level of male involvement in maternal health decision making during ANC periods

Studies have observed that the most significant components of making sure a conception is fit and giving birth may not be in the prenatal woman's ability, but rather in the manipulation of the circle of close relatives, mostly the male spouse hence the need for male involvement (Beegle et al., 2001). Similarly, a study carried out by Watson et al. (2005), unraveled that in settings where couples' communication is limited and male dominance is being manifested, male's involvement in reproductive health become challenging.

However, in the current assessment, the level of male spouses' taking part in motherly fitness choice making during ANC period was high. Approximately three indicators were used and

respondents scored high in all three indicators used to measure male involvement in motherly fitness choice making during ANC period as indicated in figure 4.4. This was confirmed in an In-depth interview with a midwife who said that male involvement in their spouses' ANC issues is progression in recent times. Despite the fact that the study revealed a higher involvement of male spouse in maternal health decision making, it however recorded low level of men accompanying their wives to ANC clinics which was revealed as a result inadequate communication between spouses.

Similar to this study results was that reported in Nepal which revealed that stages of husband's taking part in maternal fitness care outcomes were found to be extraordinary. Husbands were physically present at delivery in most of the cases, whilst a few of them were present for fitness providing facilities meaning most of them considered labour more important to ANC. However, 40.7% of the womanhood was escorted by their other half to ANC visit and they were physically present for three or more times in 1/3 of the total cases, (Lewis et al., 2015), just as reported by this study.

On the contrary, Watson et al. (2005) suggested that male involvement in procreative fitness is mostly daunting in nations where customarily distinct male-female roles hinder male partaking in Sexual and Reproductive Health. Likewise, a study carried out in Zambia by Lydia et al. (2016), proposed that intra-spousal conversation among couples was not existing, rare or not even effective. Surprisingly, another study revealed that only 2.7% of decision as to seeking health care comes from husband and wife and the rest 97.3% is a combination of personalities found in the family (Ganle et al., 2015).

However, in Brunson's work (2010), he realized a changing trend in attitudes towards traditional norms. Even nonetheless, in history there has been an absence of male taking part, womenfolk

are now becoming more voiced about needing backing in pregnancy and childbirth from their significant others which supported what was found in this study since there was no cultural hindrance to male involvement in maternal health decision making.

A similar study in the rural Gambia indicated that the respondent's proven interest to take part in matters of gestation and giving birth. The respondents in many focus groups organized reported that when it comes to antenatal care visits they were regularly part in providing transport or money for any debt settlement rather than visiting antenatal centres with their wives (Lowe, 2017). Even though there was no focus group discussion conducted, but rather In-Depth Interview which supported what was revealed in rural Gambia.

In another assessment, although husbands were unraveled to assist their wives during prenatal period and getting ready for childbirth, just a handful of them escorted their companions to the fitness facility for antenatal visits. The study revealed that very few of the participants who participated, indicated men escorting their significant others to the fitness facility for ANC visits, nonetheless most of them decided on the significance of men going to fitness facility in company with their wife. Females said it would be at ease to chat with the fitness worker when their significant others were there since at that point they feel protected, (Thapa, 2012). The findings supported what was reported by respondents in the current study.

5.5 Factors influencing male involvement in maternal health decision making during ANC Period

The study found a number of factors associated with male involvement in maternal health decision making during pregnancy. These included age of spouses, discussion with partner, discussion ANC visits with mothers, spouses' level of education and fear of sight of blood and newborn. Interestingly, other studies found socio-demographic characteristics to have much

influence on male involvement in maternal health decision making (Mitchell, 2012), but unlike this study, it did not show any significance, for instance ethnic background, occupation, level of education, marital status, number of wives and children, as well as religion of respondents were all insignificant to male involvement in maternal health decision making during pregnancy except age that was found to be significant.

One plausible reason why the socio-demographic characteristics did not show significant associations with men's involvement in maternal health decision making might be due to other factors which were not considered in the study. For instance, it may be attributed to the different method of research used. Most of the studies conducted, as reported in the literature, were qualitative, with focus either on male involvement in family planning or male involvement in mother-to-child transmission of HIV but none focus attention on spousal communication and its influence on the male spouses involvement in health decision making.

Sinha & Chattopadhyay, (2017) argued that negative conversation between couples and gender in-equality constraint women's to be able to access fitness care services in general and that assertion was not different from results from qualitative data of this study in that once there was communication between the husband and pregnant wife, she will definitely access ANC on time and other health issues discussed and taken note of.

However, the study did not identify any cultural factors as affecting spousal communication during pregnancy, but rather shyness and sheer ignorance on the part of spouses contributing to a lack of communication during pregnancy were classified as barriers. And this shyness to communication about pregnancy by spouses corroborated what was revealed by, Ebba (2010).

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Introduction

This is the last but not least of the study and it contains the summary of the key findings of this study as well as the recommendations.

6.1 Summary of Key Findings

- Majority of respondents (96.8%) indicated that they often discuss with their husbands about issues concerning their health while only 3.2% did not. Also, the majority of respondents (97.2%) stated that yes, they often discuss with their husbands about their pregnancy while 2.3% did not and 0.5% did not remember whether they did or not.
- Other issues couples communicate on often aside on their health and pregnancies, included farm work (42.8%), financial (14.3%) and matters relating to household provisions (14.3%). Also, 14.3% of respondents indicated they don't usually have a discussion with their spouses and 14.3% discuss on romantic matters or play most often.
- According to respondents, barriers to spousal communication were generally as a result of quarrels, and the nature of husbands' jobs making them have little time to communicate.
- Generally, health workers recruited for In-depth interviews were of the view that there is inadequate spousal communication during pregnancy, contrary to respondents' claim. Mood swings among pregnant women and husband's fear of financial commitment were viewed as barriers to spousal communication.

- About 64% of respondents scored high in male involvement in motherly fitness choice making during ANC period while about 36% of males scored low in motherly fitness choice making during ANC period.
- In a Binary Logistic Regression model, the possible factors influencing male taking part in motherly fitness choice making was analyzed. Respondents within the age group of >30 years were about three times more probable to have their male partners involve in Maternal health decision making during ANC period compared to the those in the age group of <20 years [(AOR: 2.896, 95% CI: 1.396-6.010, p=0.004)]. Respondents who discussed with their significant others on the number of kids to have less likelihood of their husband involving in maternal health decision making during antenatal periods in comparison with those who did not [(AOR: 0.328, 95% CI: 0.170-0.633, p=0.001)]. Also, participants who discussed their ANC visits with their mothers were more probable to have their husbands getting involve in motherly fitness choice making during ANC period than those who discussed with a health staff [(AOR: 15.257, 95%CI: 1.204-193.395, p=.035)].

6.2 Conclusion

Most respondents discussed with their husbands about their health and pregnancy during the antenatal period. Aside spouses' health, the other most discussed issue among spouses was their farm work. Issues such as matters relating to household provisions, romantic matters and financial matters were equally discussed among couples. However a significant proportion of the respondents were found not to be communicating on any issues pertaining to their life. Barriers to spousal communication were generally as a result of quarrels, the nature of husbands' jobs making them have little time to communicate, Mood swings among pregnant women and

husband's fear of financial commitment. More than half of respondents scored high in relation to their male counterparts' involvement in maternal health decision making during ANC period. However, male spouses accompanying their female spouses to seek health care was still thriving.

6.3 Recommendations

Based on the findings and conclusions made above, the researcher wishes to recommend the following:

At the Staff Level

- During antenatal visits, healthcare staffs should continue to encourage spousal communication especially about the health and pregnancy of women.
- Through outreaches, durbars and other educative programmes, public health officials should continue to encourage males' involvement in the maternal health matters of their wives.

District Health Management Team

- The DHMT should ensure and provide education on the significance of spousal communication on motherly and child fitness. The education should focus on involving male spouses in every aspect of the ANC process.
- Also, implement strategies that will ensure that maternal and child fitness care services are male-friendly.
- The DHMT should encourage and support the formation of a father to father support groups (FTFSGs) in the district, just as there is mother to mother support groups (MTMSGs) to make such groups sustainable and functioning. This was revealed by participants during the In-depth interview.

Policy and decision-makers (Government, MOH and GHS)

- The value of husbands contribution to mothers and child fitness cannot be disputed; hence the labour commission should make conscious effort to include labour laws that will allow male spouses to be granted permissions to accompany their pregnant wives to ANC services without any hindrance from their superiors at workplace.
- The study clearly shows that programs for improving maternal and child health cannot be achieved without male spouses' involvement and should therefore be informed by research rather than mere assumptions regarding the factors that affect maternal and child health. Thus, MOH, Ghana Health Service and other decision-makers should create the environment for expanding research on the subject.

Religious Bodies

- During counseling services, various religious bodies should inculcate spousal communication in their counseling so as to make it a part and parcel of the couple.

REFERENCE

Adewuyi, A., & Ogunjuyigbe, P. (2018). The role of men in family planning: an examination of men's knowledge and attitude to contraceptive use among the Yorubas. *African Population Studies*, *18*(1), 35–49. Retrieved from https://pdfs.semanticscholar.org/1e03/9aadcba97b1b7a93d45195c4b647d7c31e1d.pdf?_ga=2.65462253.215428058.1598831193-633703471.1576139202 on 11-01-2020

Agache, A., Leyendecker, B., Schäfermeier, E., & Schölmerich, A. (2014). Paternal involvement elevates trajectories of life satisfaction during transition to parenthood. *European Journal of Developmental Psychology*, *11*(2), 259–277. https://doi.org/10.1080/17405629.2013.851025

Aizer, A. A., Chen, M. H., McCarthy, E. P., Mendu, M. L., Koo, S., Wilhite, T. J., … Nguyen, P. L. (2013). Marital status and survival in patients with cancer. *Journal of Clinical Oncology*, *31*(31), 3869–3876. https://doi.org/10.1200/JCO.2013.49.6489

Akinwaare, M. O., Ogbeye, G. B., & Ejimofor, N. (2019). Social Support During Pregnancy among Pregnant Women in Ibadan, Nigeria. *International Journal of Nursing, Midwife and Health Related Cases*, *5*(1), 14–26.

Allisyn, C. M., Gabriel, S., Dineen, R., Rawlins, B., Yaméogo, M., & Baya, B. (2006). Birth-preparedness for maternal health: Findings from Koupéla district, Burkina Faso. *Journal of Health, Population and Nutrition*, *24*(4), 489–497. https://doi.org/10.3329/jhpn.v24i4.701

Amukugo, H. J., & Jooste, K. (2012). Male involvement in reproductive health: a management perspective. *Nursing Management*. https://doi.org/doi.org/10.1111/j.1365-2834.2012.01332.x

Arthur, E. (2012). Wealth and antenatal care use: Implications for maternal health care utilisation

in Ghana. *Health Economics Review*, *2*(1), 1–8. https://doi.org/10.1186/2191-1991-2-14

Babalola, S., & Fatusi, A. (2009). Determinants of use of maternal health services in Nigeria - Looking beyond individual and household factors. *BMC Pregnancy and Childbirth*, *9*, 43. https://doi.org/10.1186/1471-2393-9-43

Balmer, D. H., Gikundi, E., Kanyotu, M., & Waithaka, R. (1995). The negotiating strategies determining coitus in stable heterosexual relationships. *Health Transition Review : The Cultural, Social, and Behavioural Determinants of Health*, *5*(1), 85–95.

Bankole, A., & Singh, S. (1998). Couples' Fertility and Contraceptive Decision-Making in Developing Countries: Hearing the Man's Voice. *International Family Planning Perspectives*, *24*(1), 15–24. https://doi.org/10.2307/3038211

Barnlund, D. C. (1968). *Interpersonal Communication*. Retrieved from https://books.google.com.gh/books?id=6voauI-tdkMC

Bartlett, J., Kotrlik, J., & Higgin, C. (2001). *Sample Size in Statistics (How To Find It) Using Cochran'S Formula.Pdf*. https://doi.org/10.1.1.486.8295&rep=rep1&type=pdf

Bawah, A. A. (2002). Spousal communication and family Planning behaviour in Navrongo: A longitudinal assessment. *National Library of Medicine*, *33*(2), 185–194. https://doi.org/doi: 10.1111/j.1728-4465.2002.00185.x.

Becker, S. (1996). *Couples and Reproductive Health : A Review of Couple Studies*. *27*(6), 291–306.

Beckman, L. J. (2012). *Husbands ' and Wives ' Relative Influence on Fertility Decisions and Outcomes Author (s): Linda J . Beckman Reviewed work (s): Published by : Springer content in a trusted digital archive . We use information technology and tools to increase productiv*. *7*(3), 182–197.

Beegle, K., Frankenberg, E., & Thomas, D. (2001). Bargaining power within couples and use of prenatal and delivery care in Indonesia. *Studies in Family Planning*, *32*(2), 130–146. https://doi.org/10.1111/j.1728-4465.2001.00130.x

Behrman, J. R., Kohler, H. P., & Watkins, S. C. (2002). Social networks and changes in contraceptive use over time: evidence from a longitudinal study in rural Kenya. *Demography*, *39*(4), 713–738. https://doi.org/10.2307/3180828

Berlo, D. K. (1960). *The Process of Communication: An Introduction to Theory and Practice* (17th ed.). Retrieved from https://books.google.com.gh/books?id=yQQtAAAAMAAJ

Bernard, H. W., & Huckins, W. C. (1971). *Dynamics of Personal Adjustment*. Retrieved from https://books.google.com.gh/books?id=BS-xAAAAIAAJ

Bertrand, J. T., Mathu, N., Dwyer, J., Thuo, M., & Wambwa, G. (1989). Attitudes toward Voluntary Surgical Contraception in Four Districts of Kenya. *Studies in Family Planning*, *20*(5), 281. https://doi.org/10.2307/1966765

Bhatta, D. N. (2016). *Involvement of males in antenatal care, birth preparedness, exclusive breast feeding and immunizations for children in Kathmandu, Nepal*. 1–10. https://doi.org/10.1186/1471-2393-13-14

Biddlecom, A. E., Casterline, J. B., Perez, A. E., Biddlecom, B. A. E., Casterline, J. B., & Perez, A. E. (2019). *Spouses ' Views of Contraception in the Philippines Spouses ' Views of Contraception in the Philippines*. *23*(3), 108–115.

Blanc, A. K. (2001). The effect of power in sexual relationships on sexual and reproductive health: An examination of the evidence. *Studies in Family Planning*, Vol. 32, pp. 189–213. https://doi.org/10.1111/j.1728-4465.2001.00189.x

Bussel, J., & Spitz, Bernard Demyttenaere, K. (2010). Childbirth expectations and experiences

and associations with mothers' attitudes to pregnancy, the child and motherhood. *Journal of Reproductive and Infant Psychology - J REPROD INFANT PSYCHOL*, *28*., 143–160. https://doi.org/10.1080/02646830903295026

Çakırer, N., & Çalışkan, Z. ışık. (2010). Nevşehir İli Ağıllı Köyünde Gebelik, Doğum ve Lohusalığa İlişkin Geleneksel İnanç ve Uygulamalar. *TAF Preventive Medicine Bulletin*, *9*(4), 343–348.

Canary, D. J., & Dindia, K. (1998). *Sex differences and similarities in communication : critical essays and empirical investigations of sex and gender in interaction*.

Çapik, C., & Çapik, A. (2014). Traditional infant care practices of mothers with 6-12 month-old infants in Turkey. *Indian Journal of Traditional Knowledge*, *13*(2), 266–274.

Carroli, G., Rooney, C., & Villar, J. (2001). How effective is antenatal care in preventing maternal mortality and serious morbidity? An overview of the evidence. *Paediatric and Perinatal Epidemiology*, Vol. 15, pp. 1–42. https://doi.org/10.1046/j.1365-3016.2001.00001.x

Chaudhury, R. H. (2018). Population Investigation Committee Female Status and Fertility Behaviour in a Metropolitan Urban Area of Bangladesh Author (s): Rafiqul Huda Chaudhury Published by : Taylor & Francis , Ltd . on behalf of the Population Investigation Committee Stable URL. *Jstor*, *32*(2), 14. Retrieved from https://www.jstor.org/stable/2173561 on 19-12-2019

Cherlin, A. (2004). Dezinstituționalizarea căsătoriei americane. *Journal of Marriage and Family*. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/j.0022-2445.2004.00058.x on 10-12-2019

Christiane A. Hoppmann, Denis Gerstorf, A. H. (2011). Spousal Associations Between

Functional Limitation and Depressive Symptom Trajectories: Longitudinal Findings from the Study of Asset and Health Dynamics Among the Oldest Old (AHEAD). *Bone*, *23*(1), 1–7. https://doi.org/10.1038/jid.2014.371

Coyne, J. C., & DeLongis, A. (1986). Going Beyond Social Support. The Role of Social Relationships in Adaptation. *Journal of Consulting and Clinical Psychology*, Vol. 54, pp. 454–460. https://doi.org/10.1037/0022-006X.54.4.454

Damji, T., & Lee, C. (1995). Gender role identity and perceptions of Ismaili Muslim men and women. *The Journal of Social Psychology*, *135*(2), 215–223.

De Silva, W. (1994). *"Husband-wife communication and contraceptive behaviour in Sri Lanka*.

Dipa, S. (2008). *Empowering communities to make pregnancy safer: an intervention in rural Andhra Pradesh*. (5), 1–42. Retrieved from http://www.popcouncil.org/asia/india.html on 15-03-2020

Donnell, O. O. (2007). *Access to health care in developing countries : breaking down demand side barriers Acesso aos cuidados de saúde nos países em desenvolvimento : rompendo barreiras contra a demanda*. *23*(12), 2820–2834.

Dougherty, L., Stammer, E., & Valente, T. W. (2018). Interpersonal communication regarding pregnancy-related services: Friends versus health professionals as conduits for information. *BMC Pregnancy and Childbirth*, *18*(1), 1–9. https://doi.org/10.1186/s12884-018-1729-x

Doyle, K., & Kato-Wallace, J. (2016). *Male engagement in maternal, newborn, and child health/sexual reproductive health and rights*. Retrieved from https://men-care.org/wp-content/uploads/sites/3/2016/12/Male-Engagement-in-MNCH-SRHR-Guide-Web.pdf on 15-06-2020

Dyson, T., & Moore, M. (1983). On Kinship Structure , Female Autonomy , and Demographic

Behavior in India Author (s): Tim Dyson and Mick Moore Source : Population and Development Review , Vol . 9 , No . 1, pp . 35-60 Published by : Population Council Stable URL : http. *Lancet*, *377*(1), 505–515. https://doi.org/10.1016/S0140-6736(10)61894-6.Health

Ebba, S. (2010). *Men's Involvement in Care and Support During Pregnancy and Childbirth as Partial Fulfillment of an Award of Master of Philosophy in International*. (May), 12–71.

Engström, G., Hedblad, B., Rosvall, M., Janzon, L., & Lindgärde, F. (2006). Occupation, marital status, and low-grade inflammation: Mutual confounding or independent cardiovascular risk factors? *Arteriosclerosis, Thrombosis, and Vascular Biology*, *26*(3), 643–648. https://doi.org/10.1161/01.ATV.0000200100.14612.bb

Erbil, N., Senkul, A., Saglam, Y., & Ergül, N. (2008). Determination of Attitudes with Gynecologic Examination and Anxiety of Turkish Women before Gynecologic Examination. *International Journal of Human Sciences, 5,* 1-13. Retrieved from www.j-humansciences.com/ojs/index.php/IJHS/article/view/401 Retrieved on 17-03-2020

Esere, M., Yusuf, J., & Omotosho, J. (2011). *Influence of Spousal Communication on Marital Stability: Implication for Conducive Home Environment*. https://doi.org/10.4314/EJC.V4I1-2

Esmaeilpour, K., Khajeh, V., & Mahdavi, N. (2013). *Predicting couples' marital satisfaction based on relationship beliefs and relationship skills*.

Exavery, A., Kanté, A. M., Njozi, M., Tani, K., Doctor, H. V., Hingora, A., & Phillips, J. F. (2014). Access to institutional delivery care and reasons for home delivery in three districts of Tanzania. *International Journal for Equity in Health*, *13*(1), 1–11. https://doi.org/10.1186/1475-9276-13-48

Ezeh, A. C., Seroussi, M., & Hendrik, R. (1996). *Men's Fertility, Contraceptive Use, and Reproductive Preferences*. 1–4.

Ezgi, S., & Hotun, S. (2018). Cultural practices before and during pregnancy: example of Turkey. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*, (10), 97–103. https://doi.org/10.18844/gjpaas.v0i10.3749

Feyisetan, B. J. . (2019). *Southern Demographic Association Spousal Communication and Contraceptive Use among the Yoruba of Nigeria Author (s): Bamikale J . Feyisetan Source : Population Research and Policy Review , Vol . 19 , No . 1, pp . 29-45 Published by : Spr*. *19*(1), 29–45.

Figueiredo, B., Field, T., Diego, M., Hernandez-Reif, M., Deeds, O., & Ascencio, A. (2008). Partner relationships during the transition to parenthood. *Journal of Reproductive and Infant Psychology*, *26*(2), 99–107. https://doi.org/10.1080/02646830701873057

Freedman, R. (1987). The Contribution of Social Science Research to Population Policy and Family Planning Program Effectiveness. *Studies in Family Planning*, *18*(2), 57. https://doi.org/10.2307/1966698

Ganle, J. K., & Dery, I. (2015). "What men don't know can hurt women's health": a qualitative study of the barriers to and opportunities for men's involvement in maternal healthcare in Ghana. *Reproductive Health*, *12*(1), 1–13. https://doi.org/10.1186/s12978-015-0083-y

Ganle, J. K., Otupiri, E., Parker, M., & Fitzpatrick, R. (2015). Socio-cultural Barriers to Accessibility and Utilization of Maternal and Newborn Healthcare Services in Ghana after User-fee Aboli- tion. *International Journal of Maternal and Child Health*, *3*(1), 1–14. https://doi.org/10.12966/ijmch.02.01.2015

Glaser, G. B. (1965). The Constant Comparative Method of Qualitative Analysis. *Social*

Problems, *12*(4), 436–445.

Greene, M. E. ., & Biddlecom, A. E. . (2000). *Absent and Problematic Men : Demographic Accounts of Male Reproductive*. *26*(1), 81–115.

Gross, K., Schellenberg, J. A., Kessy, F., Pfeiffer, C., & Obrist, B. (2011). Antenatal care in practice: An exploratory study in antenatal care clinics in the Kilombero Valley, south-eastern Tanzania. *BMC Pregnancy and Childbirth*, *11*, 1–11. https://doi.org/10.1186/1471-2393-11-36

GSS. (2014). 2010 Population and Housing Census, District Analytical Report, Nadowli-Kaleo District. *Ghana Statistical Service*.

Heller, D., Watson, D., & Ilies, R. (2004). *The Role of Person Versus Situation in Life Satisfaction: A Critical Examination. Psychological Bulletin, 130(4), 574–600.* https://doi.org/https://doi.org/10.1037/0033-2909.130.4.574

Hou, X., & Ma, N. (2013). The effect of women's decision-making power on maternal health services uptake: Evidence from Pakistan. *Health Policy and Planning*, *28*(2), 176–184. https://doi.org/10.1093/heapol/czs042

Inhon, M., & Dudgeon, M. (2004). Men's influences on women's reproductive health. *Social Science & Medicine*, Vol. 59, pp. 1379–1395. Retrieved from https://marciainhorn.com/wp-content/uploads/Mens-Influences-on-Womens-Reproductive-Health.-Medical-Anthropological-Perspectives.pdf on 18-12-2019

International Planned Parenthood Federation. (2015). *Strategic framework*. Retrieved from https://www.ippf.org/sites/default/files/strategic_framework.pdf. on 10-12-2019

Işık, M. T., Akçınar, M., & Kadıoğlu, S. (2010). Mersin ilinde gebelik , doğum ve loğusalık dönemlerinde anneye ve yenidoğana yönelik geleneksel uygulamalar. *Uluslararası İnsan*

Bilimleri Dergisi, *7*(1), 63–84.

Islam, M. A., Padmadas, S. S., & Smith, P. W. F. (2005). Men and family planning in Bangladesh : a multilevel approach using DHS data. *Health (San Francisco)*, (July), 18–23.

Jamila, Y. (2011). Influence of Spousal Communication on Marital Stability: Implication for Conducive Home Environment. *Edo Journal of Counselling*, 50–61.

Jang, J., Hsiao, K. T., & Hsiao-Wecksler, E. T. (2008). Balance (perceived and actual) and preferred stance width during pregnancy. *Clinical Biomechanics*, *23*(4), 468–476. https://doi.org/10.1016/j.clinbiomech.2007.11.011

Jejeebhoy, S. J. (2002). Convergence and divergence in spouses' perspectives on women's autonomy in rural India. *Studies in Family Planning*, Vol. 33, pp. 299–308. https://doi.org/10.1111/j.1728-4465.2002.00299.x

Johns Hopkins University School of Medicine. (2012). Johns Hopkins Handbook Of Obstetrics And Gynecology PDF, ePub eBook. In *Johns Hopkins Handbook Of Obstetrics And Gynecology*. Retrieved from 997c21cba09803e5b999c7c5509cc604.pdf Retrieved on 17-02-2020

Kadir, M. M., Fikree, F. F., Khan, A., & Sajan, F. (2003). Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Science*, Vol. 35, pp. 545–558. https://doi.org/10.1017/S0021932003005984

Kaggwa, E. B., Diop, N., & Storey, J. D. (2008). The role of individual and community normative factors: A multilevel analysis of contraceptive use among women in union in Mali. *International Family Planning Perspectives*, *34*(2), 79–88. https://doi.org/10.1363/3407908

Kakaire, O., Kaye, D. K., & Osinde, O. M. (2011). Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda. *Reproductive Health*, *8*(1), 1–7. Retrieved from http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=emed10&NEWS=N&AN=2011337341 on 5-12-2019

Kansal, A., Kandpal, S. D., & Mishra, P. (2006). Reasons for not practicing contraception in a rural population of Dehradun District. *Journal of Communicable Diseases*, *38*(1), 97–101.

Kapur, R. (2019). *Barriers to effective communication*. Retrieved from https://www.researchgate.net/publication/323794732_Barriers_to_Effective_Communication on 15-04-2020

Kiecolt-Glaser, J. K., & Newton, T. L. (2001). Marriage and health: His and Hers. *Public Health*, Vol. 62, p. 94. https://doi.org/10.4135/9781483369532.n306

Koski, A. D., Stephenson, R., & Koenig, M. R. (2011). Physical violence by partner during pregnancy and use of prenatal care in rural India. *Journal of Health, Population and Nutrition*, *29*(3), 245–254. https://doi.org/10.3329/jhpn.v29i3.7872

Kunene, B., Beksinska, M., Zondi, S., Mthembu, N., & Mullick, S. (2004). Involving men in maternity care South Africa. *Frontiers in Reproductive Health Program Population Council New Delhi*, (October), 1–72. Retrieved from http://pdf.usaid.gov/pdf_docs/PNACX587.pdf%0Ahttp://www.dec.org/pdf_docs/PNADA931.pdf%0Ahttp://pdf.usaid.gov/pdf_docs/PNACX587.pdf%0Ahttp://www.dec.org/pdf_docs/PNADA931.pdf on 2-01-2020

Lasee, A., & Becker, S. (1997a). Husband-Wife Communication about Family Planning and Contraceptive Use in Kenya. *International Family Planning Perspectives*, *23*(1), 15–20.

https://doi.org/10.2307/2950781

Lasee, A., & Becker, S. (1997b). *Husband-Wife Communication About Family Planning and Contraceptive Use in Kenya*. *23*(1), 15–20.

Lavner, J. A., Karney, B. R., & Bradbury, T. N. (2017). Does Couples' Communication Predict Marital Satisfaction, or Does Marital Satisfaction Predict Communication? *Physiology & Behavior*, *176*(1), 139–148. https://doi.org/10.1016/j.physbeh.2017.03.040

Lehrer, E. L. (2004). *Religion as a Determinant of Economic and Demographic Behavior in the United States*. (1390).

Leong, A., Rahme, E., & Dasgupta, K. (2014). Spousal diabetes as a diabetes risk factor: A systematic review and meta-analysis. *BMC Medicine*, *12*(1). https://doi.org/10.1186/1741-7015-12-12

Lewis, S., Lee, A., & Simkhada, P. (2015). The role of husbands in maternal health and safe childbirth in rural Nepal : a qualitative study. *BMC Pregnancy & Childbirth*, 1–10. https://doi.org/10.1186/s12884-015-0599-8

Litzinger, S., & Gordon, K. C. (2005). *Exploring Relationships Among Communication, Sexual Satisfaction, and Marital Satisfaction Journal of Sex & Marital Therapy Vol 31, No 5*.

Lowe, M. (2017). *Social and cultural barriers to husbands' involvement in maternal health in rural Gambia*. https://doi.org/DOI: 10.11604/pamj.2017.27.255.11378 Free PMC article

Lumbiganon, P., Hofmeyr, J., Gülmezoglu, A. M., Pinol, A., & Villar, J. (1999). Misoprostol dose-related shivering and pyrexia in the third stage of labour. *BJOG: An International Journal of Obstetrics and Gynaecology*, *106*(4), 304–308. https://doi.org/10.1111/j.1471-0528.1999.tb08266.x

Marina, D. A., Rasmané, G., Sophie, S., Simon, C., Clémentine, R., Seydou, D., … Veronique,

F. (2018). *Involving male partners in maternity care in Burkina Faso a randomized controlled trial*.

Martin, L. T., McNamara, M. J., Milot, A. S., Halle, T., & Hair, E. C. (2007). The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. *Maternal and Child Health Journal*, *11*(6), 595–602. https://doi.org/10.1007/s10995-007-0209-0

McFarlane, J., Malecha, A., Watson, K., Gist, J., Batten, E., Hall, I., & Smith, S. (2005). Intimate partner sexual assault against women: Frequency, health consequences, and treatment outcomes. *Obstetrics and Gynecology*, *105*(1), 99–108. https://doi.org/10.1097/01.AOG.0000146641.98665.b6

Menken, J., Duffy, L., & Kuhn, R. (2003). *Childbearing and Women ' s Survival : New Evidence from Rural Bangladesh Linked references are available on JSTOR for this article : Women ' s Survival : New Evidence from Childbearing and Rural Bangladesh*. *29*(3), 405–426.

Meyler, D., Stimpson, J. P., & Peek, M. K. (2007). Health concordance within couples: A systematic review. *Social Science and Medicine*, Vol. 64, pp. 2297–2310. https://doi.org/10.1016/j.socscimed.2007.02.007

Ministry of Health, N., ERA, N., & Macro, O. (2002). Nepal Dermographic and Health Survey. In *South Asian Survey* (Vol. 8). https://doi.org/10.1177/097152310100800209

Mitchell, G. T. (2012). *Male Involvement in Maternal Health Decision-Making in Nkwanta South District , Ghana*.

Msuya, S. E., Mbizvo, E. M., Hussain, A., Uriyo, J., Sam, N. E., & Stray-Pedersen, B. (2008). Low male partner participation in antenatal HIV counselling and testing in northern Tanzania: Implications for preventive programs. *AIDS Care - Psychological and Socio-*

Medical Aspects of AIDS/HIV, *20*(6), 700–709. https://doi.org/10.1080/09540120701687059

Mullany, B. C. (2006). Barriers to and attitudes towards promoting husbands' involvement in maternal health in Katmandu, Nepal. *Social Science and Medicine*, Vol. 62, pp. 2798–2809. https://doi.org/10.1016/j.socscimed.2005.11.013

Murithi, L. K., Santillán, D., Dhillon, P., Sebany, M., Farley, K., Ndhlema, T., … Jackson, A. (2016). *Understanding Couple Communication and Family Planning in Zambia: Formative Research Study Findings and Recommendations*. (May).

Musalia, J. M. (2005). Gender, social networks, and contraceptive use in Kenya. *Sex Roles*, *53*(11–12), 835–846. https://doi.org/10.1007/s11199-005-8296-0

Mutale, T., Creed, F., Maresh, M., & Hunt, L. (1991). *Life events and low birthweight—analysis by infants preterm and small for gestational age*. https://doi.org/https://doi.org/10.1111/j.1471-0528.1991.tb13363.x

Nahar, L. (1994). *Effect of spousal communication on use of contraceptives among rural women of Bnagladesh*. Retrieved from https://iussp2005.princeton.edu/papers/51811 on 20-01-2020

Nasreen, E. H., Kabir, Z. N., Forsell, F., & Edhborg, E. (2011). Prevalence and associated factors of depressive and anxiety symptoms during pregnancy: A population based study in rural Bangladesh. *BMC Women's Health*, *11*. https://doi.org/10.1186/1472-6874-11-22

Neuman, M. D., & Werner, R. M. (2016). Marital status and postoperative functional recovery. *JAMA Surgery*, *151*(2), 194–196. https://doi.org/10.1001/jamasurg.2015.3240

Ngom, P., Akweongo, P., Adongo, P., Bawah, A. A., & Binka, F. (1999). Maternal mortality among the Kassena-Nankana of northern Ghana. *Studies in Family Planning*, *30*(2), 142–147. https://doi.org/10.1111/j.1728-4465.1999.00142.x

Omari, C. K. (1988). *Modern Family Planning, Sexual Behavior and Marriage Status Among Women in Tanzania*. *18*(1), 1–14. Retrieved from https://pubmed.ncbi.nlm.nih.gov/12281288/ on 15-12-2019

Oppong, K. G. (2008). *Factors Influencing the Utilization of Antenatal Care Services in the Bosomtwe District of the Ashanti Region of Ghana* (KNUST). https://doi.org/http://hdl.handle.net/123456789/106

Østergaard, L. R., & Samuelsen, H. (2004). Muted voices: HIV/AIDS and the young people of Burkina Faso and Senegal. *African Journal of AIDS Research*, *3*(2), 103–112. https://doi.org/10.2989/16085900409490324

Pagel, M. D., Smilkstein, G., Regen, H., & Montano, D. (1990). Psychosocial influences on new born outcomes: A controlled prospective study. *Social Science and Medicine*, Vol. 30, pp. 597–604. https://doi.org/10.1016/0277-9536(90)90158-O

Parul, C., Raiten, D. J., Picciano, M. F., & Coates, P. M. (2003). Dietary Supplement Use in Women: Current Status and Future Directions—Introduction and Conference Summary. *The Journal of Nutrition*, *133*(6), 1957S-1960S. https://doi.org/10.1093/jn/133.6.1957s

Paula J.Beckman. (1983). The Relationship between Behavioral Characteristics of Children and Social Interaction in an Integrated Setting. *Journal of the Division for Early Childhood*, *7*((1)), 69–77. Retrieved from 10.1177/105381518300700109

Plantin, L., Olukoya, A. A., & Pernilla, N. (2011). Positive Health Outcomes of Fathers' Involvment in Pregnancy and Childbirth Paternal Support: A Scope Study Literature Review. *Fathering: A Journal of Theory, Research, and Practice about Men as Fathers*, *9*(1), 87–102. https://doi.org/10.3149/fth.0901.87

Rini, C., Redd, W. H., Austin, J., Mosher, C. E., Meschian, Y. M., Isola, L., … Duhamel, K. N.

(2011). Effectiveness of partner social support predicts enduring psychological distress after hematopoietic stem cell transplantation. *Journal of Consulting and Clinical Psychology*, *79*(1), 64–74. https://doi.org/10.1037/a0022199

Robles, T. F., Slatcher, R. B., Trombello, J. M., & McGinn, M. M. (2014). Marital quality and health: A meta-analytic review. *Psychological Bulletin*, *140*(1), 140–187. https://doi.org/10.1037/a0031859

Roudi, F., & Ashford, L. S. (1996). Men and family planning: focus on Egypt. *Population Today*, Vol. 24, p. 3.

Rubertsson, C., Hellström, J., Cross, M., & Sydsjö, G. (2014). Anxiety in early pregnancy: Prevalence and contributing factors. *Archives of Women's Mental Health*, Vol. 17, pp. 221–228. https://doi.org/10.1007/s00737-013-0409-0

Saah, F. I., Tarkang, E. E., Komesuor, J., Osei, E., Acquah, E., & Amu, H. (2019). Involvement of male partners in skilled birth care in the North Dayi District , Ghana. *International Journal of Reproductive Medicine, 2019*. https://doi.org/DOI: 10.1155/2019/2852861

Sahin, H. A., & Sahin, H. G. (2003). Reasons for not using family planning methods in Eastern Turkey. *European Journal of Contraception and Reproductive Health Care*, *8*(1), 11–16. https://doi.org/10.1080/ejc.8.1.11.16

Salifu, A. (2014). *Analysis of maternal mortality in Wa District* (KNUST). https://doi.org/http://hdl.handle.net/123456789/6768

Salway, S. (1994). How attitudes toward family planning and discussion between wives and husbands affect contraceptive use in Ghana. *International Family Planning Perspectives*, *20*(2), 44. https://doi.org/10.2307/2133433

Sarwatay, D., & Divatia, A. (2016). A Study on Interpersonal Communication between Married

Couples on Planned Parenthood. *International Journal of Social Science and Humanity*, *6*(1), 1–8. https://doi.org/10.7763/ijssh.2016.v6.608

Sathar, Z. A., & Kazi, S. (2000). Women ' s autonomy in the context of rural Pakistan. *Pakistan Development Review 39(2):89-110*, *2*(Summer), 89–110. https://doi.org/DOI: 10.30541/v39i2pp.89-110

Shahidul, I., Alam, S., & Hasan, M. (2014). Inter-spousal communication on family planning and its effect on contraceptive use and method choice in Bangladesh. *Asian Social Science*, *10*(2), 189–201. https://doi.org/10.5539/ass.v10n2p189

Silva, W., & Indralal, D. (1991). Consistency Between Reproductive Preferences and Behavior: The Sri Lankan Experience. *Studies in Family Planning*, *22*(3), 188. https://doi.org/10.2307/1966645

Singh, D., Lample, M., & Earnest, J. (2014). The involvement of men in maternal health care: Cross-sectional, pilot case studies from Maligita and Kibibi, Uganda. *Reproductive Health*, *11*(1). https://doi.org/10.1186/1742-4755-11-68

Sinha, A., & Chattopadhyay, A. (2017). Utilization of maternal and child health care services in North and South India: does spousal violence matter? *International Journal of Population Studies*, *2*(2), 107–122. https://doi.org/10.18063/ijps.2016.02.001

Tayie, F., & Lartey, A. (2008). *Antenatal care and pregnancy outcome in Ghana, the importance of women's education*. *8*(3), 291–303.

Terefe, A., & Larson, C. P. (1993). Modern contraception use in Ethiopia: Does involving husbands make a difference? *American Journal of Public Health*, Vol. 83, pp. 1567–1571. https://doi.org/10.2105/AJPH.83.11.1567

Thapa, D. K. (2012). *Woman's autonomy and husband's involvement in maternal health*. (May).

Tuo, C. (2017). *Assessing the Trend, Causes and Characteristics of Facility Level Maternal Mortality in the Upper West Region of Ghana* (UDS). Retrieved from www.udsspace.udsa.edu.gh on 13-01-2020

Tweheyo, R., Konde-Lule, J., Tumwesigye, N. M., & Sekandi, J. N. (2010). Male partner attendance of skilled antenatal care in peri-urban Gulu district, Northern Uganda. *BMC Pregnancy and Childbirth*, *10*, 53. https://doi.org/10.1186/1471-2393-10-53

UNFPA. (2018). The Power of Choice: Reproductive Rights and the Demographic Transition. *The State of World Population 2018*. Retrieved from https://www.unfpa.org/sites/default/files/pub-pdf/UNFPA_PUB_2018_EN_SWP.pdf on 13-07-2020

United Nations. (1994). Report of the International Conference on Population and Development. In *Ageing International*.

van de Walle, F., & Maiga, M. (1991). *Family Planning in Bamako , Mali Author (s): Francine van de Walle and Mariam Maiga*. *17*(3), 84–90.

Vanassche, S., Swicegood, G., & Matthijs, K. (2013). Marriage and Children as a Key to Happiness? Cross-National Differences in the Effects of Marital Status and Children on Well-Being. *Journal of Happiness Studies*, *14*(2), 501–524. https://doi.org/10.1007/s10902-012-9340-8

Wang, C. C., Vittinghoff, E., Hua, L. S., Yun, W. H., & Rong, Z. M. (1998). Reducing pregnancy and induced abortion rates in China: Family planning with husband participation. *American Journal of Public Health*, *88*(4), 646–648. https://doi.org/10.2105/AJPH.88.4.646

WHO. (1984). Twienty-eighth Report on The Joint FAO/WHO Expert Committee on Food Additives. *World Health Organization - Technical Report Series*.

WHO. (2002). Field experiences in involving men in safe motherhood. *Programming for Male Involvement in Reproductive Health. Report of the Meeting of WHO Regional Advisers in Reproductive Health WHO/PAHO, September 2001*, (September 2001), 63–84.

WHO. (2015). *WHO recommendation on male involvement interventions for maternal and neonatal health* (pp. 1–9). pp. 1–9.

Yalcin-Siedentopf, N., Pichler, T., Welte, A. S., Hoertnagl, C. M., Klasen, C. C., Kemmler, G., … Hofer, A. (2020). Sex matters: stress perception and the relevance of resilience and perceived social support in emerging adults. *Archives of Women's Mental Health*, (Bonanno 2004). https://doi.org/10.1007/s00737-020-01076-2

Yargawa, J., & Leonardi-Bee, J. (2015). Male involvement and maternal health outcomes: Systematic review and meta-analysis. *Journal of Epidemiology and Community Health*, *69*(6), 604–612. https://doi.org/10.1136/jech-2014-204784

Zavaleta, N., Caulfield, L. E., & Garcia, T. (2000). Changes in iron status during pregnancy in Peruvian women receiving prenatal iron and folic acid supplements with or without zinc. *American Journal of Clinical Nutrition*, *71*(4), 956–961. https://doi.org/10.1093/ajcn/71.4.956

APPENDICES

Appendix 1: Informed Consent

UNIVERSITY FOR DEVELOPMENT STUDIES

SCHOOL OF MEDICINE AND HEALTH SCIENCES DEPARTMENT OF COMMUNITY HEALTH AND FAMILY MEDICINE

INFORMED CONSENT FORM

NAME OF INTERVIEWER---------- INFORMANT NO--------

PLACE OF INTERVIEW----------

DATE---------- TIME----------

You are invited to voluntarily participate in a study that is done through the University for Development Studies, Tamale. The purpose of the study is to explore communication between spouses during pregnancy and maternal health decision making. The findings of this study would be helpful in future reproductive health planning and implementation and also suggest practical ways by which maternal and child health barriers linked to Spousal Communication can be overcome to ensure improved access to quality maternal and child health in the district. Your participation in this study is purely voluntary and base on your own independent decision and you can withdraw from the study at any time you wish without any intimidation. If you agree to participate you will be asked a number of questions. The interview will be tape recorded to help me remember some important points that we talk about. The information given will be treated confidential and will not be disclosed in association with your name. If you choose to participate in the study upon reading the information provided or hearing what is explained you may give a verbal consent or sign in the space provided below.

INFORMANT'S SIGNATURE/THUMB PRINT INTERVIEWER'S SIGNATURE/DATE

---------- ----------

THANK YOU

Appendix 2: Study Questionnaire

QUESTIONNAIRE ID: ……..

SECTION A: SOCIODEMOGRAPHIC CHARACTERISTICS

A1. Age of respondent [__ __] years

A2. Marital status:

i. Monogamous Marriage [ ]

ii. Polygamous Marriage [ ]

iii. If response to A2 is ii, what is your position in the marriage? i. 1st wife, ii. 2nd wife, iii. 3rd wife, iv. Others (specify)----------

A3. Education status:

i. Primary

ii. J. H. S /Middle school

iii. Secondary/Tech./Voc./ A-level/O-level

iv. Tertiary

v. No formal education

A4. Which ethnic group do you belong?

i. Dagaba

ii. Frafra

iii. Akan

iv. Dagomba

v. Other (*specify)* _____

A5. Religious affiliation:

i. Christian

ii. Muslim

iii. ATR

iv. Others (specify)…....

A6. Employment status:

i. Employed

ii. Unemployed

A7. What is your main occupation?

i. Artisan (carpenter, mason, plumber, driver, etc.)

ii. Farmer

iii. Civil / Public servant

iv. Trader/ businessman

v. Others (specify)----------

SECTION B. ANC ATTENDANCE

B8. Is this your first pregnancy? i. No ii. Yes If Yes Skip to B4

B9. What was the outcome of your previous pregnancy? i Life birth. ii. Still birth

B10. If ii to B2, what led to that? ----------

B11. With the pregnancy are you still sleeping in your partner's room? i. No ii. Yes

B12. If No to B4, explain why you stop sleeping in your partner's room----------

B13. By what means did you come to the facility for ANC? i. Walking, ii. Taxi, iii. Trotro, iv. Bicycle v. others (specify) ……. .

B14. Is today your first time of coming for ANC? i. No ii. Yes If Yes to B7 Skip to B11

B15. Has your husband ever asked you to attend ANC? i. No ii. Yes

B16. Have you ever been here with your husband? i. No ii. Yes

B17. Have you ever been asked by hospital staff to come to ANC with your husband? i. No ii. Yes

B18. Do you think your community considers it acceptable for a man to accompany his wife/ partner to ANC? i. Yes ii. No iii. Don't know

B19. Do you think your family and friends consider it acceptable for a man to accompany his wife/ partner to ANC? i. Yes ii. No iii. Don't know

B20. How much would you/do you spend on transportation to the ANC on each visit?

GHC……

B21. How do you view the cost of transport to ANC?

i. Expensive ii. Slightly expensive iii. Cheap

B22. Will you continue to attend ANC until delivery? i. No ii. Yes

B23. If No to B15, explain why----------

B24. Have you ever been asked to come to ANC with your husband? i. No ii. Yes

B25. What is your perception about what you were told at the ANC? i. Very helpful ii.Helpful iii. Not helpful iv. Complete waste of time v. doesn't know vi. Other (specify) ----------

SECTION C: SPOUSAL COMMUNICATION

C26. Have you ever held a discussion on ANC with any of the following people?

a. Wife or partner i. Yes ii. No iii. Not sure

b. Health worker i. Yes ii. No iii. Not sure

c. Friend i. Yes ii. No iii. Not sure

C27. Have you heard or read about ANC from any source before? i. Yes ii. No iii. Not sure

C28. If yes to C2, please indicate source……

C29. Have you ever discussed your pregnancy with your partner? i. No ii. Yes

C30. If No to C4, what prevents you from talking about the pregnancy? ----------

C31. Before the pregnancy, was there any discussion about getting pregnant with your partner? i. No ii. Yes

C32.If No to C6, what prevents you from holding discussion about it? ----------

C33. Have you been discussing your health with your partner? i. No ii. Yes

C34. If No to C8, then what other issues have you been discussing most with your partner? -------

C35. What is it that actually prevents you two from talking about the pregnancy? ----------

C36. Have you ever had an argument with your spouse concerning this pregnancy? i. No ii. Yes

C37. Does your partner know how you are feeling right now? i. No ii. Yes

C38. How often do you and your (husband/wife) discuss how many children to have: often (3), sometimes (2), or never (1)

THANK YOU FOR YOUR TIME

Appendix 3: In-depth interview guide

IN-DEPTH INTERVIEW GUIDE -1 (MIDWIFE, TBA, VHW)

QUALITATIVE STUDY ON SPOUSAL COMMUNICATION DURING PREGNANCY AND MATERNAL HEALTH DECISION MAKING

ANTENATAL CARE

A. How many years of experience do you have and where do you work?

B. What is your opinion on spousal communication on health during pregnancy?

C. What is your experience in women attending Ante natal clinic in the first 3 months of gestation?

D. What are the reasons? What is your experience in male spouses escorting their spouse to the clinic for antenatal care?

E. What is your opinion on issues spouses communicate more on during pregnancy?

F. What problems do women encounter in accessing antenatal care?

G. What do you think can be done to encourage spousal Communication?

H. What challenges do you think pregnant women faced when there is no healthy communication between them and their spouses?

DELIVERY

A. What is your experience in obstetric referrals?

B. What is your feeling about male spouse's participation in their wives delivery?

C. Are male spouses escorting their wives to deliver in health facilities? Are they present when their wives are in labour?

D. What are the reasons? i) religious ii) socio cultural iii) health system

E. What is your opinion about effects of inadequate spousal communication during pregnancy?

F. How can Spousal communication improve on maternal health decision making?

G. How can we improve male spouse's involvement in pregnancy and child birth?

H. Any last words.