

SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCES

UNIVERSITY OF GHANA

THE INFLUENCE OF MALE SUPPORT DURING ANTENATAL CARE ON
THE PLACE OF DELIVERY IN THE OFFINSO SOUTH MUNICIPALITY OF
THE ASHANTI REGION, GHANA

BY

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THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA,
LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE
AWARD OF MASTER OF PUBLIC HEALTH DEGREE

JULY, 2016

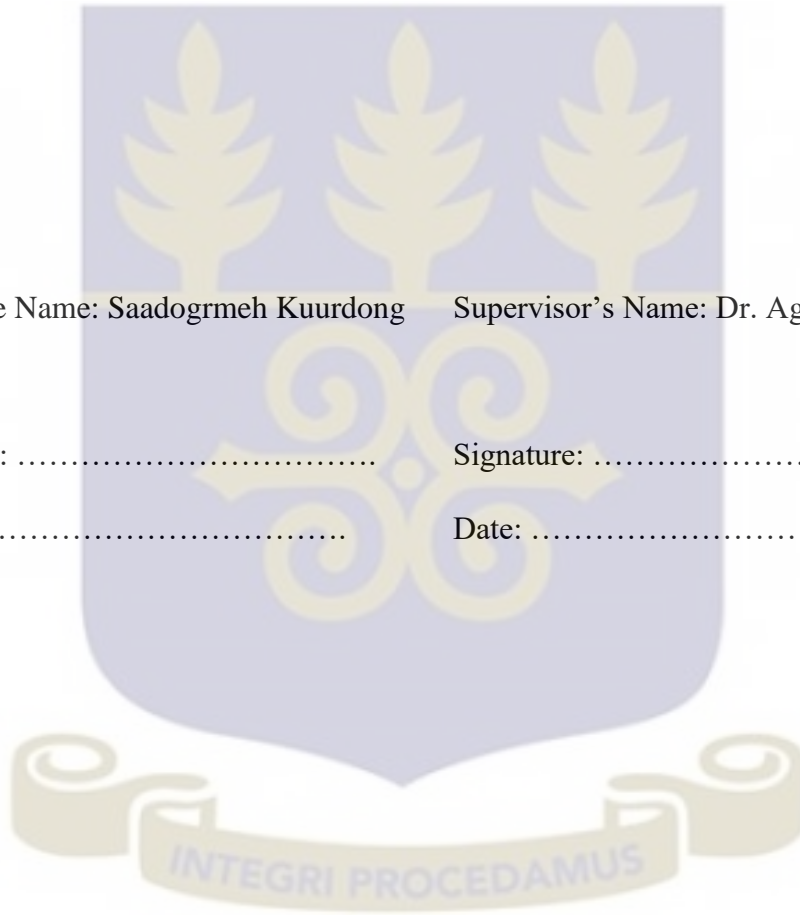
DECLARATION

I, Saadogrmeh Kuurdong, hereby faithfully declare that this study, with the exception of the references to the work of others cited, is my own study conducted at Offinso South Municipality, while a student at the Department of Population Family and Reproductive Health, School of Public Health, University of Ghana, Legon.

Candidate Name: Saadogrmeh Kuurdong Supervisor's Name: Dr. Agnes M. Kotoh

Signature: Signature:

Date: Date:



DEDICATION

Dedicated to my wife, Madam Alice Chefuu Wasaal and children; Joseph Naa Kuurdong, Joshua Ziem Kuurdong, Jess Kog Kuurdong and Jessica Nom Kuurdong.

I also dedicate this write up to my mother, Madam Tegeh Ter-eru, all my brothers and uncle, Dr. N. Karbo and his wife Madam Mercy Guri.



ACKNOWLEDGEMENTS

My first thanks go to the Almighty God for the strength, knowledge and understanding given to me in the conduct of this research. I extend my gratitude to Dr. Agnes M. Kotoh, my supervisor for her immense support and useful pieces of information which led to the completion of the research. My deepest thanks to Mr. Dennis Arku of the Department of Statistics for his assistance. I would like to forward my heart felt appreciation to Mr. Amachie Joseph of the Department of Statistics and Mr Samed Ishaq of St. Patrick's Hospital, Offinso for their timely intervention on data management.

Special appreciation goes to the entire staff and students of Offinso Nursing/Midwifery Training College for their encouragement and varied assistance during the conduct of this study. I am also grateful to the participant for their willingness to participate in the study and cooperation demonstrated during data collection.

Finally, the moral and spiritual support of other members of my family, especially Mr. Daniel Kuurdong for all his financial support, and friends are most appreciated



ABSTRACT

In Ghana and other countries of the developing world, men are very influential in deciding whether their partners visit the antenatal clinic (ANC) or not or they deliver in a health facility or not. Generally, there is a high ANC coverage in Offinso and Ghana at large. But as a result of lack of male support during ANC, some pregnant women are not able to deliver at health facilities. This necessitated the conduct of this study to explore the influence of male support during ANC on the place of delivery. The main aim of this study is to find out how male support influence the place of delivery. The study assessed the level of male support, factors influencing male support and the influence of male support on the place of delivery.

A cross sectional study design was employed to conduct this study in two hospitals and a health center in the Offinso South Municipality of the Ashanti Region of Ghana. A structured questionnaire with closed and open ended questions was administered to a total of 426 respondents (213 couples) aged between 15 to 49 years old. The data was analyzed using STATA 13.1

The majority of male and female respondents were aged 25-34 and 20-29 years respectively. The results of this study suggest that more than 80% of both males and their partners reported that the level of male support during ANC was high. Level of knowledge about ANC, economic factors, cultural factors of the males and time spent at the ANC showed some association with male support, but it was statistically not significant. Both males and their partners reported that 95% of all deliveries occurred in health facilities. There was no association between male support and the place of

delivery. The findings show a high level of male support and high health facility deliveries.

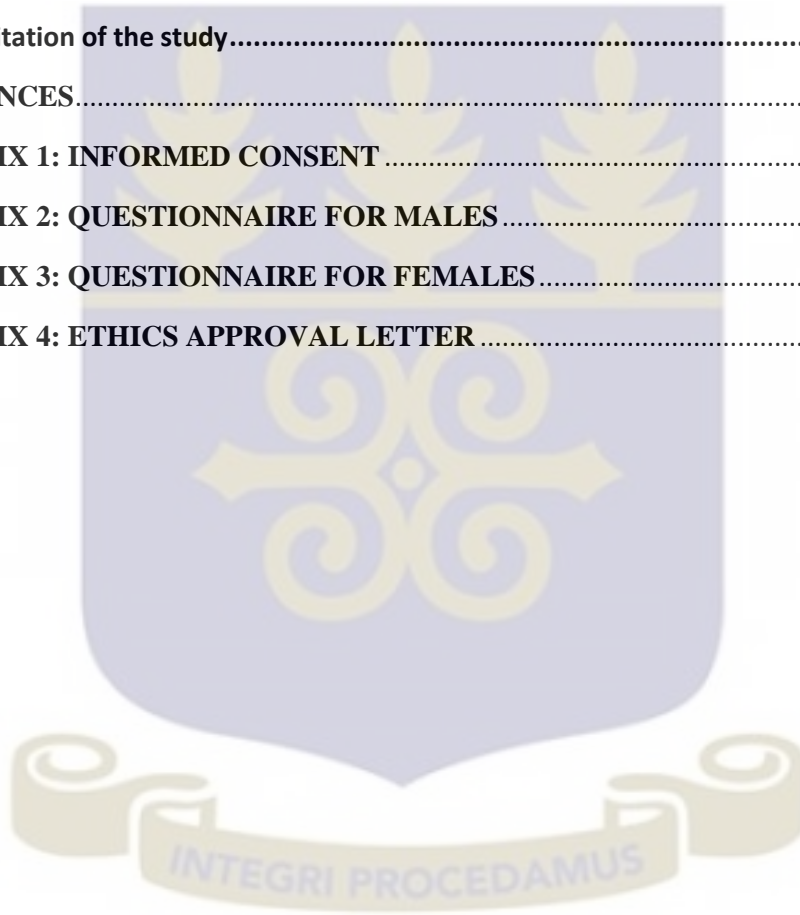


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LIST OF ACRONYMS

Acronym	Meaning
AIDS	Acquired Immuno-Deficiency Syndrome
ANC	Antenatal Care
CHPS	Community-based Health Planning and Services
CWC	Child Welfare Clinic
GDHS	Ghana Demographic and Health Survey
GSS	Ghana Statistical Service
HIV	Human Immuno-Deficiency Virus
ICPD	International Conference on Population and Development
MDGs	Millennium Development Goals
PMTCT	Prevention of mother to child transmission
PNC	Postnatal care
SDA	Seventh Day Adventist



CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Antenatal care is the care given to pregnant women from pregnancy until the onset of labour (Opeyemi, Olabisi, & Oluwaseyi, 2014). Male support during ante-natal care (ANC) is also defined as seeking and sharing information to jointly discuss and decide about appropriate health behaviour and care during pregnancy (Opeyemi et al., 2014).

Developing countries account for 99% of global maternal deaths. In Sub-Saharan Africa, for example, a woman's lifetime risk of dying from preventable or treatable complications of pregnancy and childbirth is 1 in 39, compared to 1 in 3800 in the developed world (Yargawa & Leonardi-bee, 2015). Antenatal clinic attendance in Ngorongoro, a rural district in northern Tanzania, is over 90% while only 7% of women receive skilled delivery care (Magoma, Requejo, Campbell, Cousens, & Filippi, 2010). Males support during ANC reduces negative maternal health behaviours, risk of preterm birth, low birth weight, fetal growth restriction and infant mortality.

There is epidemiological and physiological evidence that male support reduces maternal stress, increases uptake of prenatal care, leads to cessation of risky behaviors such as smoking, and ensures male support in their future parental roles from an early stage (Kaye et al., 2014). Also, male support during ANC could promote better partnership between males and women in the household and the community. Also, Jennings et al. (2014) observed that approval of and support during ANC have a positive influence on

ANC. Thus the need to incorporate males in the support of their partners during ANC period cannot be underestimated.

Males are important actors who influence, positively or negatively, both directly and indirectly, the reproductive health outcomes of women (Guadagno, Mackert, & Rochlen, 2013). It has been observed that events surrounding pregnancy is a contested area and males are often absent from ANC (Guadagno et al., 2013). It is also said that pregnancy and delivery are peculiar female experiences that represent times women celebrate and males are given a secondary role.

Including males in ANC has been reported to be advantageous in seeking medical care during pregnancy. Studies suggest that males who are more educated were more likely to identify obstetric emergencies and support their partners to get medical care (Guadagno et al., 2013). In Pakistan, males' approval was an important determinant of ANC utilization (Guadagno et al., 2013).

In many Ghanaian societies, males often govern behaviours regarding family planning, women's work load, and allocation of money, availability of nutritious food, transport and time that women can use to access healthcare services especially ANC (GDHS, 2014). Study found that male disapproval is a major barrier to women's use of ANC services. However, there are limited studies on the level of male support during ANC and how this influence place of delivery. This study seeks to determine the level of males support during ANC, factors that influence male support during ANC and how male support influence the place of delivery.

1.2 Statement of Problem

The 1994 International Conference on Population and Development (ICPD) held in Cairo indicated that it is the right of all people to have good reproductive health. The ICPD emphasized that men and women together share responsibility for good maternal health. A study in Nepal revealed that involving males during health education at antenatal clinics led to more support for their partners than educating their partners alone. Helleve's (2010) study in the Gambia involving pregnant women also found that male perception of actual roles for ANC services was low.

A study in Egypt also indicated that male support during post abortion care improves maternal health. However, male involvement in reproductive health have been low. A study in Bangladesh, found that out of 480 men aged 15 to 54 years, living with at least one child younger than 3 years, only 27% of them accompanied their wives for ANC.

ANC attendance and delivery at a health facility have been found to reduce adverse pregnancy outcomes.

However, worldwide, male ANC attendance and skilled delivery care remains a challenge to safe motherhood. About 210 million women become pregnant each year with 30 million (15%) developing complications, resulting into over half a million maternal deaths (Tweheyo, Konde-lule, Tumwesigye, & Sekandi, 2010)

Also, in many Sub-Sahara African countries including Ghana, ANC attendance is usually high but health facility delivery is low. According to the 2014 Ghana Demographic and Health Survey (GDHS), the national ANC coverage is 97% against 73% delivery at health facility. Anecdotal reports suggest that delivery at health facilities in Offinso South Municipality is a challenge though ANC attendance is high.

From the midwife returns at the Municipal's Health Directorate in Offinso, 408 (1.5%) males out of 28,985 attendance and 265 (0.9%) males out of 28064 attendance were involved in ANC in 2013 and 2015 respectively. Also, 4942 (17.1%) deliveries out of 28,985 ANC attendance and 5004 (18%) deliveries out of 28,064 ANC attendance occurred in health facilities during the same period.

This study, therefore, seeks to determine the level of male support during ANC and its influence on the place of delivery. It will also explore factors associated with male support during ANC and place of delivery.

1.3 Justification

The level of risks associated with pregnancy outcomes often reduces with access to good ANC services and delivery at a health facility. Studies have shown that male approval is important in the use of ANC (Jennings et al., 2014). Male support for their wives during antenatal care maximize good pregnancy outcomes (Helleve, 2010). It is generally argued that when males accompany their wives to the health facility, he will have access to health education on important maternal health services. Because he knows the benefits of delivering in a health facility, he will encourage her to deliver in a health facility. Hence, there is the need for this study to determine the level of male support during ANC and explore factors that influence male support during ANC and place of delivery. The results of this study will inform policy makers and relevant institutions to develop appropriate technical guidelines to encourage male support to promote delivery at health facilities.

1.4: Conceptual Frame Work

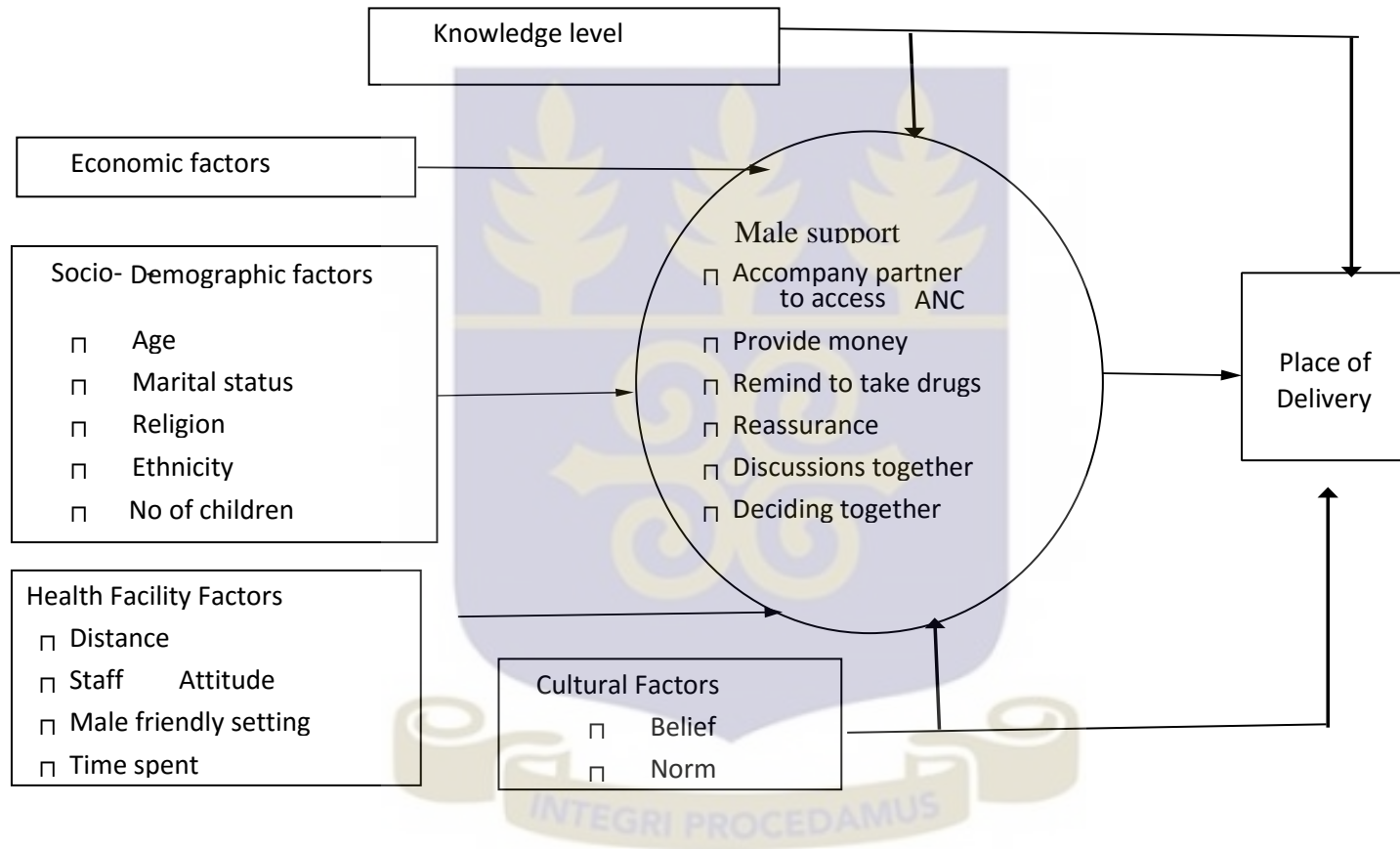


Figure 1: Conceptual framework on influence of male support on place of delivery

Figure 1 shows the conceptual framework of male support during ANC and its influence on the place of delivery. It shows that socio-demographic factors, knowledge level of the respondents about ANC, cultural factors, economic factors, and health facility factors affect male support during ANC. For instance, beliefs, marital status, number of children, age, religion, ethnicity among others affect male support for their partners during ANC. Furthermore, the influence of health facility factors such as staff attitude, distance, and time spent at ANC set up among others on male support cannot be overlooked. The framework also shows a relationship between the level of knowledge and male support during ANC. Over all, the conceptual frame work shows how the place of delivery is directly affected by male support during ANC and indirectly by socio-demographic, economic, and cultural and health facility factors.

1.5 Study Objectives

1.5.1 General Objective

To explore the influence of male support during ANC on the place of delivery.

1.5.2 Specific Objectives

- To determine the level of male support during ANC in Offinso South Municipality.
- To examine factors that influence male support during ANC in Offinso South Municipality.
- To explore whether or not male support during ANC influence the place of delivery in Offinso South Municipality

1.6 Research Questions

1. What is the level of male support during ANC in Offinso South Municipality?
2. What factors influence male support during ANC in Offinso South Municipality?
3. Does male support during ANC influence the choice of place for delivery in Offinso South Municipality?



CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter is organized under four main headings including an introduction in to the topic, the place of delivery, level of male support during ANC, and factors affecting male support during ANC.

2.1 Introduction

It is unclear why women in developing countries are disproportionately affected by adverse pregnancy outcomes than women in the developed world (Straughen, Caldwell, Jr, & Misra, 2013). Some studies have sought to provide answers; recent reports have highlighted the lack of attention to the role of males in pregnancy. The role fathers in developing countries play in families may be different from that of fathers in the developed countries as many fathers in the developing countries face unique, yet highly interconnected obstacles to ANC involvement including joblessness, low educational attainment, and marital relationship (Straughen et al., 2013). Studies indicated that male support during ANC increased with high educational level. Partners education was a statistically significant indicator in Andra Pradesh, but not in Karnataka (Navaneetham & Dharmalingam, 2002). Partners' educational level is a stronger parameter than woman's education in the Philippines (Simkhada, Teijlingen, Porter, & Simkhada, 2007). A study conducted in Ethiopia on factors affecting the usage of maternal health services indicated that women education positively and independently predicted the use of health facility for delivery (Pallikadavath, Foss, & Stones, 2004). In another study, no statistical significance between the male partner's age and support for wife during ANC

was found. A study shows that age of female partners at marriage and pregnancy also influence male support during ANC. In rural north India (Pallikadavath, Foss, & Stones, 2004) age at marriage was shown to affect male support for their partners. However, the male partner's level of education and occupation have an effect on his involvement in supporting his partner to access ANC (Nanjala & Wamalwa, 2012). Some studies also found an association between parity and male support during ANC. Higher parity was generally a barrier to male support for their partners during ANC period (Paredes, Hidalgo, Chedraui, Palma, & Eugenio, 2005). In another study carried out in Ethiopia on factors affecting the use of maternal health services, it was realized that women with higher parity are 50% less likely to use a health facility for delivery than their single parity counterparts. Additionally, women of higher parity (giving birth more than one) may not feel the need to receive professional care if previous deliveries were not complicated (Bloom, Lippeveld, & Wypij, 2007). Male support during Antenatal check-ups was more likely among women who married at the age of 19 or above, compared with those who married younger (Pallikadavath et al., 2004). However, this was not the case in Jordan (Bloom et al., 2007). Studies showed that ethnicity and religion played a significant role in male support during ANC. Men belonging to 'Schedules' castes and tribes do not support their women during ANC in India (Navaneetham & Dharmalingam, 2009 and Pallikadavath et al., 2004). Men from the Islamic religion were much more likely to support their partners during ANC in India (Pallikadavath et al., 2004) than other religions. In Hausa culture, 'God's Will' was the factor for males' failure to support their partners during ANC in Nigeria (Simkhada et al., 2007). Women who followed Muslim, Orthodox and Protestant religions were more likely to be

supported by their partners during ANC in Ethiopia. In contrast, religion was not a statistically significant predictor of male support during antenatal check-ups in India (Navaneetham & Dharmalingam, 2009)

In another study, the educated, younger partners, those in monogamous marriages and non- Muslims are able to accompany their wives for ANC services (Ediau et al., 2013)

2.2 Place of Delivery

In Tanzania, over 90% of all pregnant women attended ANC at least once and approximately 62% four times or more, yet less than five in ten pregnant women receive skilled delivery care at available health units. Specifically, the study examined beliefs and behaviours related to antenatal and delivery care among some ethnic groups. The perspectives of care providers and traditional birth attendants on childbirth and the factors determining where women deliver were also investigated (Magoma et al., 2010).

In a study, out of 994 women who attended the antenatal care clinic, 74 (7.4%) presented for delivery services in health facilities. 5.4% of expected births in the population occurred in health facilities. Deliveries assisted by skilled attendants were far below the national and international goals. The use of institutional delivery services was very low even among antenatal care attendees (Bloom et al., 2007). It is known that, at least 20% of all women who attended ANC four times or more in developing regions of sub-Saharan Africa and Asia do not seek skilled delivery services. (Magoma et al., 2010)

2.3 Level of Male Support during ANC

ANC is the care provided by a skilled attendant during pregnancy until the onset of labour (Opeyemi et al., 2014). Male support in ANC is aimed to encourage men to help their partners during pregnancy Research suggests that male presence during ANC can

improve uptake of institutional deliveries, postnatal service utilization, and spousal communication (Mullany, Becker, & Hindin, 2007).

Despite the progress made towards achieving the United Nations Millennium Development Goal. (MDG) 4, 5 and 6, many Sub-Saharan African countries still have high HIV incidence, high maternal and infant mortality, and high attrition from prevention of mother-to-child transmission of HIV (PMTCT) services and under use of health facilities for delivery. Male support during ANC is seen as an increasingly valuable way to improve a number of these health indicators (Jefferys, Nchimbi, Mbezi, Sewangi, & Theuring, 2015). Antenatal care (ANC) is an important contributory factor in improved maternal health outcomes as seen in the case of Rwanda supporting male partner involvement at ANC (Påfs et al., 2015). Most societies, especially in Africa, regard attending ANC clinics as a female business; therefore, males are often not expected to accompany their wives to the clinic (Kwambai et al., 2013). Meanwhile, evidence from qualitative research shows that the absence of male partner support in ANC can create a barrier for women to access ANC services and subsequent failure to utilize skilled delivery in a health facility (Jefferys et al., 2015). It is a known fact that men, especially in developing countries, generally do not accompany their wives for ANC and are not present in the labour room during delivery (Ediau et al., 2013)

2.4 Factors Affecting Male Support during ANC

Male support during ANC is associated with numerous factors. This study specifically looks at the economic factors, cultural factors, health facility factors, and level of knowledge of respondents about ANC

2.4.1 Knowledge level of males about ANC

In a study on male partner attendance of skilled antenatal care in peri-urban Gulu district, Northern Uganda, male partners' knowledge about ANC services offered, male support was low; less than 50% (164/329) could correctly mention two or fewer services offered, 47.1% (155/329) mentioned 3 - 5 services, and only 3% (10/329) mentioned at least five services offered (Tweheyo et al., 2010). Other factors associated with higher male attendance were attainment of secondary or tertiary level education (PRR 1.25; 95%CI 1.08 - 1.46; $p = 0.003$) (Tweheyo et al., 2010).

With reference to a study carried out in Kenya, it was shown that male partners have limited knowledge regarding ANC as 40% stated that pregnancy is a natural phenomenon that does not require men's participation, and 48.2% of the male partners said that they will be ridiculed by their peers and be seen as being "ruled" by their partners if they were seen accompanying them to health facilities for ANC (Nanjala & Wamalwa, 2012).

A research suggested that ANC influences later use of delivery care by developing a habit to use formal care services and in increasing maternal knowledge (Ensor et al., 2014)

It is suggested that empowering male partners with knowledge about ANC services may also increase their ANC involvement and eventually increase skilled attended deliveries by their spouses (Ediau et al., 2013)

2.4.2 Economic Factors

A study found that working class men could not accompany their partners to clinic appointments and conversely, middle-class men tended to find time to be with their partners during antenatal visits (Redshaw & Henderson, 2013). Women who received financial support from their partners were more likely to attend ANC clinic than those without financial assistance from their partners. This is consistent with studies in Vietnam and other developing countries, which identified the importance of male support in reproductive health care for their wives (Tac, Duc, & Thi, 2015). Men are socially and economically influential and are determinants of women's reproductive health (Ediau et al., 2013)

2.4.3 Cultural Factors

Cultural norms that define pregnancy as a woman's field have been shown to discourage male participation.(Nanjala & Wamalwa, 2012).

In the Sub-Saharan setting, the cultural factors have been referred to as, for example; the cultural perception of pregnancy as a healthy state, traditional beliefs of practices during pregnancy, the reluctance to disclose the pregnancy too early, the need for a woman to get permission from her partner or close relative to visit ANC, and the stigma of being pregnant outside partnership (Andrew et al., 2014). Qualitative research revealed that although men show interest in supporting their partners during ANC, in practice, numerous barriers prevent them from doing so. For instance, social norms can prevent women from asking their partners to attend ANC or for men to concede to attending ANC. It is believed that ANC has been considered an arena for women, with predominately health workers being females and reports of indifferent treatment if they

attend (Mohlala, Gregson, & Boily, 2012). Other obstacles to male partner support include complex and interdependent structural and cultural issues and require community sensitization as well as scaling up client-friendliness in the clinics in order to subdue the social and cultural impediments (Edia et al., 2013)

2.4.4 Health Facility Factors

A study conducted in Kenya indicated that majority of the male partners (61.1%) stated that the fees charged at health facilities was high and beyond their reach making them unable to support their partners during ANC, 54% indicated that the health workers are harsh, uncooperative and abusive. Also about 48% of the male partners stated that when they accompany their partners to the ANC clinics, they are forced to take HIV tests without adequate counseling. In spite of lack of support by males to their partners, most mothers (72%) interviewed felt that their male spouses should at least set aside funds to be used in assisting them access ANC services while 54% indicated that they wanted their male partners to be accompanying them to health facilities for ANC (Nanjala & Wamalwa, 2012).

In another study in Uganda, it was established that the main barriers to attendance of ANC identified by male partners were: long waiting time (41.7%), lack of transport means (35.8%), walking distance greater than one hour (more than 5 kilometers) to a health facility (34.1%) and fear of being tested for HIV (29.7%) (Tweheyo et al., 2010).

CHAPTER THREE

3.0 METHODOLOGY

This chapter is organized under the following areas: study design, study population and setting, sampling, data collection tool, variables, data analysis, inclusion criteria, exclusion criteria, quality control, ethical clearance, and limitation of the study.

3.1 Study Design

A cross sectional study design was used to carry out this research. Structured questionnaires were used to collect quantitative data.

3.2 Study Population and Setting

Offinso South Municipal is one of the 30 districts in the Ashanti Region. It was established by Legislative Instrument (L.I.) 1909 in 2007. It was carved out of the then Offinso Municipal and split into Offinso South Municipal and the Offinso North District.

The Offinso South Municipality is located in the extreme North-Western part of the Ashanti Region. It has a total land area of 585.7 square kilometers which is 2.4 percent of total land size of the Ashanti Region. The municipality shares common boundaries with Offinso North in the North, Ejura-Sekyedumase District in the East, Sekyere South in the South-East, Atwima Nwabiagya and Ahafo Ano South Districts in the West. The 2010 Population and Housing Census put the population of the municipality at 76,895 with a population density of 131 persons per square kilometer.

For health care delivery, the municipality is blessed with two hospitals (St. Patrick's Catholic and Namong SDA Hospitals), two clinics (Anyenasuso SDA and Offinso

Community Clinics), three health centers (Abofour, Bonsua, and Offinso) and Kwagyekrom Community-based Health Planning and Services (CHPS). The referral hospital in the municipality is the St. Patrick’s Catholic Hospital.

Figure 3 displays the political map of the Offinso South Municipality. The area is almost symmetrically dissected by the Kumasi-Techiman main trunk road forming part of the Trans-African Highway, which serves as the main gateway to the Ashanti Region from the Northern and Brong-Ahafo Regions. The Municipal capital, Offinso New Town, is only about a 30 minutes’ drive from the central business district of Kumasi, the capital of Ashanti Region. (Ghana Statistical Service, 2010).

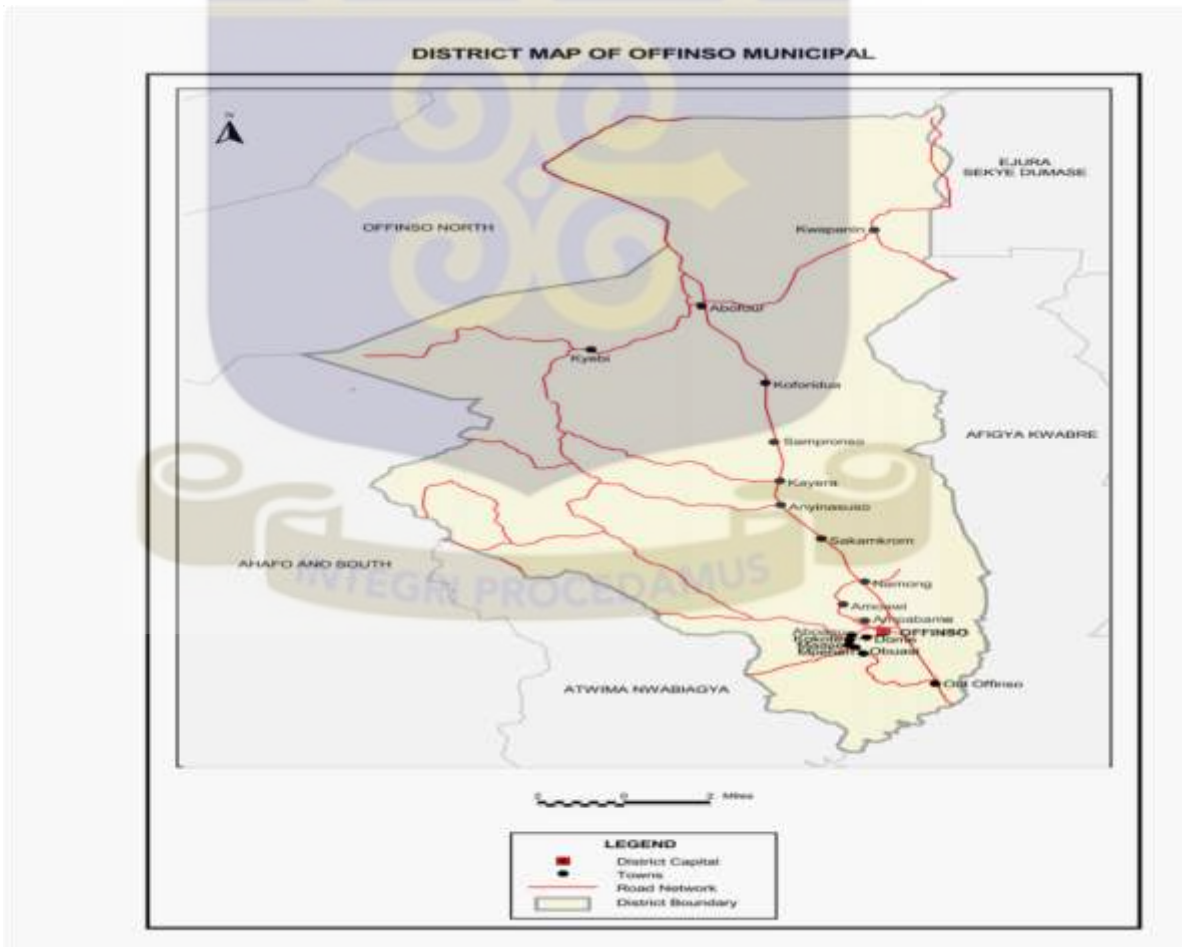


Figure 2: District Map of Offinso South Municipality

3.3 Sampling

3.3.1 Sample Size Calculation

For populations that are large, Cochran developed the formula that shows a representative sample for proportions as follows; $n = (Z^2_{\alpha/2}) * P (1-P) / e^2$

Where n is the sample size, Z^2 is the abscissa of the normal curve that cuts off an area at the tails ($1 - \alpha$ equals the desired confidence level, e.g., 95%), e is the desired level of precision, p is the estimated proportion of an attribute that is present in the population. The value for Z is found in statistical tables which contain the area under the normal curve. (Kasiulevičius, Šapoka, & Filipavičiūtė, 2006)

The value for Z is 1.96 which correspond to a confidence level of 95%

$P = 0.5$, $e = 0.05$, $1 - 0.5 = 0.5$, and $n = ?$ Please note that p was assumed to be 50%

$$n = 1.96^2 * 0.5(0.5) / 0.05^2, n = 384$$

10% was added to account for non-responses. The adjustment factor $100 / (100 - 10) =$

1.11 was used to give the final sample size.

The required sample size adjusted to account for non-response was; $n = 384 \times 1.11 = 426$ (Kasiulevičius et al., 2006).

3.3.2 Sampling Procedure

Three health facilities (the two hospitals in the district) and a health center were conveniently selected for the study. A sample of 426 respondents (213 women and their partners) within the reproductive age (15-49 years) with children not more than a year old were recruited from the Child Welfare Clinic (CWC) of the three health facilities using convenient sampling technique.

The women who met the inclusion criteria and have agreed to participate in the study were selected consecutively at the health facilities until the total sample was obtained. The male partners of the female respondents were contacted on phone for permission to interview their partners and also recruit them for the study. The women whose partners could not be contacted were dropped from the list of respondents. Some of the male partners could not be contacted because they are abroad, dead or did not have a phone or contact address. Women whose male partners' declined to take part in the study were also excluded from the study.

The CWC days for St. Patrick's Catholic Hospital, Namong SDA Hospital and Offinso Health Center were Fridays, Mondays and Tuesdays respectively. Based on the ANC attendance at these health facilities, the respondents were proportionately allocated. The proportions for St. Patrick's Catholic Hospital, Namong SDA Hospital, and Offinso Health Center were 50% (107 women and their partners), 30% (64 women and their partners), and 20% (42 women and their partners) respectively.

3.4 Data Collection Tool

Structured questionnaire was used to collect the data. The questionnaire consisted of four sections. Section A includes the socio-demographic characteristics of respondents. Section B focuses on place of delivery, section C on level of male support during ANC and section D examines factors associated with male support during ANC. The questionnaire was administered to the women and their partners separately. The questionnaire for the women were administered face-to-face whiles their partners were also interviewed face-to-face or through phone calls.

3.5 Variables

3.5.1 Dependent Variable

The dependent variable is the place of delivery, that is, health facility or at home.

3.5.2 Independent Variable

The independent variables are socio-demographic factors of respondents, cultural factors, economic factors, level of knowledge about ANC and health facility factors

3.6 Data Analysis

The completed questionnaire was assessed for appropriateness of data. Each pair of questionnaire was numbered serially for easy access for corrections. For example, pairs were given serial numbers as (F001, M001), (F002, M002), (F003, M003), (F213, M213). The individual responses were coded as 0, 1, 2, 3, etc. Some of the individual responses were also aggregated and given an interpretation. These interpretations were then coded as 1, 2, 3, etc. A template was designed using Microsoft Excel spreadsheet. Each variable was created on a column and each respondent occupied a row of the Excel spreadsheet. The codes for the various responses were then input into the template. Controls were set for each variable's responses to minimize accidental inputting. The data in the excel spreadsheet were then exported in to STATA software, version 13.1. In STATA, the variables and the various codes were properly defined.

For some of the variables, especially the socio-demographic characteristics of respondents, graphical representations, using histograms and pie charts were used. Frequency tables were also run to show frequencies and percentages.

A set of questions was used to categorize the male support, knowledge, cultural support and economic support in to levels as follows;

A set of eight questions were used to define the level of male support. The questions covered the following areas; accompanying partner to ANC, providing money during ANC, discussing with partner where to go for ANC, discussing with partner when to go for ANC, reminding partner to take medications, asking partner how she is fairing with the pregnancy, reassuring partner of good outcome of the pregnancy and discussing with partner where to deliver. The responses were dichotomous (“Yes” or “No”). A “Yes” response was scored 1 and a “No” response 0. All the “Yes” responses were described as positive responses and the “No” responses described as negative responses. The number of positive responses were used to categorize the levels. High level of male support meant that one was able to answer five to eight positive responses. For low level of male support, one needed to answer below five positive responses.

Eleven questions were used to classify knowledge about ANC services in to levels. High level of knowledge meant that respondents had ten to eleven positive responses to the questions. The average level of knowledge meant five to nine positive responses and low level of knowledge meant below five positive responses.

A set of five questions were employed to categorize cultural support into levels. High level of cultural support meant that respondent answered five positive responses. Average level of cultural support meant three to four positive responses and below three responses meant low level of cultural support.

For a total of eight questions, high level of economic support meant five to eight positive responses. Average level of economic support meant three to four positive responses and below three positive responses meant low level of economic support.

Cross tabulation, using chi-square test (χ^2) was applied to show the association between two variables. Fisher's exact test was used for some of the cross tabulations with cells containing a number less than Six. Simple logistic regression involving two variables was also used to show relationship or association between them. If the odds ratios at the 95% confidence interval is $p < 0.05$, the variable is put in to the multiple logistic regression model to test the strength of the association. The odds ratios were used to describe the effect of the associations. All tests were considered statistically significant if $p < 0.05$ at the 95% confidence interval (CI).

3.7 Inclusion Criteria

The following criteria were used to find and include women and their partners in the study; women and their partners aged 15 to 49 years of age who attended CWC with a child not more than a year old were included. Women who came to CWC alone but once their partners were contacted via phone qualified to be part of the study. Women and their respective partners included in the project work were resident in the study area.

3.8 Exclusion Criteria

Women and their partners who were less than 15 years and older than 49 years and did not attend CWC were excluded from the study. Single parents were also excluded from the study. Partners who were deaf, dumb, or could not speak any Ghanaian language or

English were also exempted from the study. Women whose partners were older than 49 years were excluded from the study.

3.9 Quality Control

The questionnaire was pre-tested in Abofour Health Center using 35 respondents. Ambiguous and sensitive questions were revised and re-aligned. Through the pretest, it was realized that respondents were bored with too much time spent during the period of questionnaire administration. Hence the questions were edited and made very precise and concise to save time. Respondents were also sensitive to the use of “husbands”, so “partners” was used instead. Data collectors were also recruited and trained for two days in data collection technique to ensure speedy administration of questionnaire and quality of data collected. Data collectors were instructed to stop the administration of the questionnaire the moment they felt tired.

3.9.1 Ethical Clearance

Ethical clearance was sought from the Ethical Review Committee of the Ghana Health Service. Permission to carry out the study was obtained from the Offinso South Municipal Director of Health Services. This was made possible through an introductory letter issued from the Department of Population, Family and Reproductive Health, coupled with the approval letter from the Ethical Review Committee of the Ghana Health Service.

Respondents were informed that participation in the study was voluntary and there was no penalty for refusing to participate.

Potential risks and benefits

The results of this study were used to educate individuals who are in their reproductive ages on the importance of male support during ANC and how this influence the choice of the place of delivery. Policy makers including the Municipal Chief Executive for Offinso Municipal, Municipal Health Director, Hospital Administrators and various religious leaders were informed on the urgent need to encourage male support during ANC to promote institutional skilled delivery thereby reducing maternal and infant mortality rates.

Privacy and Confidentiality

Respondents were assured that whatever information they provide are deemed purely confidential and will be used for research purposes. The responses were not shared with anybody who was not a member of the study team. Data analysis was done at the aggregate level to ensure anonymity.

Compensation

There was no costs for participating in the research neither was any respondent paid to participate in this research project.

Voluntary Withdrawal

Respondents were told that participation in this study is voluntary and there is no compensation attached. They were also told of their liberty not to answer any specific question(s) that they were not comfortable with. Some of the respondents did not agree to partake in the study. However, some consented but later on withdrew from the study. However, this did not affect the sample size since this was catered for in calculating the sample size.

Data storage and usage

The soft copy of data was saved on a CD-ROM and external hard drive and protected with a password known to only the principal investigator. The questionnaire would be kept by the principal investigator for a year to allow for publication of the research, after which it will would be destroyed.

Sharing of results

The results of this study are for academic purposes only. The results would be shared with the respondents, management of health facilities and the Municipal Health

Directorate to enable them institute measures that can promote male support for their partners during ANC which would result in increased facility delivery.

Declaration of Conflict of interest

Apart from its academic and public health importance, there are no other personal interests in the study.



CHAPTER FOUR

4.0 RESULTS

4.1 Introduction

Four hundred and twenty-six respondents took part in this study. Two hundred and thirteen women and their respective partners. Table 1 shows that the majority age category was 25 to 34 years representing 76% of males against 30.8% for the females. None of the males belonged to the 15 to 19 age category where as 17% of females made up this age category. For the females, majority of them were aged between 20 to 29 years representing 76% against 41% for the males.

About half (47%) of the male respondents had secondary education against 20.7% of females with secondary education. As much as 67% of their female partners had basic education but 31% of male respondents had basic education. About equal proportions of females (6.6%) and males (6%) had no education.

Three quarters (75%) of the male respondents compared to half (50%) of the female respondents were self-employed. However, many female respondents (35.7%) than male respondents (6%) were unemployed and many male respondents (19%) than female respondents (14.1%) were in formal employment.

More than three quarters each of males (84%) and females (82.2%) belonged to the Christian religion whereas the least (1%) and (1.4%) male and female respondents respectively belong to traditional religion. Only one female respondent was a Buddhist.

The most dominant marriage type was monogamy constituting 92% for both the male and female respondents, with 8% of the couples being polygamous. Majority (63%) of the couples have more than one child and 37% of the couples were first time parents.

The male respondents were distributed into sixteen ethnic groups whereas the female respondents were put in to eighteen ethnic identities. About three quarters of male respondents (78.4%) and female respondents (72.8%) belong to the Akan speaking ethnic group. The remaining non-Akan speaking ethnic groups were less than 30% each for both male and female respondents.

Table 1: Socio-demographic characteristics of respondents

Variables	Males, N=213 (%)	Females, N-213(%)
Age		
14-19	-	37 (17)
20-24	4 (2)	101 (48)
25-29	83 (39)	60 (28)
30-34	79 (37)	6 (2.8)
35-39	36 (17)	6 (2.8)
40-44	8 (4)	2 (0.9)
45-49	3 (1)	1 (0.5)
Level of Education		
No Education	12 (6)	14 (6.6)
Basic	66 (31)	143 (67.1)
Secondary	101 (47)	44 (20.7)
Tertiary	34 (16)	12 (5.6)
Employment Status		
Unemployed	13 (6)	76 (35.7)
Self-employed	159 (75)	107 (50.2)
Formal employed	41 (19)	30 (14.1)
Religion		
Christianity	179 (84)	175 (82)
Traditional	2 (1)	3 (1.4)
Islam	32 (15)	34 (15.9)
Buddhism	-	1 (0.5)
Marriage		
Monogamy	195 (92)	196 (92)
Polygamy	18 (8)	17 (8.0)
Parity		
One	78 (37)	79 (37)
>One	135 (63)	134 (63)
Ethnicity		
Akan	167 (78.40)	155 (72.80)
Dagomba	5 (2.35)	10 (4.70)
Dagaaba	6 (2.82)	8 (3.80)
Mamprusi	5 (2.35)	2 (0.9)
Kusase	5 (2.35)	5 (2.3)
Zabarma	5 (2.35)	6 (2.8)
Wala	5 (2.35)	3 (1.4)
Others	15 (7.03)	24 (11.3)

Figure 3 shows that whereas 95% of both male and their partners said that their babies were delivered in a health facility, 5% of the remaining couples said that they had their babies delivered at home.

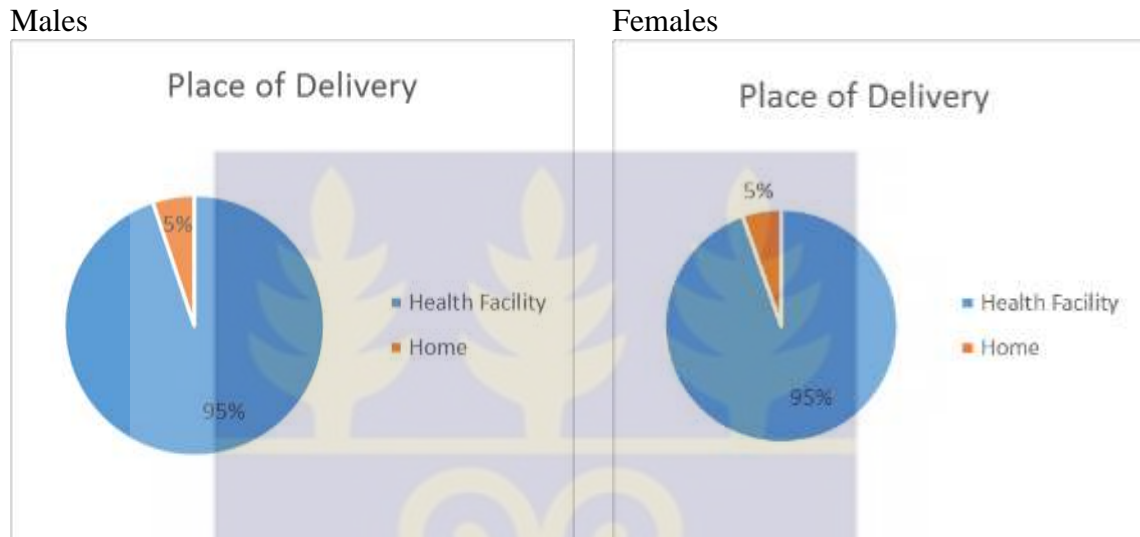


Figure 3: Place of delivery

When both male and female respondents were asked to give reasons for the choice of place of delivery, majority (37.6%) of the males said that they wanted their partners to have a safe delivery in a health facility and few (0.9%) of the males said their partners delivered in a health facility because they were referred to the hospital. When their partners were asked the same question, majority (73.7%) of them said they preferred a health facility for safe delivery. Other reasons given by males and their partners included comfortability of delivering in a health facility, possessing a valid NHIS card, health facility is close to their homes, the health facility is more resourced, and to avoid complications (Figure 4).



Figure 4: Reasons for delivery in a health facility

Table 2 shows that age, educational status, employment status, ethnicity, religion, marriage type, and the parity of male respondents do not have any association with supporting their partners. The findings from female respondents' perspective indicated that age, educational status, employment status, marriage type and their parity do not have any association with receiving support from their partners. However, religion and ethnicity were associated with male support ($p < 0.05$).



Table 2: Bivariate analysis of male and female background characteristics and male support

Variable	Males, n=213		χ^2 (P-value)	Females, n=213		χ^2 (P-value)
	High	Low		High	Low	
Age	n (%)	n (%)		n (%)	n (%)	
<30	75(35.2)	12 (5.6)	0.004 (0.950)	176 (83.0)	22 (10.0)	3.967 (0.737)
≥30	109 (51.2)	17 (8.0)		15 (7.0)	0 (0)	
Education						
No Education	11 (5.2)	1 (0.5)	0.954 (0.878)	14 (6.6)	0 (0)	4.497 (0.212)
Basic	55 (25.8)	11 (5.2)		129 (60.6)	14 (6.6)	
Secondary	88 (41.3)	13 (6.1)		39 (18.3)	5 (2.3)	
Tertiary	30 (14.1)	4 (1.8)		9 (4.2)	3 (1.4)	
Employment						
Unemployed	11(5.2)	2 (0.9)	0.597 (0.623)	70 (32.9)	6 (2.8)	0.873 (0.671)
Self-employed	139 (65.3)	20 (9.3)		94 (44.1)	13 (6.1)	
Employed	34 (16.0)	7 (3.3)		27 (12.7)	3 (1.4)	
Religion						
Christianity	156 (73.3)	23 (10.8)	1.122 (0.555)	162 (76.1)	13 (6.1)	11.615 (0.014)
Traditional	2 (0.9)	0 (0)		3 (1.4)	0 (0)	
Islam	26 (12.2)	6 (2.8)		25 (11.7)	9 (4.2)	
Buddhism	-	-		1 (0.5)	0 (0)	
Marriage						
Monogamy	169 (79.3)	26 (12.3)	0.156 (0.718)	176 (82.7)	20 (9.4)	0.041 (0.699)
Polygamy	15 (7.0)	3 (1.4)		15 (7.0)	2 (0.9)	
Children						
One child	67 (31.5)	11 (5.2)	0.025 (0.875)	75 (35.2)	4 (1.9)	3.759 (0.063)
>One child	117 (54.9)	18 (8.4)		116 (54.4)	18 (8.5)	
Ethnicity						
Akan	146 (68.5)	21 (9.9)	0.711 (0.399)	145 (68.1)	10 (4.7)	9.238 (0.002)
Non-Akan	38 (17.8)	8 (3.8)		46 (21.6)	12 (5.6)	

Table 3 shows that there is no significant association between religion and ethnicity of the female partners and the male support they receive from their male partners.

Table 3: Multiple logistic regression on background characteristics of females and male support they receive from their partners

Male support	AOR	P-value	95% CI
Religion			
Christianity	Reference		
Traditional	1.000	1.000	
Islam	2.432	0.204	0.617–9.577
Buddhism	1.000	1.000	
Ethnicity			
Akan	Reference		
Non-Akan	2.160	0.250	0.581–8.027

4.2 The level of male support during ANC

Table 4 indicates that 91% of females received a high level of support from their partners during ANC while 9% received low level of support during ANC. Majority (86%) of the male respondents attested to offering high level of support to their partners compared to 14% who confessed that they offered low level of support to their partners. Also, 26% of male respondents said they have accompanied their partners to the ANC. However, 27.2% of the female respondents said they were accompanied by their partners to the ANC. In addition, 47% of the male respondents said they have reminded their partners to take medications brought home from ANC. However, 62% of the female respondents said their partners have reminded them to take their medications. The rest of the criteria had above 80% positive response rate for the males and their partners.

Table 4: Level of male support during ANC

Level of male support during ANC Criteria	Positive responses %	
	Males, n=213	Females, n=213
Accompany wife to the ANC	26.0	27.2
Provide money during ANC visits	93.0	94.8
Discuss where to go for ANC	90.0	93.0
Discuss when to start ANC	89.0	87.0
Reminder to take medications	47.0	62.0
Ask wife how she is fairing	88.0	89.0
Reassure her of good outcome	89.0	92.0
Discuss where to deliver	89.0	91.0
Level of male support	n=213	n=213
High	86.0	91.0
Low	14.0	9.0

4.3 Factors influencing male support during Anti-natal clinic

Table 5 reveals that 17.8% of males had high level of knowledge, 76.5% had average level of knowledge about ANC services compared to 66.2% of their partners having high level of knowledge and 30.1% had average level of knowledge about ANC services. This generally implied that more females have high level of knowledge about ANC services than their partners.

About three quarters (79.3%) of males had high level of cultural support in supporting their partners where as 86.9% of females said their partners have high level of cultural support. More than three quarters (87.8%) of the males have high level of economic support and 79.8% of the females indicated that their partners had high level of economic support. For the health facility factors, 37.6% of the males said that ANC staff are good but 51.6% of the females said ANC staff are good. Also, 83.1% of males said they spent less than two hours in ANC while 88.7% of the females said they spent less than two hours in the ANC. About 70.0% of couples live within 5 Km of ANC and about 96.0% of the respondents attested that they were treated nicely at the ANC.

Table 5: Factors associated with male support during anti-natal clinic

Variable	Males, N=213 (%)	Females, N=213 (%)
Knowledge		
High	38 (17.84)	141 (66.20)
Average	163 (76.53)	64 (30.05)
Low	12 (5.63)	8 (3.76)
Cultural support		
High	169 (79.34)	185 (86.85)
Average	35 (16.43)	22 (10.33)
Low	9 (4.23)	6 (2.82)
Economic support		
High	187 (87.79)	170 (79.81)
Average	17 (7.98)	29 (13.62)
Low	9 (4.23)	14 (6.57)
Attitude of ANC staff		
Good	80 (37.56)	110 (51.64)
Poor	133 (62.44)	103 (48.36)
Time at ANC		
≤2 hrs	177 (83.10)	189 (88.73)
>2 hrs	36 (16.90)	24 (11.27)
Distance to ANC		
≤5 Km	150 (70.42)	153 (71.83)
>5 km	63 (29.58)	60 (28.17)
Kind of treatment at ANC		
Nicely	204 (95.77)	206 (96.71)
Badly	9 (4.23)	7 (3.29)

4.3.1 Level of Knowledge of Respondents

Table 6 shows that less than a quarter (22.5%) of the males had positive responses to measurement of fundal height, 40.4% to vaccinations, 33.0% to counseling and 45.1% to assessing fetal heart beats.

About three quarters (76.5%) of males had average level of knowledge about ANC service whiles about two-thirds (66.2%) of their partners had high level of knowledge about ANC services.

Table 6: Level of knowledge of respondents about ANC services and male support

ANC services	Positive responses, %	
	Males, n=213	Females, n=213
Taking vital signs	61.03	90.61
Administration of drugs	77.93	89.67
Giving health talks	80.75	90.14
Taking weight	94.7	89.20
Measurement of fundal height	22.54	77.00
Laboratory investigations	90.14	89.20
Vaccinations	40.38	68.54
Counselling	33.80	71.83
Taking scan	88.26	90.14
Assessing fetal heart beats	45.07	72.77
Physical examination	89.20	93.43
Level of knowledge about ANC services		
High	17.84	66.20
Average	76.53	30.05
Low	5.63	3.76

4.3.2 Cultural Support

Table 7 indicates that about a third (31.46%) of males and about a half (54.7%) of females said it is a community norm for males to support their partners. 79.3% of males and 86.9% of their partners said there is a high cultural support for males support. Only 4.2% of males and 2.8% of females said there is a low level of cultural support for male support during ANC.

Table 7: Level of cultural support

Level of cultural support	Positive responses %	
	Males, n=213	Females n=213
Personally belief that males should support	98.12	96.71
Societal belief that males should support	84.04	87.32
Religious belief that males should support	92.49	92.02
Community norm that males should support	31.46	54.72
Community praise male support	91.08	91.51
Levels of cultural support		
High	79.33	86.85
Average	16.43	10.33
Low	4.23	2.82

4.3.3 Economic Factors

Table 8 reveals that 87.8% of the males belong to a high level of economic support and 79.8% of the females believed that their partners belong to a high level of economic support.

Table 8: Level of economic support

Level of economic support Criteria	Positive responses %	
	Males, n=213	Females, n=213
Using National Health Insurance	95.31	94.84
Give enough money during ANC visit	94.84	95.31
Always give money on every ANC visit	92.02	85.92
Buy all the items prescribed by the nurse	79.34	74.18
Own a vehicle	19.72	23.00
Drive or rent a car to go to ANC	24.88	29.38
Buy enough maternity clothing	90.61	82.55
Enough savings toward last pregnancy	94.84	92.96
Levels of economic support		
High	87.79	79.81
Average	7.98	13.62
Low	4.23	5.57

Table 9 reveals that the level of knowledge of the male partners is associated with the level of support given to their partners ($p < 0.001$). The level of cultural support of the male partners is also associated with the level of support given to their partners ($p = 0.013$). There is yet another association between the economic level of the male partners and the support they give ($p < 0.001$) as well as the time spent at the health facility ($p = 0.029$).

The female partners' responses confirmed that there is an association between their partners' level of economic support and the support they receive from the male partners ($p = 0.02$). However, the association was not significant.

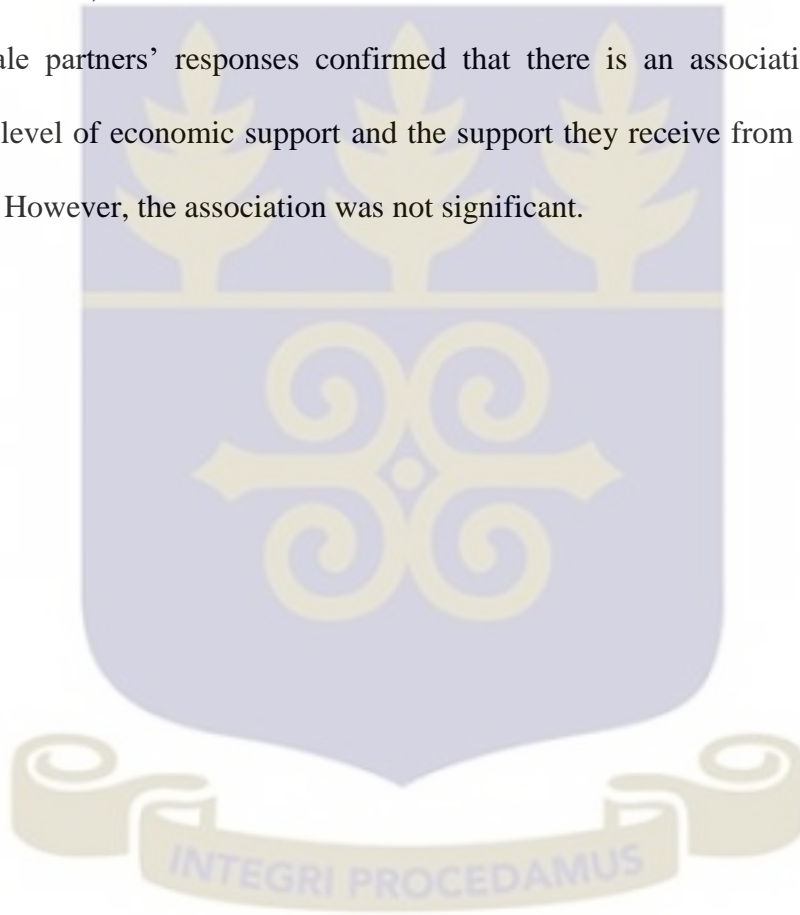


Table 9: Bivariate analysis of factors associated with male support

Male support Predictors	Males, n=213			Females, n=213		
	High	Low	χ^2 (P-value)	High	Low	χ^2 (P-value)
Knowledge	n (%)	n (%)		n (%)	n (%)	
High	37 (17.4)	1(0.5)	24.374 (0.000)	129 (60.6)	12 (5.6)	1.507 (0.376)
Average	142 (66.7)	21 (9.8)		55 (25.8)	9 (4.2)	
Low	5 (2.3)	7 (3.3)		7 (3.3)	1 (0.5)	
Culture						
high	151 (70.9)	18 (8.5)	9.749 (0.013)	168 (78.9)	17 (7.9)	3.948 (0.091)
Average	28 (13.1)	7 (3.3)		19 (8.9)	3 (1.4)	
Low	5 (2.3)	4 (1.9)		4 (1.9)	2 (1)	
Economic						
High	160 (75.1)	27(12.7)	22.946 (0.000)	157 (73.7)	13 (6.1)	17.314 (0.02)
Average	16 (7.5)	1 (0.5)		26 (12.2)	3 (1.4)	
Low	3 (1.4)	6 (2.8)		8 (3.8)	6 (2.8)	
Attitude						
Good	70 (32.9)	10 (4.7)	0.135 (0.713)	101 (47.4)	9 (4.2)	1.132 (0.287)
Poor	114 (53.5)	19 (8.9)		90 (42.3)	13 (6.1)	
Time						
≤2 hrs	157 (73.7)	20 (9.4)	4.774 (0.029)	172 (80.6)	17 (7.8)	3.223 (0.082)
>2 hrs	27 (12.7)	9 (4.2)		19 (8.8)	5 (2.8)	
Distance						
≤5 Km	129 (60.6)	21 (9.8)	0.064 (0.800)	137 (64.3)	16 (7.5)	0.009 (0.921)
>5 km	55 (25.8)	8 (3.8)		54 (25.4)	6 (2.8)	
Treatment						
Nicely	178 (83.6)	26 (12.2)	3.107 (0.108)	185 (86.9)	21(9.8)	0.122 (0.539)
Badly	6 (2.8)	3 (1.4)		6 (2.8)	1 (0.5)	

Table 10, after controlling for other variables, points out that there is no significant statistical association between the male partners' support to their partners during ANC and their cultural inclination as well as the length of time spent at the health facility. There was also no significant association between male support and the level of knowledge of males about ANC. The males' level of economic support and the support for their partners during ANC had a significant association following the fact that males in a low level economic support are about Ten times less likely to support their partners

during ANC compared to males in a high level of economic support (AOR=9.950 p=0.006, 95% CI=1.961 – 50.498).

Table 10: Multiple logistic regression of factors associated with male support

Variables	AOR	P-value	95% CI
Males' level of knowledge of ANC services			
High	Reference		
Average	5.218	0.116	0.664–41.006
Low	35.304	0.005	2.861–435.629
Cultural support of males			
High	Reference		
Average	1.936	0.228	0.662–5.667
Low	4.352	0.116	0.696–27.215
Economic support offered by males			
High	Reference		
Average	0.189	0.166	0.018–1.993
Low	9.950	0.006	1.961–50.498
Time spent by males at ANC			
<2 hrs	Reference		
≥2 hrs	0.691	0.449	0.265–1.799

4.4 The influence of male support during ANC on the place of delivery

Table 11 shows that there is no association between all the socio-demographic characteristics of females and the place of delivery using the crude odds ratio (COR). However, the adjusted odds ratio (AOR) show an association between the females' employment status and the place of delivery in that the odds of females who are self-employed delivering in a health facility is 82% less likely than those who are unemployed (AOR=0.179, 95% CI=0.043–0.744, p=0.018). After controlling for other variables, the number of times a woman delivered (parity) has an association with the place of delivery

but the association was found to be insignificant due to the wide confidence interval (p=0.042, AOR=10.032, 95% CI=1.082–93.02).

Table 11: Logistic regression of socio-demographic characteristics of females on place of delivery

Place of del.	COR	P-value	95% CI	AOR	P-value	95% CI
Age						
14-19	Reference			Reference		
20-24	0.844	0.813	0.206–3.451	0.476	0.398	0.085–2.662
25-29	0.391	0.317	0.062–2.457	0.236	0.159	0.032–1.757
30 and above	1.000			1.000		
Education						
No education	Reference			Reference		
Basic	1.083	0.941	0.129–9.069	0.917	0.942	0.088–9.556
Secondary	1			1.000		
Tertiary	1			1.000		
Employment						
Unemployed	Reference			Reference		
Self-employed	0.383	0.137	0.108–1.357	0.179	0.018	0.043–0.744
Employed	0.339	0.323	0.040–2.888	0.239	0.254	0.020–2.795
Ethnicity						
Akan	Reference			Reference		
Non-Akan	0.885	0.858	0.231–3.389	0.048	0.200	0.00–4.979
Religion						
Christianity	Reference			Reference		
Traditional	1			1.000		
Islam	1.785	0.404	0.457–6.967	26.32	0.169	0.249–2775
Buddhism	1			1.000		
Marriage						
Monogamy	Reference			Reference		
Polygamy	2.480	0.268	0.497–12.36	1.481	0.679	0.231–9.497
Parity						
One	Reference			Reference		
>One	6.976	0.065	0.883–55.09	10.032	0.042	1.082–93.02

Table 12 shows that the kind of treatment women go through at the ANC and the distance from their homes to the ANC are associated with the place of delivery. After controlling

for other variables, the treatment women go through at the ANC was found to be significantly associated with the place of delivery because the odds of a woman who was treated quite nicely delivering in a health facility is about 6 times less likely compared to women who were treated nicely ($p=0.017$, AOR=6.143, 95% CI=1.381 – 27.331).



Table 12: Logistic regression of factors associated with place of delivery

Place of delivery	COR	P-value	95% CI	AOR	P-value	95% CI
Male support from males						
High	Reference			Reference		
Average	1.508	0.706	0.178–12.782	0.804	0.856	0.075–8.554
Low	2.263	0.462	0.257–19.898	5.838	0.183	0.436–78.193
Knowledge of females						
High	Reference			Reference		
Average	1.907	0.302	0.559–6.495	1.791	0.442	0.405–7.910
Low	3.214	0.309	0.339–30.472	0.284	0.405	0.015–5.489
Culture of females						
High	Reference			Reference		
Average	3.088	0.112	0.769–12.393	3.079	0.236	0.479–19.800
Low	1			1		
Economic level of females						
High	Reference			Reference		
Average	0.571429	0.601	0.070–4.641	0.476	0.543	0.043–5.209
Low	1.230771	0.849	0.146–10.377	1.206	0.879	0.108–13.470
Attitude of ANC staff						
Very good	Reference			Reference		
Good	0.932	0.91	0.275–3.154	0.619	0.502	0.153 – 2.507
Poor	4.333	0.22	0.417–45.018	2.136	0.991	
Time spent by females						
<1 Hr.	Reference			Reference		
1-2 Hrs.	1.118	0.871	0.291–4.301	0.451	0.363	0.081–2.511
3-4 Hrs.	3.036	0.166	0.631–14.611	1.844	0.544	0.256–13.303
Distance to ANC						
1-5 Km.	Reference			Reference		
6-8 Km	3.769	0.028	1.152–12.332	2.379	0.265	0.518–10.930
>8 Km	1			1		
Treatment females go through						
Nicely	Reference			Reference		
Quite nicely	4.242	0.022	1.235–14.573	6.143	0.017	1.381-27.331
Badly	5.067	0.166	0.509–50.374	1.327	0.989	

CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

The study explored factors that influence male support during ANC and place of delivery in the Offinso South Municipality of Ashanti Region, Ghana. It determines the level of male support during ANC, examine factors which influence male support, and determine the influence of male support during ANC on the choice of place for delivery.

About three quarters (76%) of the male respondents are between the ages of 25 to 34 years while 76% of the female respondents are from 20 to 29 years. This is in agreement with the 2010 Population and housing census which indicated that 41% of the municipal population is a youthful one (Population & Housing Census 2010). There was no male respondents within the age group of 15 to 19 years. It is also revealing that while females have sexual partners at an earlier age, their male counterparts do at a later age. The study also saw that close to half (47%) of the male respondents had secondary education whereas about two thirds (67%) of the female respondents had primary education. This implied that there is a female attrition rate after the basic level. Generally, the male respondents' educational attainment is higher than their partners. The findings of this study is not different from the population and housing census which indicated that 78.8% males than 65.7% females are literates (Population & Housing Census, 2010). The results indicated that over 80% of male and female respondents were Christians followed by the Muslims accounting for about 15%. This is not different from the general population of the municipality as there are about 73% Christians than Muslims. Since the dominant religion is Christianity, 92% of the couples are monogamous.

The religion and ethnicity of the female respondents have been seen to be associated with males supporting their partners during ANC ($p < 0.05$). This is in consonance with a study in India where religion was found to have an association with male support during ANC. They found that more Islamic men than men from other religions support their partners during ANC (Pallikadavath et al., 2004). However, following multiple logistic regression analysis, they did not show any significant association with male support for their partners.

5.2 Place of delivery

The findings of this study indicated that 95% of mothers had their last babies delivered in a health facility. This agrees with the 2014 GDHS where 90% of deliveries were reported to occur in health facilities in urban area of Ghana (GDHS, 2014). The findings of these studies are similar since the study setting is also an urban area. It also supports the findings of a study in Matlab, Bangladesh, that 77% of deliveries in 2009 occurred in health facilities (Pervin et al., 2012). In a sharp contrast, another study in Bangladesh on couples' report of household decision-making and the utilization of maternal health services in Bangladesh, only 23% of deliveries took place in health facilities (Ensor et al., 2014). The findings were also inconsistent with the data from the midwife returns at the Offinso Municipal's Health Directorate. This could be due to the fact that health facility based survey was used instead of a community based survey. This could be due to the fact that the study was carried out in a rural setting. The findings of this study also indicate that 73.7% of the female respondents stated that they chose a health facility for delivery because it is safer. However, other studies were silent on the reasons why women chose to deliver in a health facility. Generally, health facility delivery is

improving, especially, in the urban centers of Ghana. This could be due to the availability of health facilities in the urban centers, high level of education, less cultural inclination in cities and high level of economic standards in cities.

5.3 The Level of Male Support during ANC

The findings of this study revealed that 90% of males offered high level of support during ANC to their partners and 86% of female respondents agreed that they received high level of support from their partners during ANC. This is in line with a study in Kenya where women who delivered in health facilities were reported to have a high level of support from their partners (Wilunda et al., 2015). Again, the findings from this study is in agreement with another study conducted in the peri-urban Gulu district of Northern Uganda where the level of male support during ANC is reported to be 70.5% (Tweheyo et al., 2010). The findings in these studies are consistent with each other because it is known that urban and educated men show high level of support to their pregnant partners because of their proximity to health facilities and good knowledge about the benefits of health facility delivery (Bloom et al., 2007). Conversely, other studies in Africa pointed to the fact that male support during ANC is low. One of such studies entitled “official invitation letters to promote male partner attendance in Mbeya Region, Tanzania”, came out with the findings that there was a low level of male support.

5.4 Factors Influencing Male Support during ANC

Male partners' level of knowledge about ANC is associated with the level of support given to their partners ($p < 0.001$). Findings from researches, especially a study on male

partner attendance of skilled ANC in Northern Uganda, shared common opinions in that the attendance rate was about three times higher among male partners that could identify at least three services offered at ANC (high level of knowledge) compared to those identifying two or less services (low level of knowledge), (OR=2.72; CI= 2.20-3.36; $p < 0.001$) (Tweheyo et al., 2010).

In this study, there was an association between level of knowledge of males and the support they give their partners ($p < 0.001$). This might be because males with high level of knowledge about ANC services know and understand the benefits of ANC which might have compelled them to offer a high level of support to their partners. The level of knowledge of males and the support they give their partners are strongly associated because the odds of males in low level of knowledge about ANC services to support their partners was 35 times less compared to males with high level of knowledge giving support to their partners. This means that males with high level of knowledge about ANC services are more likely to support their partners during ANC compared to males with low level of knowledge about ANC services.

The level of cultural support of the male partners is also associated with the level of support given to their partners ($p = 0.013$). The findings in this study were found to be in harmony with findings from other studies. In a study in Kenya, it was discovered that males with low cultural support decline to support their partners during ANC. The reason being that pregnancy is perceived as a woman's domain; hence discouraging male participation (Nanjala & Wamalwa, 2012). In a study, it was observed that culture adversely affected male support during pregnancy in that couples were reluctant to

disclose pregnancy early and it is forbidden for males to accompany their partners to the ANC (Andrew et al., 2014).

There exist an association between the level of economic support by the male partners and the kind of support given ($p < 0.001$). When other predictors were controlled, it was realized that the association between the level of economic support of males and the support they give their partners was significant because the odds of males in low level of economic support giving assistance to their partners was about 10 times less compared to males in high economic status giving support to their partners. This meant that males with high level of economic support have more tendency to support their partners during ANC than those in low level of economic support. This finding agreed with the fact that males are economically influential and are determinants of women's reproductive health (Ediau et al., 2013). An inference, on the contrary, can be made from some studies that males in high economic standing are not able to offer support to their partners during pregnancy. One of such studies whose findings can be inferred indicated that wealthier men could not find time to accompany their partners to the ANC but middle-class men are able to find time to accompany their partners to the ANC (Redshaw & Henderson, 2013).

In buttressing the central role of the level of economic support in male support during ANC, the female partners' responses also showed that there is an association between their partners' level of economic support and the support they receive from them ($p = 0.02$) but the association not significant.

The results of this study showed no significant association between the time spent at the health facility and support males gave their partners during ANC. The findings just

showed an association between the time spent at the health facility and the support males give their partners during ANC ($p=0.029$). In this study, male respondents who spent less than 2 hours seems to readily accompany their partners than those who spent two or more hours at a health facility. In a similar study in Uganda, the findings were in conformity with this study where 47.7% of the males could not accompany their partners to the ANC due to long waiting time. The working class males with very busy schedules find it very difficult to support their partners during ANC. Those in the middle class and the non-working males tend to have time to support their partners during ANC (Tweheyo et al., 2010).

5.5 The Influence of Male Support during ANC on the Place of Delivery

There seems to be no association between male support and the place of delivery. This finding could be attributed to the fact respondents were selected at CWC. The results might have changed if the respondents were selected from the community. On the contrary, evidence from qualitative research showed that the absence of male partner support in ANC can create a barrier for women to access ANC services and subsequent failure to utilize skilled delivery in a health facility (Jefferys et al., 2015). This could be very true because if male partners were not involved during ANC, they might not know the importance of supporting their partners during ANC to deliver in a health facility.

This seems to suggest that if women are economically empowered, health facility delivery could be significantly scaled up. This is not different from a study among African American women in United States which stated that joblessness of black fathers, unlike white fathers, was responsible for out of health facility delivery (Straughen et al., 2013).

There was also an association between parity and the place of delivery after controlling for other explanatory variables. It can be deduced that multipara women know the benefits of health facility delivery than the first time mothers. On the contrary, a study carried out in Ethiopia on factors affecting the use of maternal health services revealed that women with higher parity are 50% less likely to use a health facility for delivery than their single parity counterparts (Race, 2015). Additionally, women of higher parity may not feel the need to receive professional care if previous deliveries were uncomplicated (Jefferys et al., 2015).

There is an association between the distance from couples' home to ANC and the place of delivery but this association was insignificant. However findings from a study on male partner attendance of skilled antenatal care in peri-urban Gulu district, Northern Uganda, revealed that walking distance greater than one hour (more than 5 kilometers) to a health facility prevented 34.1% of pregnant women from delivering in a health facility (Tweheyo et al., 2010). The manner in which women are treated at the ANC is closely associated with the place of delivery. When other variables were controlled, the manner in which women are treated had a strong association with the place of delivery. This is true because some women attended ANC but did not give birth in a health facility. This could be due to the fact that they were badly treated during the antenatal period. A study in Kenya on "determinants of male partner involvement in promoting deliveries by skilled attendants in Busia came out with similar findings where 54% of respondents indicated that the health workers were harsh, uncooperative and abusive making them afraid to use the health facility during delivery (Nanjala & Wamalwa, 2012)

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

Most of the couples in the study had their last child delivered in a health facility. Both male and their female partners said that they preferred deliveries in a health facility because it is safer, affordable, comfortable and close to them. It was observed that both males and their partners reported a high level of male support during ANC. Male respondents reported an association between their support and knowledge level, economic level, cultural level, and time spent at the ANC. The religious and ethnic backgrounds of the male respondents also showed some associations. It was however revealing that these associations were not significant. The female respondents reported that the level of economic support of their male partners was significantly associated with the support they receive during ANC. It was shown that male support during ANC and the place of delivery were not associated probably due to using CWC attendants as the respondents.

6.2 Recommendations

- Heads off health facilities should introduce pregnancy schools at the ANC for couples. All registrants must be enrolled into the school and classes held every second Saturday of the month. These monthly classes should be attended by pregnant women and their partners to receive lessons on pregnancy and child birth. They graduate after giving birth in the health facility.

- The health facilities managers should put in measures to reduce the waiting time at the ANC to encourage more men to accompany their spouses to ANC.
- The managers of the various ANCs should place emphasis on focused ANC with special attention on male involvement.
- The leaders of the various religious bodies should regularly speak on male support during pregnancy at their gatherings.
- The Municipal Assembly should support any effort geared toward improving male support during ANC.
- A research using community survey instead of facility based to sample respondents for a study on the influence of male support during ANC on the place of delivery in Offinso south municipality, Ashanti Region. This is due to the fact that mothers coming for CWC were probably supported by their male partners during pregnancy and the postnatal period. Those who were not supported by their partners probably did not patronize ANC and CWC. Hence they were probably left out in the communities.

6.3 Limitation of the study

The respondents were obtained through non-random sampling technique at health facilities. Hence, the results of the study cannot be generalized. Also, the exclusion of single parents and the physically challenge might have excluded some vital data.

Respondents were CWC attendants. It is possible that they attended ANC and gave birth in a health facility. That is why they came to the CWC. This could be the reason why the findings of this study is high health facility delivery.

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APPENDIX 1: INFORMED CONSENT

Subject number

Project Title:

The influence of male support during ANC on the place of delivery in the Offinso South Municipality of the Ashanti Region of Ghana.

Background

Dear Respondent, I am Saadogrmeh Kuurdong, a student of the School of Public Health, University of Ghana. I am conducting a nine-month study on “The influence of male support during ANC on the place of delivery” in the Offinso South Municipality in the Ashanti Region of Ghana. This study is to explore male role in place of delivery in the Offinso South Municipality.

The study involves answering a questionnaire on the influence of male support during ANC on place of delivery amongst others. This is purely an academic research; it forms part of my work for the award of a Master’s Degree.

Risks and Benefits

The results of this study would help educate individuals who are in their reproductive ages on the importance of male support during ANC and how this influence the place of delivery. Policy makers will also be informed on the urgent need to actively involve men in ANC to promote institutional skilled delivery thereby reducing maternal and infant mortality rates.

Anonymity and Confidentiality

You are assured that whatever information you will provide will be deemed as purely confidential and used for research purposes. Your responses will not be shared with

anybody who is not a member of the study team. Data analysis will be done at the aggregate level to ensure anonymity.

Costs and Compensation

There will be no costs for participating in the research neither will you be paid to participate in this research project.

Contact for Additional Information

All queries concerning this study should be directed to Saadogrmeh Kuurdong (0208394026)

GHS-ERC Administrator's Contact Information

Name: Dr. Hannah Frimpong

Tel. No. : 0507041223

Voluntary Participation and Right to Withdraw from Study

Your participation in this study is voluntary. You are at liberty not to answer any individual question or all the questions. You may withdraw from the study at any time. That notwithstanding, I encourage you to fully participate since your contributions are relevant to help answer questions on the influence of male support during ANC on place of delivery

Data Storage and Usage

I will not share your information with anyone outside of this study. The completed questionnaire after entry will be stored under lock and key accessible to only me and the study supervisor.

Sharing of results

There results of this study are for academic purposes only. The knowledge I will learn from this study will be shared with the respondents, management of health facilities and the municipal health directorate to enable them institute measures that can promote male support for their wives during ANC which will result in high patronage for skilled facility based delivery. I may publish the results for others to learn from.

Study results would be emailed to you. Kindly provide your address below

.....

Certificate of Consent

The above document describing the benefits, risks and procedures for the research title (the influence of male support during ANC on place of delivery) has been read and explained to me. I have been given an opportunity to have any questions about the research answered to my satisfaction. I agree to participate as a respondent.

Date

_____ Name and signature or mark of respondent

For respondents who cannot read the form themselves, a witness must sign here:

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

Date

_____ Name and signature of witness

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

Date

_____ Name Signature of Person Who Obtained Consent

APPENDIX 2: QUESTIONNAIRE FOR MALES

SECTION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

- | | |
|--|--|
| <p>1. What was your age on your last birth day?</p> <p style="text-align: right;">Code</p> <p>a. 15 – 19 1</p> <p>b. 20 – 24 2</p> <p>c. 25 – 29 3</p> <p>d. 30 – 34 4</p> <p>e. 35 – 39 5</p> <p>f. 40 – 44 6</p> <p>g. 45 – 49 7</p> <p>2. What is your level of education?</p> <p>a. No education 1</p> <p>b. Basic level 2</p> <p>c. Secondary level 3</p> <p>d. Tertiary 4</p> <p>3. What is your employment status?</p> <p>a. Unemployed 1</p> <p>b. Self-employed 2</p> <p>c. Employed 3</p> | <p>4. Which ethnic group do you belong to? code</p> <p>a. Akan 1</p> <p>b. Dagomba 2</p> <p>c. Ga 3</p> <p>d. Ewe 4</p> <p>e. Others (Specify)</p> <p>5. What is your religion?</p> <p>a. Christianity 1</p> <p>b. Traditional 2</p> <p>c. Islam 3</p> <p>d. Others (Specify)</p> <p>6. Type of marriage</p> <p>a. Monogamy 1</p> <p>b. Polygamy 2</p> <p>7. How many children do you have?</p> <p>a. One 1</p> <p>b. More than one 2</p> |
|--|--|

SECTION B: PLACE OF DELIVERY

8. Where did your wife deliver her last child? Code
- a. Health Facility 0
 - b. Home 1
9. Why did you prefer that place where your wife delivered?
-

SECTION C: LEVEL OF MALE SUPPORT DURING ANC

10. What is the level of male support during ANC?

NO	ITEMS	YES (1)	NO (0)
i	Did you accompany your wife to the ANC?		
ii	Did you provide money for your wife during ANC visits?		
iii	Did you discuss with your wife on where to go for ANC?		
iv	Did you discuss with your wife on when to start visiting ANC?		
v	Did you remind your wife to take her medications?		
vi	Did you ask your wife how she is fairing with her pregnancy?		
vii	Did you reassure her that the outcome of her pregnancy will be good?		
viii	Did you discuss with your wife on where to deliver?		
TOTAL			

Interpretations

Code

- a. 5 to 8 “YES” responses mean high level of support 1
- b. 3 to 4 “YES” responses mean average level of support 2
- c. Below 3“YES” responses mean low level of support 3

SECTION D: FACTORS ASSOCIATED WITH MALE SUPPORT

Level of knowledge of males about ANC

11. What do health workers usually do for your wife at the ANC?

NO	ITEM	YES (1)	NO (0)
i.	Taking vital signs		
ii.	Administration of drugs		
iii.	Giving health talks		
iv.	Taking weight		
v.	Measurement of fundal height		
vi.	Laboratory investigations		
vii.	Vaccinations		
viii.	Counselling		
ix.	Taking a scan		
x.	assessing fetal heart beats		
xi.	physical examination		
TOTAL			

Interpretation of responses	Code
a. ten to eleven services mean high level of knowledge	1
b. five to nine mean average level of knowledge	2
c. Below five services mean low level of knowledge	3

Cultural Factors

12. What is the level of cultural support?

NO	ITEMS	YES	NO
		(1)	(0)
	i. Is it your personal belief to accompany your wife to the ANC?		
	ii. Is it a societal belief to accompany your wife to the ANC?		
	iii. Is it a religious belief to accompany your wife to the ANC?		
	iv. Is it a norm that males should accompany their wives to the ANC?		
	v. Does the community praise males who accompany their wives to the ANC?		
TOTAL			

Interpretation	Code
a. 5 “YES” mean high cultural support	1
b. 3-4 “YES” mean average cultural support	2
c. Below 3 “YES” mean low cultural support	3

Economic Factors

13. What is the level of economic support?

NO	ITEMS	YES (1)	NO (0)
i.	Do your wife have a valid National Health Insurance Scheme?		
ii.	Do you give your wife enough money during ANC visit?		
iii.	Do you always give your wife money on every ANC visit?		
iv.	Did you buy all the items on the list given to your wife by the nurse?		
v.	Do you own a vehicle?		
vi.	Do you drive your wife to or rent a car for your wife to go to ANC?		
vii.	Did you buy enough maternity clothing for your wife?		
viii	Did you make enough savings toward your wife last pregnancy?		
TOTAL			

Interpretation

Code

- a. 5 to 8 “YES” indicate high level of economic support 1
- b. 4 “YES” indicate average level of economic support 2
- c. Below 4 “YES” indicate low economic support 3

Health Facility Factors

14. How do you perceive the attitude of service providers to you? **Code**
- a. Good 1
 - b. Poor 2
15. How long do you spend at the ANC? **Code**
- a. Less than 1 hour 1
 - b. 1 hour to 2 hours 2
 - c. 3 hours to 4 hours 3
 - d. More than 4 hours 4
16. What is the distance between the health facility and your home? **Code**
- a. 1 Km to 5 Km 1
 - b. 6 km to 8 km 2
 - c. Greater than 8 km 3
17. How were you treated at the ANC clinic? **Code**
- a. I was treated nicely 1
 - b. I was treated quite nicely 2
 - c. I was treated badly 3



APPENDIX 3: QUESTIONNAIRE FOR FEMALES

SECION A: SOCIO-DEMOGRAPHIC CHARACTERISTICS

<p>1. What was your age on your last birth day?</p>	<p>Code</p>	<p>4. Which ethnic group do you belong to?</p>	<p>Code</p>
<p>a 15 – 19</p>	<p>1</p>	<p>a. Akan</p>	<p>1</p>
<p>b 20 – 24</p>	<p>2</p>	<p>b. Dagomba</p>	<p>2</p>
<p>c 25 – 29</p>	<p>3</p>	<p>c. Ga</p>	<p>3</p>
<p>d 30 – 34</p>	<p>4</p>	<p>d. Ewe</p>	<p>4</p>
<p>e 35 – 39</p>	<p>5</p>	<p>e. Others (Specify)</p>	
<p>f 40 – 44</p>	<p>6</p>	<p>5. What is your religion?</p>	
<p>g 45 – 49</p>	<p>7</p>	<p>a. Christianity</p>	<p>1</p>
<p>2. What is your level of education?</p>		<p>b. Traditional</p>	<p>2</p>
<p>a. No education</p>	<p>1</p>	<p>c. Islam</p>	<p>3</p>
<p>b. Basic level</p>	<p>2</p>	<p>d. Others (Specify)</p>	
<p>c. Secondary level</p>	<p>3</p>	<p>6. Type of marriage</p>	
<p>d. Tertiary</p>	<p>4</p>	<p>a. Monogamy</p>	<p>1</p>
<p>3. What is your employment status?</p>		<p>b. Polygamy</p>	<p>2</p>
<p>a. Unemployed</p>	<p>1</p>	<p>7. How many children do you have?</p>	
<p>b. Self-employed</p>	<p>2</p>	<p>a. One</p>	<p>1</p>
<p>c. Employed</p>	<p>3</p>	<p>b. More than one</p>	<p>2</p>

SECTION B: PLACE OF DELIVERY

8. Where did you deliver your last child? Code
- a Health Facility 0
- b Home 1
9. Why did you prefer that place where you delivered?
-

SECTION C: LEVEL OF MALE SUPPORT DURING ANC

10. What is the level of male support during ANC?

NO	ITEMS	YES (1)	NO (0)
	Did your husband accompany you to the ANC?		
i	Did your husband give you money during ANC visits?		
ii	Did your husband discuss with you on where to go for ANC?		
iii	Did your husband discuss with you on when to go for ANC?		
iv	Did your husband remind you to take your medications?		
v	Did your husband ask how you are faring with your pregnancy?		
vi	Did your husband assure you of good outcome of your pregnancy?		
vii	Did your husband discuss with you on where to deliver		
TOTAL			

Interpretations

Code

- a From 5 to 8 “YES” responses mean high level of support 1
- b Below 5 “YES” responses mean low level of support 2

SECTION D: FACTORS ASSOCIATED WITH MALE SUPPORT

Level of knowledge of females about ANC

11. What do health workers usually do for the pregnant women at the ANC?

NO	ITEM	YES (1)	NO (0)
i.	Taking vital signs		
ii.	Administration of drugs		
iii.	Giving health talks		
iv.	Taking weight		
v.	Measurement of fundal height		
vi.	Laboratory investigations		
vii.	Vaccinations		
viii.	Counselling		
ix.	Taking a scan		
x.	assessing fetal heart beats		
xi.	physical examination		
TOTAL			

Interpretation of responses

Code

- a. mention 10 to 11 services mean high level of knowledge 1
- b. mention 5 to 9 mean average level of knowledge 2
- c. Below 5 services mean low level of knowledge 3

Cultural Factors

12. What is the level of cultural support?

NO	ITEMS	YES (1)	NO (0)
i.	Is it a personal belief that your husband should accompany you to ANC?		
ii.	Is it a societal belief that your husband should accompany you to ANC?		
iii.	Is it a religious belief that your husband should accompany you to ANC?		
iv.	Is it a norm that males should accompany their wives to the ANC?		
v.	Do the community praise males who accompany their wives to ANC?		
TOTAL			

Interpretation

Code

- a. All “YES” responses mean high cultural support 1
- b. 3 to 4 “YES” responses mean average cultural support 2
- c. Below 3“YES” responses mean low cultural support 3

Economic Factors

13. What is the level of economic support?

NO	ITEMS	YES	NO
		(1)	(0)
i.	Do you have a valid National Health Insurance Scheme?		
ii.	Do your husband give you enough money during ANC visit?		
iii.	Do your husband always give you money on every ANC visit?		
iv.	Did your husband buy all the items on the list given to you by the nurse?		
v.	Do your husband own a vehicle?		
vi.	Do your husband drive you to or rent a car for you to go to ANC?		
vii.	Do your husband buy enough maternity clothing for you?		
viii.	Did your husband make enough savings toward your last pregnancy?		
TOTAL			

Interpretation	Code
a. 5 to 8 “YES” responses indicate high economic support	1
b. Four “YES” responses indicate average economic support	2
c. Below 4 “YES” responses indicate low economic support	3


Health Facility Factors

14. How do you perceived the attitude of service providers toward you?	Code
a. Good	1
b. Poor	2
15. How long do you spend at the ANC?	Code
a. Less than 1 hour	1
b. 1 hour to 2 hours	2
c. 3 hours to 4 hours	3
d. More than 4 hours	4
16. What is the distance between the health facility and your home?	Code
a. 1 Km to 5 Km	1
b. 6 km to 8 km	2
c. Greater than 8 km	3
17. How were you treated at the ANC clinic?	Code
a. I was treated nicely	1
b. I was treated quite nicely	2
c. I was treated badly	3

APPENDIX 4: ETHICS APPROVAL LETTER

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

In case of reply the number and date of this Letter should be quoted.



Research & Development Division
Ghana Health Service
P. O. Box 440 199
Accra
Tel = 233-102-681109
Fax = 233-102-685424
Email: Hannah_Frimpong@ghs.gov.gh

My Ref: GHS/RDD/ERC-Admin/Agg
Your Ref No.

11th March, 2016

Saadgrmeh Kuudong
University of Ghana
School of Public Health
Legon, Accra

ETHICS APPROVAL - ID NO: GHS-ERC: 57/12/15

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol titled:

“The Influence of Male Support during Antenatal Care on the Place of Delivery in Offinso South Municipality, Ashanti Region, Ghana”

This approval requires that you submit yearly review of the protocol to the Committee and a final full review to the Ethics Review Committee (ERC) on completion of the study. The ERC may observe or cause to be observed procedures and records of the study during and after implementation.


Please note that any modification without ERC approval is rendered invalid.

You are also required to report all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.

You are requested to submit a final report on the study to assure the ERC that the project was implemented as per approved protocol. You are also to inform the ERC and your sponsor before any publication of the research findings.

Please note that this approval is given for a period of 12 months, beginning 11th March, 2016 to 10th March, 2017. However, you are required to request for renewal of your study if it lasts for more than 12 months.

Please always quote the protocol identification number in all future correspondence in relation to this approved protocol.

SIGNED: 
PROFESSOR MOSES ATKINS
(GHS-ERC VICE-CHAIRPERSON)

INTEGRITY PROCESS

Cc: The Director, Research & Development Division, Ghana Health Service, Accra