

**HUSBAND'S INVOLVEMENT IN MATERNAL CARE AMONG WOMEN OF CHILDBEARING
AGE ATTENDING POST NATAL CLINIC IN IBADAN**

BY

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**A DISSERTATION SUBMITTED TO THE DEPARTMENT OF EPIDEMIOLOGY
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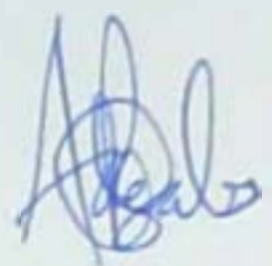
UNIVERSITY OF IBADAN, NIGERIA

**IN PARTIAL FUFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A
MASTER DEGREE (M.SC) IN EPIDEMIOLOGY**

JANUARY 2016

CERTIFICATION

I certify that this research work was duly carried out directly under my supervision and also meets the regulations governing the award of the degree of M.Sc. Epidemiology of the department of Epidemiology and Medical Statistics, Faculty of Public Health, College of Medicine , University of Ibadan.

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DEDICATION

I dedicate this dissertation to God Almighty, the God of all wisdom, Knowledge and source of strength , to my parents who have continued to support me and lastly my departed Grandmother Mrs. Emily Umezunke.

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LIST OF ABBREVIATIONS AND ACROYNMS

ANC	Antenatal Care
MMR	Maternal mortality ratio
NARHS	National AIDS and Reproductive household survey
NDHS	Nigeria Demographic and Health Survey
NPC	National Population Commission
UNDP	United Nation Development Programmes
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children Endowment Fund
USAID	United States Agency for International Development
PNC	Postnatal Care
POD	Place of Delivery
WHO	World Health Organization

ABSTRACT

Background: Nigeria recorded more than 40,000 deaths of women in 2013 third after India and Serbia - lone as countries with the highest maternal mortality rate in the world. Men's participation in antenatal, childbirth and postnatal care is crucial to the health of the mothers and neonates. Nevertheless, very few men participate in maternal health, especially in developing countries. The objective of this study is to determine the current level of participation of men in maternal care and preferences of women attending the post natal clinic at Adeoyo Maternity Hospital Ibadan.

Methodology : A cross-sectional study design was used . Systematic random sampling was used to recruit a total of 335 women attending post natal clinic on immunization and breastfeeding clinic days . The women were interviewed with a self administered questionnaire consisting of three sections: demographics, Husband's involvement in pregnancy, Labour and Post natal/ baby care and perception, preference and barriers to Husband's involvement in their wives care.. The mean value of all the responses was calculated with values below the mean was considered to be low involvement and those above the mean were considered as high involvement. Analysis were done using SPSS version 16 . Chi-square test and binary Logistic regression was used to analyze associations between the independent variables and husband's involvement which was categorized as High or Low.

Results : The mean age of the respondents was 30.7 ± 5.4 years. More than half of the respondents attended a tertiary institution 178 (53.5%), while 141 (42.3%) attended secondary school. About a third of our respondents had one previous pregnancy while 39% have had two other pregnancies . About 86% of the women reported their husbands of encouraged them to book for ANC however about 37% ever accompanied their wives to ANC. During the period of labour about 67 % of the men were present from the onset of labour and followed their wives to the hospital. Husband's number of antenatal visits affected their involvement in labour as husbands attending one ANC had 66% high involvement in their wives care during labour and those who attended two ANC have 75% high husband involvement in maternal care . About 37% of men accompanied their wives for PNC. Muslim respondents were significantly four times less likely than their Christian counterparts to want husband's involvement in their care. (OR= 0.27, 95%CI=0.13-0.56)

Conclusion A higher proportion of men were present during labour compared to ANC and PNC. Also a high percentage of the women wanted their husbands fully involved in their care. Campaigns are needed to promote a greater involvement of men in the maternal care of their wives.

Key words: Husband involvement, ANC, Labour, Pregnancy,

Word Count : 439

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND

Globally 800 women die every day from child bearing related issues.(WHO,2014).An estimated 290,000 women die each year in developing countries from pregnancy-related causes, and 2.9 million newborns die in the first month of life (UNFPA 2014). Sub-Saharan Africa has a combined average maternal mortality rate of 500 per 100,000 live births according to UNFPA estimates of 2010.(WHO,2014). According to International business times (Ludovica May 2014) Nigeria recorded more than 40,000 deaths of women in 2013 by WHO figures making her third after India and Sierra -Lone out of the five countries with the highest maternal mortality rate in the world. Current statistics in NDHS 2013 puts maternal mortality in Nigeria at 576 per 100,000 women. (NPC and ICF, 2014) .This figure is high and indicates that measures must be taken to reduce maternal mortality.

The period of pregnancy all the way to delivery and post natal care can be a time of mixed feelings in women. It is a time of both joy and fear. Joy at the fact that a new child is being brought to life and fear of the unknown (Waquas et al , 2014). This fear stems from the fact that so many issues are involved in child bearing and child birth, issues from eclampsia, bleeding and blood loss, hypertension, anaemia etc. A number of these issues are driven by hormonal changes and the differences which occur in the woman's body from the moment she becomes pregnant through to the post natal period (Waquas et al , 2014) .

Studies done in Nigeria have demonstrated that the presence of spousal support during labor and delivery helps for better outcomes of delivery and reduction of maternal mortality. (Vehviläinen-Julkunen and Emelonye, 2014). The study is interested in women's are reported role of their husbands in their reproductive health care especially during the period of labour, childbirth, and post-partum. This study seeks to investigate outcomes of pregnancy with husbands involved and how this can lead to better, more productive and less stressful pregnancy with the overall aim of reducing maternal mortality.

1.2 PROBLEM STATEMENT

Despite the enormous amount of effort and resources which has been put into tackling high maternal mortality rates, they have remained high globally and in Nigeria . Sub -Saharan Africa has its current maternal mortality rate put at 500 deaths per 100,000 live births (WHO, 2014). Maternal mortality has remained high with Sub-Sahara constituting for 62% of global maternal deaths and Nigeria contributing

14% to maternal deaths globally (Sajedinejad , 2015). MMR has also remained high in Nigeria with a ratio of 630 deaths per 100,000 live births according to Ndep (2014). In Nigeria the scourge is on and raging like a wild fire.

Estimates such as the 576 deaths per 100,000 live births is given in the current NDHS carried out in 2013 show that a lot still has to be done to combat this problem. Two nationally representative surveys recently conducted in Nigeria: Nigeria Demographic and Health Survey (NDHS) in 2013 and National AIDS and Reproductive household survey (NARHS) in 2012 showed that the proportion of pregnant women who had not attended any ANC services in Nigeria was 33.9% and 34.9% respectively (Fabmigbe and Idemudia, 2015). About 63 % of the women who had given birth in the last 5 years did not utilize postnatal care this could be due to a high number (63 %) of home births by the mothers in Nigeria (Somefun and Ibisani , 2016) . The Nigeria Demographic and Health Survey (NDHS) 2013 estimated its Neonatal Mortality Rate (NMR) as 37 per 1000 live births which constituted about 54% of infant mortality (Akinyemi et al , 2015).

Although most of maternal deaths are preventable, yet maternal mortality remains high and progress in combating maternal mortality has not been satisfactory (Sajedinejad , 2015).A Nigerian study indicated that only about 27% of men are involved in their wives care and about 51% had poor knowledge of maternal health.(Olugbenga-Bello et al, 2013). Psycho social support has been shown to be associated with better outcomes for delivery and maternal health in general (Morhason- Bello et al , 2009). There has also continued to be a lack of involvement of males in maternal health even as they remain crucial partners with women in the issue of reproductive health (Singh et al , 2014). This study therefore intends to find out the current level of involvement of husbands in providing social support for their wife, barriers to such support and preferences of the women, during pregnancy and post natal care as reported by the wives. Positive male (husband) involvement in maternal health is defined as the mental and physical participation of males (husbands) in maternal and prenatal health and family planning in such a way as to increase maternal and infant survival rates and improve family planning outcomes (USAID, 2009).

1.3 JUSTIFICATION

Studies carried out in Nigeria report conflicting percentages of men involvement in women's care as regards maternal health.(Adenike et al, 2013). Benefits of this study will include determining the current level of participation of men in maternal health. This study intends to understand the role which women expect their men to play during the period of pregnancy and childbirth. Studies which have been done in Nigeria focuses on eliciting data from men about their involvement in women's care. This study intends to elicit information from the women on the reported involvement of their husbands in their care.

Men need to ensure that their partners make it through this trying period and come through without losing their lives or that of their infants at this crucial time. This study also wants to look at paternity leave as a strategy for involving males in maternal health and if there is any merit to such thinking. This study

intends to sway the thinking of government and policy makers by convincing them of the roles which can be played by husbands in achieving positive outcomes of pregnancy. Adequate laws and policies can then be made to ensure that husbands and partners can be with their women during this trying time of delivery. This study also hopes to pave the way for future research so that more light can be thrown on the subject of the involvement of husbands in the care of their partners and how it could lead to more desirable and better outcomes and a drastic reduction in the maternal mortality rate both in Nigeria and Sub-Saharan Africa as a whole. There is also the issue of how to better improve the participation of men in their women's care.

1.4 OBJECTIVES

1.5 GENERAL OBJECTIVE

This study is to determine women's reported level of involvement of their husbands in their care during pregnancy, delivery and post natal care in relation to better and improved outcomes of pregnancy.

1.6 SPECIFIC OBJECTIVES

To determine the current level of participation of men during pregnancy, childbirth and post-partum period

To determine the preference and expectation of women with respect to their husband's involvement in their care.

To identify the women's reported barriers towards husband's involvement in their partners care

To determine if a relationship exists between husband's involvement and outcomes of delivery

CHAPTER TWO

LITERATURE REVIEW

2.1 OVERVIEW / BURDEN OF MATERNAL MORTALITY GLOBALLY, IN AFRICA AND IN NIGERIA

About 800 women die every day from pregnancy and child birth related issues and sadly from preventable causes. It is also worthy of note that 90% these maternal deaths occur in the developing regions and countries of the world (Kendall and Langer , 2015) . In 2010 there were an estimated 287,000 maternal deaths worldwide. Sub-Saharan Africa accounted for 56 percent of these deaths (Mangeni et al , 2013) .Nigeria is a diverse society with a population size of about 170 million people with demographic data showing that 50.6% were males and 49.4% were females make up this overwhelming population size(Vehviläinen-Julkunen and Emelonye , 2014) .

A high burden of these deaths is borne by developing countries especially Nigeria where the maternal mortality and morbidity rates have remained one of the highest globally. Data shows a daunting maternal mortality ratio of 1500/100,000 births in Nigeria accounting for nearly 15% of the global estimates of maternal mortality..(Vehviläinen-Julkunen and Emelonye , 2014).Furthermore, the death risk faced during pregnancy or childbirth by Nigerian women is greater than that of women in half of other African countries put together as antenatal care coverage and institutional delivery estimated at 47% and 33% respectively(Vehviläinen-Julkunen and Emelonye , 2014) .

2.2 DISEASES AND CONDITIONS WHICH CAUSE MATERNAL MORTALITY

Maternal mortality is an expression of the social, cultural and gender equity disadvantages that women experience and the capacity of a health system to respond maternal health needs(Farrokh-Eslamlou , 2014). Maternal death is defined as the death of a female of reproductive age during pregnancy, labor or within 42 days of termination of pregnancy from causes that are related to or aggravated by pregnancy and relevant care (WHO , 2014). A lot of conditions have been known and identified by literature to be the cause of maternal deaths. Maternal deaths are measured by maternal mortality ratios per country and are reported as the number of maternal deaths per 100,000 live births. (WHO , 2014).

This definition allows identification of maternal deaths, based on their causes as either direct or indirect. Direct obstetric deaths are those resulting from obstetric complications of the pregnant state (pregnancy, delivery, and postpartum), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above. Deaths due to, for example, haemorrhage, pre eclampsia /eclampsia or those due to complications of anaesthesia or caesarean section are classified as direct obstetric deaths. Indirect obstetric deaths are those resulting from previous existing disease, or diseases that developed during pregnancy, and which were not due to direct obstetric causes but aggravated by physiological effects of pregnancy. For example, deaths due to aggravation of an existing cardiac or renal disease are indirect obstetric deaths. (WHO ,2005)

Maternal mortality is extremely high during labour, delivery and within 48 hours after delivery. A study done in Bangladesh showed that, 40% of maternal death from all causes occurred at these times (Paulo, 2011). Another study showed that about 60 percent of the maternal deaths occur during child birth and immediate post-partum period, with 50% of these deaths occurring within the first 24 hours of delivery. (Paulo ,2011). Pregnancy has been shown to be the leading cause of deaths for young women aged 15 through 19 and the other group at high risk is that with advanced maternal age of above 35 years. (Paulo ,2011)

Obstetric haemorrhage accounts for 25% of all maternal deaths globally with primary postpartum haemorrhage (PPH) the largest share of the cases. Mortality due to haemorrhage reflects the appropriateness of obstetric care. It is not only the largest contributing factor in developing countries but it is also the leading cause in the most developed nations. (khanum ,2013) .According to the world health organization, Severe bleeding, infection, pregnancy induced high blood pressure and unsafe abortion accounts for 80% of all maternal deaths. (WHO, 2014). Other causes of maternal mortality have also been identified yet nearly two-thirds of maternal deaths worldwide are mainly due to five direct causes which are haemorrhage, obstructed labour, eclampsia (pregnancy induced hypertension), sepsis and complications of unsafe abortion.(shah , 2008).

We also have the issue of delay in getting health care as one of the reasons especially in developing countries for the death of mothers.(shah , 2008) . Delay was also identified in three stages as delay in decision to seek care, reaching a health care centre, or finally in getting attention for a qualified health professional. (Shah . 2008) Causes of maternal death are also broadly divided into direct and indirect causes. The direct causes of maternal death include :

Haemorrhage

Hypertensive disorders

Unsafe abortion

Puerperal sepsis

Obstructed labour

Ruptured uterus

Hyper emesis

Chorioamnionitis

The indirect causes of maternal death also include:

Hepatic encephalopathy

Congenital heart disease

Anaemic heart failure

Epilepsy

All these causes have been listed and identified as the causes of maternal death.(Shah , 2008).Most of the maternal deaths occur due to avoidable factors. A study done on maternal mortality in Ilala district in Dar es salaam found that three quarters of the women dying as a result of pregnancy had been seen by health care provider died in a health facility. The study further explained that poor management has been shown to increase maternal mortality. Quality of care was adversely affected by lack of supplies. Blood and drugs were not available in the majority of cases with suboptimal care (Paulo, 2011).

Studies done in Enugu Nigeria also showed that MMR of 2397.3 per 100,000. Major avoidable factors were substandard care (27.7%), delay in seeking care (19.1%), financial constraints (8.4%), delay in recognizing problem (6.4%), lack of blood (4.3%), lack of drugs (2.1%) and no major avoidable factors were identified in 29.8% (20). (Paulo , 2011). It is estimated that abortion complications contribute about 20% of maternal deaths worldwide (Paulo .2011). In every 8 minutes a woman in a developing country will die of complications arising from an unsafe abortion (Paulo , 2011). Unsafe abortion is one of the leading causes of maternal mortality with 13% worldwide and in developing countries 55% of all abortions are unsafe. (Paulo , 2011).

Various studies have shown the impact of indirect obstetric causes like HIV/AIDS, malaria, heart diseases and anaemia to be significant causes of maternal mortality. (Paulo , 2011). Other studies have also given various causes for maternal deaths both at the hospitals and outside the hospitals. According to farrokh-Eslamlou (2014) the causes of hospital maternal deaths include :

- Obstetric haemorrhage
- Uterine atony
- Haemorrhage from caesarean section
- Laceration and uterine rupture
- Placental abruption
- Ectopic pregnancy
- Hypertensive disorders of pregnancy
- HELLP syndrome
- Acute pulmonary oedema
- Acute fatty liver
- Cerebrovascular disease
- Eclampsia
- Infections both obstetric and non- obstetric
- Heart disease
- Pulmonary embolism
- Intracranial haemorrhage
- Anaesthesia related

The causes of death outside the hospital facilities include :

Post-partum haemorrhage

Hypertensive disorders of pregnancy

Infection

Heart disease

Pulmonary thromboembolism

2.3 INTERVENTIONS TO LOWER MATERNAL MORTALITY GLOBALLY, IN AFRICA, SUB-SAHARA AFRICA AND IN NIGERIA

Different kinds of interventions aimed at reducing maternal and child mortality rates have been implemented in low- and middle-income countries. (Yuan et al , 2014) Some interventions try to improve maternal and child health by improving material circumstances where women or children live, such as provision of nutrition supplementation while others try to improve the delivery of maternal and children health services, such as promotion of immunization by outreach campaign. (Yuan et al , 2014). Interventions also target demand sides and remove the physical, financial or other barriers to access to maternal or child health services, such as, subsidies for use of health services , community based information, education and communication interventions (Yuan et al , 2014)

In order to attain optimum level of health during pregnancy and the best possible maternal and neonatal health outcomes, effective interventions need to be delivered during preconception period and throughout pregnancy (Lassi et al , 2014). Interventions delivered during pregnancy play a definitive beneficial role for improved maternal, foetal and neonatal health and survival (Lassi et al , 2014) .

The effectiveness of the content, frequency, and timing of visits in currently recommended programs for routine antenatal care is yet to be ascertained and data from observational studies have shown that groups that have more antenatal-care visits have lower maternal, fetal, and neonatal morbidity and mortality than those who have fewer antenatal-care visits (Lassi et al , 2014) .

During pregnancy, mothers who have iron deficiency anaemia have shown to have inadequate weight gain needed to maintain a healthy foetus; have weak immune system causing them to be more prone to infections; have heavy placentas; and are at a higher risk of neonates being born either prematurely or with LBW. Maternal outcomes are shown to be greatly improved with iron supplementation (Lassi et al , 2014) .

Smoking during pregnancy has serious consequences on the health and wellbeing of the newborn child and It has important deleterious effects on the baby at birth and throughout the early development of the child (Lassi et al , 2014) .The smoking cessation strategies in pregnancy include provision of advice and counselling using various tools (written and electronic resources and telephone support), cognitive behavioural therapy (CBT) and motivational interviewing, advice and counselling based on feedback of foetal health status or measurement of by-products of tobacco smoking in the mother, provision of

pharmacological agents such as nicotine replacement therapy and bupropion, social support and encouragement, including the use of rewards for cessation and other interventions such as hypnosis. (Lassi et al , 2014) .

Family planning uptake has remained the foremost and cheap strategy to reducing maternal mortality ratio both globally and in Nigeria but, its implementation in developing countries has not received the much desired successes and this is the case in Nigeria also. (Ojegbade et al ,2014) Family planning helps to prevent unwanted pregnancies and eliminates recourse to abortions. Both short and long inter-pregnancy intervals are associated with adverse perinatal outcomes such as preterm birth, low birth weight (LBW), small for gestational age (SGA) and perinatal death. This link, however, may be confounded by different maternal characteristics and socioeconomic status (Lassi et al, 2014) .

MgSO₄ is used in the treatment of severe preeclampsia and eclampsia .Use of MgSO₄ in patients with severe pre-eclampsia reduced the risk of progression to eclampsia by more than half and reduced maternal mortality. The effect of MgSO₄ on perinatal outcomes has also been studied, demonstrating significantly improved outcomes for newborns compared to phenytoin.

2.4 THE ROLE OF SOCIAL SUPPORT IN LABOUR AND DELIVERY

The influence of social relationships on health status has been recognized increasingly in public health and epidemiological research (Balaji et al , 2007). The potent role that social relationships play in stress processes has become increasingly well understood through research on social support, social networks, and social integration (Rini et al , 2006). Social support influences health and well-being and research findings show that social support positively influences pregnancy outcomes. (Roth , 2004). Clearly, received support is a complex phenomenon as it involves transactions between two people, usually in an interdependent relationship, whose needs and goals in any given circumstance may or may not correspond (Rini et al , 2006)

It is proposed that a more complete understanding of received support and its effectiveness is best achieved by joint consideration of the perceived quality and quantity of support attempts by specific providers and the extent to which attempted support meets recipients' needs.(Rini et al , 2006). Social support should be valuable to all expectant mothers, yet life circumstances may place some women in greater need than others. For example, adolescents, unmarried women, and women with few economic resources may be especially likely to benefit more from social support. Pregnancy is not uniformly stressful for all women, and there is growing evidence that women with especially high prenatal stress are at greater risk for poor outcomes (Collins et al 1993)One study of Israeli women who had recently given birth found that the intimacy of a close relationship predicted greater support satisfaction and also predicted that relationships with partners characterized by higher quality, more emotional closeness and intimacy, and greater equity would be more conducive and more effective when providing support from the baby's father (Rini et al , 2006).

The significance of social support in relation to health and well-being has been extensively researched and well established as a positive influence. Research on social support specifically focused on pregnant women has shown it to influence outcomes of pregnancy positively. (Roth ,2004). Social support in relation to depressed mood during pregnancy was frequently reported in relevant literature. Women with little social support were more likely to have symptoms of depression during and after pregnancy. Conversely, pregnant or postpartum women with symptoms of depression tended to have less social support .(Roth , 2004)

Supportive relationships may enhance feelings of well-being, personal control, and positive effect, thereby helping women to perceive pregnancy-related changes as less stressful. This may result in lowered rates of stress-induced biochemical responses and fewer stress-related health behaviours such as smoking and alcohol use .In addition, help with daily tasks such as household chores and child care can provide needed assistance with physically taxing demands that may be harmful to expectant mothers, especially late in pregnancy. (Collins et al , 1993)

Male involvement is generally described as men: a) accompanying their spouses; b) providing social-economic support; and c) using family planning as well as HIV prevention measures and the commonly cited approaches at community and service provision levels were men escorting spouses and couple orientated services, respectively. (Mukobi , 2013). A view proposed by a Ghanaian study defined men involvement in a variety of ways, as not just being physically present and involved in carrying out newborn care tasks but also providing financial support.(Dunbaugh et al, 2014)

In different parts of the world, more especially in developed countries such as UK and Denmark, spousal participation is common practice during labour and delivery with about 95% attendance and Studies conducted in these developed countries shows that women who had continuous spousal labour support are reassured, comforted and emotionally encouraged to overcome pain associated with labour and delivery..(Vehviläinen-Julkunen and Emelonye . 2014) .Furthermore, literature has shown that women with continuous support by spouses also experience shorter labours, reduced need for oxytocin, anaesthesia, analgesia, instrumental deliveries and decreased by 50% their chances of being admitted to a caesarean section.(Vehviläinen-Julkunen and Emelonye , 2014)

In Africa, particularly Nigeria, the volume of research literatures relating to spousal participation in labour and research findings as to how the practice ameliorates labour and delivery pain is very limited. (Vehviläinen-Julkunen and Emelonye , 2014)The traditional approaches to maternal health care taken by health systems in most developing countries portray the gendered belief system and the services are female oriented thereby discouraging male involvement (Kululanga , et al ,2012).

Pregnancy and child birth is usually referred to as purely a women's affair especially in Africa and men hardly accompany their women for ante-natal visits or to the delivery room for that matter. (Sokoya et al , 2014). Over the years the involvement of men in the maternal care of women has been very minimal as

maternal health was seen to be a fairly women's affair. (Adenike et al , 2014). There has also been the issue of male dominance in the upper echelons of power in the health sector leading to serious consequences in the health care delivery of maternal health services to women and girls. (Adenike et al , 2014).

Studies continue to show that men in general in Africa have not been able to provide adequate care and support for their pregnant and nursing wives. (Sokoya , 2014). Despite all these, studies continue to support the argument that men involvement and support for pregnant women aids for much better outcomes of delivery.(Sokoya, 2014). Studies continue to show that to promote optimum health for child and mother involvement of male partner is paramount. (sokoya et al , 2014)

Male presence and support during pregnancy still continues to be poor which can be attributed to beliefs and traditional practices here in Nigeria.(Vehviläinen-Julkunen and Emelonye , 2014). The presence of males in the labour room and giving of spousal support in any manner possible has been seen as preferable to a lot of women as opposed to not having the spouses present. (Vehviläinen-Julkunen and Emelonye , 2014). Generally it is seen that women undergo a lot of pain and discomfort during the period of child birth and studies have continued to point in the direction of spousal support as being able to bring about better outcomes of pregnancy. (Vehviläinen-Julkunen and Emelonye , 2014).

Involving men is particularly challenging in countries whose culturally defined gender roles may hinder men's participation. For example, in countries where communication between couples is limited and manifestations of masculinity often involve violence against women and alcohol consumption, high-risk sexual behaviour is commonplace (walston , 2005).Several studies have also examined the role of men in influencing uptake of reproductive health services and these studies define male involvement in terms of men's roles as clients of health care services, as partners, or as agents of positive change .(Mangeni et al ,2013). Yet, there is no single widely used indicator for measuring male involvement. (Mangeni , 2013).

The data for a study done in Malawi study showed that men felt being pressurized to attend antenatal care with their wives purely for HIV counselling and testing and PMTCT counselling, interventions whose goal is to promote the health of the mother and child (Kululanga et al , 2012) The male expressed the feeling of being ignored by the health care providers because they were not allowed in the examination room even in facilities where privacy was guaranteed. As such, the men lingered outside the clinic waiting for their wives..(Kululanga et al , 2012). The males also felt in this study that ante-natal care was clearly a women's affair and that they were only invited for HIV test. .(Kululanga et al , 2012). Data from this study also indicted the health officials and professionals as they handled maternal care as purely a women's affair and the men felt they had no business being there. .(Kululanga et al , 2012).

In Kenya, a study conducted on male involvement in maternal health came to the conclusion that a male partner's participation, through attending ante natal clinic visits, is associated with a woman's use of an

skilled birth attendants during delivery and thereby reducing the risks associated with pregnancy.(Mangeni et al , 2013).A community study done in Atelowo community of Oshogbo in Nigeria showed that half of the respondents agreed that men should be involved in pre-conception care and also encourage family planning. (Olugbenga-Bello et al , 2014). This same study conducted in Oshogbo concluded by admitting that, the level of awareness of men about maternal health was high, but their involvement in giving care was poor and only about half of them had good attitude towards maternal health care.(Olugbenga –Bello et, al)

Findings of a study conducted at Babcock University school of nursing in Nigeria showed that all the participants agreed that their husbands' support during pregnancy, labour and delivery was necessary.(Sokoya et al , 2014). This same study in Babcock university showed that participants felt encouraged by their husbands support, and agreed that this support made pregnancy less stressful for them coupled with the fact that their husbands' provision of their needs gave them emotional security.(Sokoya et al , 2014) . Participants understood that lack of husbands support during pregnancy, labour and delivery was dangerous. (Sokoya et al , 2014). This study also discovered that even though men are generally supportive of their pregnant wives, very few of them are directly involved in the maternity care of their wives, and only about a quarter of such men had ever accompanied their women on ante-natal visits. (Sokoya et al ,2014)

A study done in Enugu state, Nigeria argues that although enhancing clinical protocols and skills can be of benefit to women in Nigeria and elsewhere yet violence women experience throughout their lives – genital mutilation, domestic violence, and steep power gradients – is accentuated through pregnancy and childbirth, when women are most vulnerable (Anderson et al . 2011). Intimate partner violence especially in pregnancy and women's fear of husbands or partners and not discussing pregnancy with their men needs to change for better outcomes of pregnancy. (Anderson et al , 2011). A randomized control trial conducted at the university college hospital in Ibadan from 2008 to 2009 came to the conclusion that male involvement as a strategy can provide new policy direction with respect to reproductive issues and maternal health

(Ojengbode et al , 2009)

2.5 Husband's Involvement in Different Types of Care

Male partner participation is a crucial component to optimize antenatal care/prevention of mother to child transmission of HIV(ANC/PMTCT) service yet the participation of males in ANC and PMTCT is very low according to Haile and Brhan (2014) with levels of male involvement being as low as 20%. There are several strategies by which men may be involved in PMTCT. Healthcare workers should offer pregnant women all strategies available for involvement of males in their care for her to select the appropriate one according to Nyondo et al (2013). They went further in their study to state strategies to include (1) healthcare workers refusing service provision to women accessing antenatal clinic without

their partners, women refusing ANC attention in the absence of a partner, extending invitations and had six subcategories: (1) word of mouth, (2) card invites, (3) woman's health passport book invites, (4) telephonic invites, (5) use of influential people, and (6) home visits.

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CHAPTER 3

METHODOLOGY

3.1 STUDY AREA

This study was conducted in Ibadan North Local Government Area (IBNLGA) of Oyo state. The local government is divided into 12 wards consisting of a population of 308,119 with 152,608 as males and 155,511 as females (NPC, 2007). . This study was conducted at the post natal clinic of Adeoyo Hospital Yemetu Ibadan. Adeoyo Maternity Hospital, Yemetu, Ibadan is a secondary health center. Adeoyo Maternity Hospital was established in 1927 and has about 208 bed spaces. The hospital attends to pregnant women twice in a week on Tuesdays and Fridays. The hospital on the average attends to about 60 to 70 women per clinic day. The hospital has a single delivery room attached to an observation room. Men are not allowed into the delivery room. The hospital has two wards called lying –in wards. Women who have just been delivered are observed, both mother and child for 24 to 48 hours and if there is no problem they are discharged and allowed to go home. There is no day for postnatal clinic at the hospital , instead there are days for immunization and breastfeeding. These days are Mondays and Wednesdays when doctors and nurses attend to the post natal needs of women and their babies.

3.2 STUDY DESIGN

This study was a hospital based cross sectional survey. Structured questionnaire was used to gather data

3.3 STUDY POPULATION

This study was conducted among women attending post natal clinic at Adeoyo Maternity Hospital Yemetu Ibadan.

3.4 INCLUSION CRITERIA

Women must have been attending post natal clinic

3.5 SAMPLE SIZE DETERMINATION

The sample size was determined using the formula for calculating sample size of single proportion for descriptive studies.

Where,

n= Minimum desired sample size

$Z_{\alpha/2}$ = Standard normal deviate set at 1.96

d= Level of Precision at 0.05

p= Percentage of men who followed their wives to the delivery room is reported by Olugbenga – Bello et al, (2013) to be 27%

$$n = \frac{Z_{\alpha/2}^2 (p q)}{d^2} \quad (\text{Kasiulevičius et al , 2006})$$

$$n = \frac{1.96^2 \times (0.27 \times 0.73)}{0.05 \times 0.05} = 303$$

This gave a sample size of 303 which is equivalent to n. To adjust for non response 10% was chosen as non-response rate and dividing 303 by this rate (0.9), minimum sample was 334

3.6. Sampling Technique

A systematic random sampling method was used to recruit subjects for the study. With a total number of about 60 clients expected per clinic day in Adeoyo Maternity Hospital. The number 2 was randomly selected, representing the first respondent as the 2nd client who walks in on the day of the data collection. Applying an interval of two, the second and fourth respondents from were sampled and then the process was continued until the required sample size (335) was obtained.

3.7 DATA COLLECTION

Semi- structured questionnaire was used to gather data. The questionnaire was selfadministered but consideration was given to semi-literate and illiterate respondents.

Sections of the questionnaire included:

Section A- Socio-demographic section- this section gathered information as concerns characteristics such as age, marital status, level of education, place of residence , religion etc.

Section B-Husband's level of involvement - this section covered respondents reported level of their husband's involvement in their care both at the stage of pregnancy and delivery and all the way down to the post Natal period

Section C- Social support, perception and Barriers to male Involvement- this section was to determine what women consider to be social support. It asked questions of what women expect or desired as their husband's level of social support and what is the current reported level of their husband's involvement in their care. It also elicited information on possible barriers to male involvement in maternal health of their women during pregnancy and child birth.

A pre-test was carried out at a maternity health centre in Eleyele Area of Ibadan Oyo state and adjustment was made to the questionnaire in line with responses.

DEPENDENT VARIABLE

Husband's level of involvement in maternal care of wife was either high or low. A composite score was used to determine if the involvement of the husband was high or low.

For husbands involvement in Pregnancy scores were given to the responses to the variables in the questionnaire. A composite score was then computed using the variables under husband's involvement in pregnancy. The variables included : positive response to news , Encouraging the wife to go for Antenatal , Accompanying the wife to ANC , Kind words , Helping out in House chores , buying of gifts , Giving

massages , Paying Hospital bills. The mean value was computed for these variables and used as the midpoint. Values falling below the mean were considered to be of “ Low involvement” while values above the mean were for “ High involvement”

For husband’s involvement in labour the same method as above was used and a composite score was adopted. The difference here were the variables with which the score was computed which were : Husband’s presence during labour , Husband’s presence in delivery room , Husband running errands for wife during labour , payment of hospital bills.

For husband’s involvement in post natal care variables used for the composite score include : Accompany wife for post natal clinic ,Discussing family planning , Encouraging breastfeeding , Helping to soothe the baby , Paying any bills incurred at this period for mother and child ,Changing of diapers , Bathing of the child

INDEPENDENT VARIABLES

Socio demographic variables - these included age of respondents, age of husbands, religion of respondents, marital status of respondents , Occupation of respondents, Ethnicity of spouses, occupation of husbands , Family setting i.e. Monogamy or polygamy , Average family income , Number of wives in polygamous setting , Position of wife in polygamous setting

Obstetric Variables

Number of previous pregnancies, number of living children, number of babies in scan result, if respondent was admitted or not, was there any complication during labour or not

3.8 DATA MANAGEMENT AND ANALYSIS

The data was analysed using Statistical Package for Social Sciences (SPSS) version 16. Analysis carried out on the data set included descriptive analysis to determine mean, median, frequencies and proportions. Chi-square was used to test for statistical significant associations between categorical variables and the level of involvement of Husband in maternal significance was set at 0.05. Test of association between the dependent and independent categorical variables was carried out by Chi-square test.

3.9. Ethical considerations

3.9.1. Ethical Approval

The study protocol was reviewed and approval for the study was obtained from Oyo State Research Ethical Review Committee, Ministry of Health, Secretariat, Ibadan.

3.9.2. Informed Consent

The purpose of the study was explained to the respondents and written informed consent obtained from the study participants using an informed consent form prior to commencement of the interviews.

3.9.3. Confidentiality

Serial numbers and not names were used on questionnaires containing information collected in order to ensure participants' privacy and only the researchers knew the identification numbers. The data was not discussed with anyone outside the research team.

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CHAPTER FOUR RESULTS

CHARACTERISTICS OF RESPONDENTS

A total of 335 respondents were documented and analysed with age of the women ranging from 19 to 45 years. The result section will be divided mainly into three categories. The first is the socio demographic status and distribution of the respondents as well as their husbands, the second category will be results on the involvement of husbands both in the antenatal, delivery and post natal stage for which a composite score was used to differentiate husband's involvement into "High involvement and Low involvement". Scores for involvement were computed with a median being used to determine values falling on either side of the divide to either be high involvement or low involvement. The third category will include results on the perception and preference of women with regards to their husband's involvement in their care as well as the barriers to the involvement of husbands in the care of their wives with respect to associated positive outcomes of delivery.

Distribution of Respondents by Socio demographic Characteristics

A total of 335 respondents were analysed with their minimum age being 19 years and maximum age of was 45 years old. The mean age for the respondents was 30.7 ± 5.4 years. Data on age was available for 329 of the husbands of our respondents. Of this number we have 24 years to be the minimum age for husbands and 57 as the maximum age with a total mean age to be 37.4 ± 6.5 years. More than half of the respondents attended a tertiary institution 178 (53.5%), while about 141 respondents which represents 42.3% attended just secondary school. The remaining 14% which amounts to just about 14 persons attended just primary school (Table 4.1). Yoruba ethnic group constitutes about two-thirds of the respondents of this study 216 (64.5%), with the Igbo ethnic group making up about one-third (27.1%) of the respondents in this study. Hausas and other ethnic groups in Nigeria make up about one in twenty (6.6%) of the respondents.

Almost all our respondents were married 326 (97.6%) and 9 in every 10 of our respondents was living with their husband during the period of pregnancy 306 (91.3 %). About two – thirds of our respondents 194 (58.3%) are traders, while close to one quarter are civil servants 74 (22.2 %). One in ten of all our respondents are artisans or self-employed 35 (10.5 %). About one half of our respondents 190 (56.9%) earned a family income of about N10,001 to N 50,000. One quarter of our respondents earned between N50, 001 and N100,000 as monthly income 96 (28.7%). Nine out of ten of our respondents 306 (91.6%) were in monogamous relationships and family setting, while one out of ten 28 (8.4 %) were in polygamous homes and relationships. 64% of our respondents were adherents to the Christian faith while 34% were Muslims. 64% of the husbands of our respondents attended tertiary institution with 40% of them being traders.

Table 4.1: Socio-Demographic Characteristics of Respondents

n=335

VARIABLE	Number	(%)
Age distribution		
Of the respondents		
18-24 yrs	31	9.2
25-29 yrs	107	31.9
30-34 yrs	111	33.1
35 yrs and above	86	25.7
Level of Education		
Primary school	14	4.2
Secondary school	141	42.1
Tertiary Institution	178	53.1
Missing	2	0.2
Ethnicity		
Yoruba	216	64.5
Igbo	92	27.5
Hausa	5	1.5
Others	22	6.6
Marital Status of Respondents		
Single	4	1.2
Married	326	97.3
Separated	4	1.2
Missing	1	0.3
Respondent living with Their Husbands		
Yes	306	91.3
No	28	8.4
Missing	1	0.3
Living with Husband during Pregnancy?		
Yes	318	94.9
No	16	4.8
Missing	1	0.3
Average Family Income		
1N- 10,000N	30	9.0
10,001N-50,000N	190	56.7
50,001N- 100,000N	96	28.7
100,001 and above	18	5.4
Missing	1	0.3

Table 4.1: Socio-Demographic Characteristics of Respondents

n=335 (Cont.)

VARIABLE	Number	(%)
Religion of Respondent		
Christianity	215	64.2
Islam	114	34.0
Others	6	1.8
Husband's Level of Education Attained		
Primary school	8	2.4
Secondary School	110	32.8
Tertiary Institution	213	63.6
Missing	4	1.2
Husband works In the same town where You live		
Yes	279	83.3
No	42	12.5
Missing	14	4.2
Family Setting of Respondent		
Monogamy	306	91.3
Polygamy	28	8.4
Missing	1	0.3

4.2 Obstetric History of Respondents

The results of our study show that 32 % of our respondents have had one previous pregnancy while 39% have had two other pregnancies. Also, within this study 41 % of our respondents have had over two living children while 38% had just one living child, and 19 % of our respondents have had three living children.

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Table 4.2 Obstetric History of Respondents

VARIABLE	Number	(%)
n=335		
Previous Pregnancy of Respondents		
One	108	32.2
Two	133	39.7
Three	59	17.6
Four and above	34	10.1
Missing	1	0.3
Number of living children Of Respondent		
One	127	37.9
Two	139	41.5
Three	63	18.8
Four and above	4	1.2
Missing	2	0.6
Number of ANC Attended		
One	11	3.3
Two	23	6.9
Three	63	18.8
Four and above	237	70.7
Missing	1	0.3
Place of Delivery		
At home	19	5.7
One the way to hospital	10	3.0
At a health center	18	5.4
At a maternity center	18	5.4
At the hospital	268	80.0
Missing	2	0.6
Any complication During pregnancy		
Yes	38	11.4
No	291	86.9
Missing	6	1.8
You admitted during Pregnancy		
Yes	52	15.5
No	270	80.6

4.3 Husband's involvement in Antenatal care

This study showed that 90% of the husbands of our respondents reacted positively to the news of their wives being pregnant with child while just about 5% were either not happy or their wives were not sure of their feelings. About 86% of the husbands of our respondents encouraged their wives to go and book for ante natal care after they had confirmed that they were pregnant, while just about 7.8% did not encourage their wives to book for ANC. Only 37% of our respondents ever accompanied their wives to ante natal clinic while over half of the men 56% never attended ante natal clinic even for once with their wives. About 78% of the women did not experience physical violence and intimidation during pregnancy while 17% complained that they had experienced violence during period of pregnancy. We had 4 in every 5 of the men amounting to about 81% said kind word to their wives especially when they were tired and 83% involved themselves in house chores during the period of pregnancy.

We had 3 out of every 4 men totalling about 75% buying gifts for their wives during pregnancy on their way home from work while 78% of our men gave massages to their wives to ease back pain during pregnancy and 91% of the men supported their wives financially by paying their bills during pregnancy. Over two thirds of our respondents 71.2% attended ANC more than 4 times while just over half of the men 51.2% attended antenatal clinic with their wives just once. Just 14.4% of our men attended ANC four times and above. 85% of our respondent had their husbands living in the same town with them during the course of pregnancy while just 15% lived outside the town when their wives were pregnant. For husbands who attended ANC with their wives two thirds of them 67% attended ANC during the first trimester with 32% attending during the second trimester and just 1% coming in the third trimester. 55% of the husbands followed their wives for ultrasound scan while 45% of the husbands did not accompany their wives for ultrasound scan.

Table 4.3 Husband's involvement in Antenatal care

n=335

VARIABLE	Number	(%)
Husband responded		
Positively to news of Pregnancy		
Yes	303	90.4
No	15	4.5
Not sure	16	4.8
Missing	1	0.3
Husband encouraged You to book for antenatal		
Yes	286	85.4
No	26	7.8
Not sure	21	6.3
Missing	2	0.6
Husband Accompanied You for Antenatal clinic		
Yes	122	36.4
No	187	55.8
Not Sure	25	7.5
Missing	1	0.3
You experienced physical Violence during pregnancy		
Yes	55	16.4
No	260	77.6
Not sure	18	5.4
Missing	2	0.6
Husband said Kind words to you when You were tired		
Yes	268	80.0
NO	56	16.7
Not sure	9	2.7
Missing	2	0.6
Husband did House chores during Your pregnancy		
Yes	279	83.3
No	39	11.6
Not sure	16	4.8

Table 4.3 Husband's involvement in Antenatal care (Cont.)

n=335

VARIABLE	Number	(%)
Husband		
Bought you gifts and presents		
During pregnancy		
Yes	249	74.3
No	63	18.8
Not sure	22	6.6
Missing	1	0.3
Husband gave		
You massages during pregnancy		
Yes	260	77.6
No	57	17.0
Not sure	16	4.8
Missing	2	0.6
Husband met		
Your financial needs		
During pregnancy		
Yes	303	90.4
No	11	3.3
Not sure	19	5.7
Missing	2	0.6
How many antenatal		
Visits did your		
Husband attend		
None	171	51.0
Once	39	11.6
Twice	50	14.9
Three	26	7.8
Four and above	48	14.3
Missing	1	0.3
Timing		
Of your husband's		
Antenatal visit		
1 st Trimester	131	39.1
2 nd Trimester	30	9.0
3 rd Trimester	2	0.6
Missing	139	41.5

4.4 Husband's involvement During Labour and Delivery

This study showed that 80.5% of our women delivery in the hospital with the lowest percentage of 3% delivering on the way to hospital while 63% of our husbands were around during the onset of Labour with just 24% of the men not being around when their wives went into labour. 3 out of every 4 of our respondents and 76.1% agreed that the hospitals did not allow men into the delivery rooms.

A high percentage of about 61% of the husbands of our respondents went on errands for their wives during the period of delivery while 24% did not. 281 (85%) supported their wives financially by paying their hospital bills. 291 (88%) of our respondents had no complication during pregnancy while 38 people which totals 11% had one complication or the other during labour and delivery. 16% of our respondents were admitted during the course of pregnancy while above 80% were not admitted for any reason during the course of pregnancy.

We had 7 in 10 of our respondents totaling about 71% that felt their husband's support was either good or excellent during Labour and Delivery while about 9% felt their Husband's support was either poor or very poor during the period of Delivery and Labour.

Table 4.4: Husband's involvement During Labour and Delivery

n=335

VARIABLE	Number	(%)
Was your husband		
Around during the		
Onset of labour?		
Yes	212	63.3
No	81	24.2
Not sure	2	0.6
Missing	40	12.0
Did the hospital allow		
The presence of your		
Husband in the delivery room?		
Yes	58	17.3
No	255	76.1
Not sure	19	5.7
Missing	2	0.9
Was your husband present		
In the delivery room		
During delivery?		
Yes	77	23.0
No	239	71.3
Not sure	18	5.4
Missing	1	0.3
Your husband supported		
You financially by paying		
Hospital bills during pregnancy		
And labor		
Yes	281	84.6
No	40	11.9
Not sure	11	3.3
Missing	3	0.9
Rate your		
Husband's support during		
Labor and delivery*		
Very Poor	12	3.6
Poor	19	5.7
Good	63	18.8
Very Good	87	26.0
Excellent	151	45.1
Missing	3	0.9

4.5 Husband's involvement During Post Natal Period as well as Baby care

Over half of our respondents 55% said their husbands did not accompany them for postnatal clinic while 119 (35.8) reported their husbands to have accompanied them for post natal. 55% of our respondents which totals 182 women reported that their husbands did not discuss family planning uptake with them while 139 (42%) of the women had discussions with their husbands about family planning. Within this study, 210 (63%)women agreed that their husbands encouraged them to breast feed the infant while 94 women (28%) reported their husbands did not encourage them to breastfeed.62% of the husbands woke up at night to soothe the baby when he/she was crying at night while 34% of the husbands did not wake to soothe the baby at night.

From all our respondents, 282 respondents which amounts to 78% provided financially for their wives during post natal period while 38 (11%) reported their husbands as not providing for their care and upkeep after the birth of the child.60% of our men did learn to change diapers for newborns but just 50% of the husband of respondents did actually change diapers for the new child.About 173 (51%) of the women reported their husbands to have assisted in bathing the child while 145 (45%) did not assist their wives in bathing the new child. 3 out of every 4 (75%) of our women also admitted to receiving help and support from relatives and friends during the period of pregnancy and post-partum.

We had 68% of our respondents which felt the support their husband provided during post natal period was either excellent or very good while 21% felt that their husband provided good support for them during the period. Conversely just about 10% of the women felt the support of their husband was either poor or very poor during the post natal period.

Table 4.5: Table that shows Husband's involvement During Post Natal Period as well as Baby care

n=335

VARIABLE	Number	(%)
Did your husband accompany		
You for Post natal visits?		
Yes	119	35.5
No	184	54.9
Not sure	29	8.7
Missing	3	0.9
Husband discussed		
Family planning uptake		
With you		
Yes	139	41.5
No	182	54.3
Not sure	12	3.6
Missing	2	0.6
Husband encouraged		
You to breastfeed the baby		
Yes	210	62.7
No	94	28.1
Not sure	29	8.7
Missing	2	0.6
Husband woke		
At night to soothe the baby		
Yes	208	62.3
No	113	33.8
Not sure	13	3.9
Missing	1	0.3
Husband provided for		
Financial need post natal		
period		
Yes	262	78.2
No	38	11.3
Not sure	34	10.1
Missing	1	0.3
Did your husband learn		
To change diapers		
Yes	201	60.2
No	123	36.8
Not sure	10	3.0

Table 4.5: Table that shows Husband's involvement During Post Natal Period as well as Baby care (

Cont.)

n=335

VARIABLE	Number	(%)
Your husband changed diapers for the new born		
Yes	167	49.9
No	145	43.3
Not sure	22	6.6
Missing	1	0.3
Your husband assisted In bathing the child		
Yes	173	51.6
No	145	43.3
Not sure	16	4.8
Missing	1	0.3
Your husband helped in Swabbing the umbilical cord		
Yes	124	37.0
No	185	55.2
Not sure	25	7.5
Missing	1	0.3
You got social support From friends and relatives		
Yes	236	70.4
No	53	15.8
Not sure	23	6.9
Missing	23	6.9
Rate your Husband's support during Post natal period		
Very poor	11	3.3
Poor	23	6.9
Good	70	20.9
Very Good	87	26.0
Excellent	143	42.7
Missing	1	0.3

4.6 Women's perception and preference to husband's Involvement in Maternal Care

For our respondents 60 % strongly agreed that Husband's support was necessary during pregnancy, Labour and post natal care, while 29% agreed that this support was needed. This means 89% of our respondents felt a need for the support of their husbands during the period spanning from pregnancy to post-partum with just 3.6% of our women feeling no need for the support of their husbands during this period.

From our results 87% of the women agreed that men had a role to play in family planning just as about 9% did not think it necessary for men to be involved in decisions about family planning. 4 out of every 5 women totalling about 83% wanted their husbands to be present in the delivery room while they were giving birth or going into Labour while about 9% were not in support of husbands being in the delivery room.

The study showed that 7 in every 10 women within this study (70%) felt that a paternity leave will improve the involvement of Husbands in the care of their wives while 1 in every 4 women (25%) did not feel that men needed a paternity leave in order to involve themselves more in the care of their wives. Well over half of our respondent 54% felt that between 1 to 30 days was sufficient for a paternity leave for men who were expecting their wives to deliver a child while 21% felt 31-60 days was better for the leave with the rest opting for 61 to 90 days

. In every 5 women 4 of the women totalling about 81% felt that their husband's support during pregnancy brought them emotional support while 3% did not feel any emotional support from their husband's care. Within this study 45% of our respondents preferred their mothers to give them social support during pregnancy and child birth, while 38% wanted their husband to give them support. 3 in every 5 women amounting to about 61% agreed or strongly agreed that ridicule from other men could affect the level of involvement of their husbands in their care while 20% did not feel that their husbands should be bothered about being ridiculed by friends for caring for their wives during pregnancy and childbirth.

Table 4.6: Women's perception to husband's Involvement in Maternal Care

	Strongly Disagree(%)	Disagree (%)	Undecided (%)	Agree(%)	Strongly Agree(%)	Total
Is husband's support necessary during pregnancy, labor and delivery		12(3.6)	22(6.6)	96(28.7)	205(61.1)	335(100)
Do men have a role to play in family planning?	4(1.2)	26(7.8)	12(3.6)	115(34.4)	117(53.0)	335(100)
Should husband be present during delivery and Labour?	1 (0.3)	29(8.7)	23(6.9)	163(48.8)	118(35.8)	335(100)
Would a paternity leave improve Husband's involvement in maternal care?	13(3.9)	71(21.3)	14(4.2)	151(45.2)	85(25.4)	335(100)
Husband's provision gives Emotional support		10(3.0)	18(5.4)	126(37.7)	180(53.9)	335(100)
Fear of ridicule from friend discourage your husband from being involved in your care	1 (0.3)	69(20.6)	58(17.3)	104 (31.0)	102(30.4)	335(100)

Table 4.7: Women's preference to husband's Involvement in Maternal Care

VARIABLE	Number	(%)
You felt encouraged		
By your husband's support		
During pregnancy, Labor		
And post natal care?		
Yes	273	81.5
No	27	8.1
Not sure	14	4.2
Missing	21	6.3
Days Suitable for a paternity leave		
1-30 Days	181	54.0
31 -60 Days	69	20.6
61 - 90 Days	59	17.6
Missing	26	7.8
Who do prefer to provide social		
Support during pregnancy?		
Relatives	10	3.0
Mother-in-law	22	6.6
Mother	150	44.8
Husband	126	37.6
Others	25	7.5
Missing	2	0.6

4.7 Possible Barriers to Male involvement in maternal health

A large percentage of about 81.3% of our respondents felt that their husband wanted to be involved in their care and just 12% felt their husband were not bothered about being involved in their care. 56 % of the women did not feel that religion encouraged their men to be involved in their care. Respondents felt that health care providers encouraged male participation in maternal care, with about 65% affirming that health care providers did encourage male participation in maternal care.

Men are traditionally not allowed into delivery rooms in Nigeria. 65% of our respondents agreed that men should not be allowed into the delivery room. There was no clear consensus on if culture was a barrier to male involvement with 46.4% agreeing that their culture discouraged male participation in maternal health and 40.7% did say that culture did not discourage male participation.

Table 4.8: Barriers to Husband's involvement in maternal health

n=335

VARIABLE	Number	(%)
Does your Husband feel A need to be involved in your Care?		
Yes	270	80.6
No	40	11.9
Not sure	22	6.6
Missing	3	0.9
Does your religion encourage Male participation in maternal health?		
Yes	95	28.4
No	184	54.9
Not sure	52	15.5
Missing	4	1.2
Health care providers encourage Male participation in maternal Care		
Yes	219	65.4
No	86	25.9
Not sure	27	8.1
Missing	3	0.9
Men allowed into the Delivery room in the health Facility you used		
Yes	86	25.7
No	217	64.8
Not sure	29	8.7
Missing	3	0.9
Culture discourages male Participation in maternal Health		
Yes	155	46.3
No	136	40.6
Not sure	43	12.8

4.8 Association between Husband's involvement in Pregnancy and Socio demographic factors

Respondents with primary school level of education had low involvement of their husbands care for their wives to be 77%. Respondents who attended secondary school totalling 78 (56%) had high involvement of their husbands in their care. For respondents who attended tertiary institution they had a marginally higher high husband involvement of 59% than those that went to just Secondary school. Men who were living with their wives had a higher involvement of their husbands of 58% than men not living with their wives who had a high involvement of 32% in the care of their wives.

In homes making an average income of 1N- 10,000N there was an almost even percentage of involvement of the husband of their husband during pregnancy. Low involvement of husbands accounted for 52% of our men while 48% had higher involvement in their wives care. For homes were N10,001- N50,000 was being made on a monthly basis 61% of the husbands had high involvement in their wives care while 39% had low involvement . All the 18 respondents who indicated an monthly income of N100,001 and above had high involvement in their wives care.

There were 133 (63%) who indicated that they were of the Christian faith and had high husband involvement in their care while 45% who were Muslim faithful had High husband involvement in their care. Among husbands of respondents who attended secondary school, about 64(59%) had high involvement in their wives care while 120(57%) of those who attended tertiary institution had high involvement in their wives care. Women with one previous pregnancy had high involvement of 51% of their husbands in their care, while those with three previous pregnancies had 68% of their husbands highly involved in their care. For women with four and above previous pregnancies just about 1 in 4 (25%) of their husbands were highly involved in their care during the period of pregnancy.

Respondents which were below 30 years of age had about 58% of their husbands being highly involved in their care while 90 (62%) of women between 30 and 35 years had high involvement of their husbands in their care. Women who were older than 35 years of age had 68% of their husbands having low involvement in their care during the period of pregnancy. For husbands which were less than 30years 66% of them had high involvement in their wives care while men between the ages of 30 to 39 years had 62% of the men being highly involved in their wives care during pregnancy. For men greater than 40 years 56 (59%) of them had low involvement in the care of their wives during pregnancy.

Table 4.9 Association between Husband's involvement in Pregnancy and Socio demographic factors

Husband's Involvement in Pregnancy	Low Involvement N(%)	High Involvement N (%)	χ^2	P- Value
Age of Respondent				
Less than 30 years of age	57 (41.6)	80 (58.4)	13.28	0.001
30 to 35 years	56 (38.4)	90 (61.6)		
Greater than 35 years	32 (68.1)	15 (31.9)		
Age of Husband of Respondent				
Less than 30 years	13 (34.2)	25 (65.8)	12.69	0.002
30 to 39 Years	73 (38.2)	118 (61.8)		
Greater than 40 years	56 (58.9)	39 (41.1)		
Two	47(34.3)	90(65.7)		
Three and above	34 (50.7)	33 (49.3)		
Level Of Education Of Respondent				
Primary School	10(76.9)	3(23.1)	6.31	0.04
Secondary School	62(44.3)	78(55.7)		
Tertiary Institution	72(41.1)	103(58.9)		
Ethnicity of Respondent				
Yoruba	95(44.6)	118(55.4)	4.91	0.18
Others	50(42.7)	67(57.3)		
Are you currently living with your partner/husband				
No	19(67.9)	9(32.1)	7.02	0.01
Yes	126(41.9)	175(58.1)		
Does your Husband Work in the Same Town where you Live				
No	26 (61.9)	16 (38.1)	6.89	0.01
Yes	111 (40.4)	164 (59.6)		
Number of Previous Pregnancies				
One	52 (49.1)	54 (50.9)	16.00	0.001
Two	50 (38.2)	81 (61.8)		
Three	19 (32.2)	40 (67.8)		

Table 4.9 Association Between Husband's involvement in Pregnancy and Socio demographic factors (Cont.)

Husband's Involvement in Pregnancy	Low Involvement N(%)	High Involvement N (%)	X ²	P- Value
Were you living with your partner during pregnancy?				
No	10(62.5)	6(37.5)	2.40	0.12
Yes	134(42.8)	179(57.2)		
Family Setting of Respondent				
Monogamy	132 (43.7)	170 (56.3)	0.08	0.78
Polygamy	13 (46.4)	15 (53.6)		
Polygamy	13 (46.4)	15 (53.6)		
Average Family Income				
IN – 10,000N	15 (51.7)	14(48.3)	27.44	<0.001
10,001N- 50,000N	73(38.8)	115 (61.2)		
50,001N- 100,000N	57(60.6)	37(39.4)		
100,001N and above	0 (0.0)	18(100)		
Religion of Respondent				
Christianity	78 (37.0)	133 (63.0)	13.42	0.001
Islam	62 (54.9)	51 (45.1)		
Husband's Level of Education Attained				
Primary School	8 (100)	0 (0.0)	10.76	0.01
Secondary School	44 (40.7)	64 (59.3)		
Tertiary Institution	90 (42.9)	120(57.1)		

4.9: Association Between Husband's Involvement in Labour and Socio demographic factors

Respondents living with partner had 225(72%) of their husbands highly involved in their care while 75% of the respondents not living with their husbands had low involvement of their husbands in their care during the period of labour. 25% of our husbands who went to primary school were highly involved in their wives care during labour while 74(69%) of our husbands who attended just secondary school were highly involved in their wives care. For husbands who went to tertiary institution of any kind, 150 (71%) of them had high involvement in the care of their wives during the period of labour.

For respondents who had one previous pregnancy 71 (66%) had high involvement of their husband in their care during labour, while for those with two previous pregnancies , 93(71%) had high involvement of their husbands in their care during labour. Women who had previous pregnancies of three and above had 84% of husbands being highly involved in their care. Women who had one living child and whose husbands were highly involved in their care during labour were about 83(65.4%). About 105 (77%) who had two children had high involvement of their husband in their care, while 39 (63%) of women with three children had their husbands highly involved in their care during labour.

Husbands number of antenatal visits seem to affect their involvement in labour with husbands attending one having 66% high involvement in their wives care during labour and those attending twice have 75% high husband involvement in their care. For husbands who came to ANC three times, 19(76%) of them were highly involved in their wives care during labour while 88% of the men who ventured to attend ANC up to 4 time and above had high involvement in their wives care during labour and childbirth.

Women who their husband worked in the town where they lived had about 72% of their husbands highly involved in their care during labour while just about 21(53%) of men who worked in different towns from where their wives live could attain such high level of involvement in their wives care during labour. Women who were currently living with their husbands had high husband involvement of 72% in their care during labour while those who did not live with their husbands had about 56% of their husbands having low involvement in their care during delivery and childbirth.

The younger a husband was the more involved he seemed to be in his wife's care during labour as 80% of men less than 30 years old had high involvement in their wives care with 76% of those men between 30 and 39 years also provided high involvement in their wives care during delivery. Just about 53% of men greater than 39 years of age offered high involvement in the care of their wives during the period of Labour. For women less than 30 years 88(65%) of them reported high involvement of their husbands in their care while 115(79%) of women between 30 and 35 years of age reported such high level of involvement of their husbands in their care during the period of Labour. Women greater than 35 years of age indicated that just about 55% of them had high involvement of their husbands in their care during the period of Labour.

Table 4.10: Association between Husband's Involvement in Labour and Socio demographic factors

Husband's involvement in Labour	Low involvement n(%)	High involvement N(%)	χ^2	P- Value
Level of Education of Respondent				
Primary School	2 (14.3)	12(85.7)	2.37	0.31
Secondary school	47 (33.6)	93 (66.4)		
Tertiary Institution	52 (29.9)	122(70.1)		
Ethnicity and Husband's Involvement During Labour				
Yoruba	67(31.5)	146 (68.5)	12.51	0.006
Igbo	19(21.1)	71 (78.9)		
Hausa	2 (40)	3 (60)		
Others	13 (59.1)	9 (40.9)		
Marital status of Respondents				
Single	1 (25)	3 (75)	3.85	0.15
Married	96 (29.9)	225 (70.1)		
Separated	100 (30.4)	229 (69.6)		
Living with Partner during Pregnancy				
No	12 (75)	4 (25)	15.82	< 0.001
Yes	88 (28.1)	225 (71.9)		
Family Setting of Respondent				
Monogamy	94 (31.2)	207 (68.8)	0.47	0.33
Polygamy	7 (25)	21 (75)		
Average Family Income				
1N-10,000N	9 (30)	21 (70)	6.34	0.100
10,001N-50,000N	67 (35.8)	120 (64.2)		
50,001- 100,000N	22(23.4)	72 (76.6)		
100,001N and above	3 (16.7)	15 (83.3)		

Table 4.10: Association between Husband's Involvement in Labour and Socio demographic factors
(Cont.)

Husband's involvement in Labour	Low involvement n(%)	High involvement N(%)	X ²	P- Value
Previous Pregnancies of Respondents				
One	37 (34.3)	71 (65.7)	12.75	0.005
Two	38 (29.0)	93(71.0)		
Three	9 (15.8)	48(84.2)		
Four and above	17 (15.0)	17(50.0)		
Number of Living Children of Respondents				
One	44(34.6)	83 (65.4)	9.81	0.02
Two	31(22.8)	105 (77.2)		
Three	23 (37.1)	39 (62.9)		
Four and above	3 (75.0)	1 (25.0)		
Husband's Number of Antenatal Visits				
Once	13(33.3)	26(66.7)	13.12	0.01
Twice	12 (24.5)	37 (75.5)		
Three times	6 (24.0)	19 (76.0)		
Four and Above	6 (12.5)	42 (87.5)		
Age of Respondent				
Less than 30 years	48 (35.3)	88(64.7)	12.69	0.002
30 to 35 years	31 (21.2)	115(78.8)		
Greater than 35 years	22(45.8)	26(54.6)		
Husband work in the same town where you live				
No	19 (47.5)	21(52.5)	5.97	0.02
Yes	79 (28.4)	199 (71.6)		
Religion of Respondent				
Christianity	55 (26.1)	156 (73.9)	10.12	0.006
Islam	46 (40.7)	67(59.3)		
Husband's Level of Education Attained				
Primary School	6 (75.0)	2 (25)	7.70	0.02
Secondary School	33 (30.8)	74(69.2)		
Tertiary Institution	61(28.9)	150(71.1)		

Table 4.10: Association between Husband's Involvement in Labour and Socio demographic factors (Cont.)

Husband's involvement in Labour	Low involvement n(%)	High involvement N(%)	X ²	P- Value
Are you living with your Partner/ Husband				
No	15 (55.6)	12 (44.4)	8.54	0.003
Yes	86 (28.5)	216 (71.5)		
Age of Husband				
Less than 30 years	8 (20.5)	31(79.5)	17.41	< 0.001
30 to 39 years	46 (24.1)	145(75.9)		
Greater than 39 years	44(46.8)	50(53.2)		

4.10 Association between Husband's Involvement during post natal care and Socio demographic factors

Respondents of the Yoruba ethnic groups have 46% high involvement of their husbands in post natal care of their wives while the Igbo ethnic group reported a percentage of 73 for high involvement of husband in post natal care of their wives. For women living with their husbands 57% of them reported a high involvement of their husbands in their care while just about 18% of those not living with their husbands could provide the same high level of involvement of their husbands in post natal care.

Family setting of respondents showed that women in monogamous relationships which were about 171(56%) reported high involvement of their husbands in their care during post natal period while those in polygamous homes and relationships had just 21% of high involvement of their husbands in their care during the period of post natal care. For men who had attended secondary school just about half of them 52% offered high level of involvement in the care of their wives during post natal period. Among men who attended tertiary institution, 119 (57%) of them were highly involved in the care of their wives during the post natal period.

Women who had one previous pregnancy reported 40% of their husbands offered high involvement in their care during post natal period. About 84(63%) of women who had two previous pregnancies had their husbands highly involved in their care during the post natal period. Respondent with four and above previous pregnancies had 58% involvement of their husbands to be high during the post natal period.

Table 4.11: Association between Husband's Involvement during post natal care and Socio demographic factors

Husband's involvement in Labour	Low involvement n(%)	High involvement n(%)	χ^2	P- Value
Age of Respondent				
Less than 30 years	15 (38.5)	24 (61.5)	1.27	0.53
30 to 39 years	90 (47.1)	101 (52.9)		
Greater than 40 years	47 (49.0)	49 (51.0)		
Level of Education of Respondent				
Primary school	4 (30.8)	9 (69.2)	1.38	0.50
Secondary School	67 (47.5)	74 (52.5)		
Tertiary Institution	83 (47.2)	93 (52.8)		
Ethnicity				
Yoruba	115 (53.7)	99 (46.3)	18.68	<0.001
Igbo	25 (27.5)	66 (72.5)		
Hausa	3 (60.0)	2 (40.0)		
Others	12 (54.5)	10 (45.5)		
Marital Status				
Single	2 (50.0)	2 (50.0)	1.31	0.52
Married	150 (46.4)	173 (53.6)		
Separated	3 (75.0)	1 (25.0)		
Are you Currently Living with Your Husband				
Yes	131 (43.2)	172 (56.8)	15.60	<0.001
No	23 (82.1)	5 (17.9)		
Were you living with your partner during Pregnancy?				
Yes	143 (45.4)	172 (54.6)	3.34	0.07
No	11 (68.8)	5 (31.3)		
Average Family Income				
1N – 10,000N	13 (43.3)	17 (56.7)	1.54	0.67
10,001 – 50,000N	90 (47.6)	99 (52.4)		
50,001N -100,000N	45 (47.9)	49 (52.1)		
100,001N and above	6 (33.3)	12 (66.7)		

Table 4.11: Association between Husband's Involvement during post natal care and Socio demographic factors (Cont.)

Husband's involvement in Labour	Low involvement n(%)	High involvement n(%)	X ²	P- Value
Family Setting of Respondent				
Monogamy	132 (43.6)	171 (56.4)	12.63	< 0.001
Polygamy	22 (78.6)	6 (21.4)		
Religion of Respondent				
Christianity	89 (42.0)	123 (58.0)	5.28	0.07
Islam	63 (55.3)	51 (44.7)		
Others	3 (50.0)	3 (50.0)		
Husband's Level of Education Attained				
Primary School	7 (87.5)	1 (12.5)	6.36	0.04
Secondary School	53 (48.2)	57 (51.8)		
Tertiary Institution	91 (43.3)	119 (56.7)		
Does your husband live and work in the same town where you live?				
No	24 (57.1)	18 (42.9)	1.866	0.172
Yes	127 (45.8)	150 (54.2)		
Number of living children				
One	69 (54.8)	57 (45.2)	5.715	0.057
Two	59 (42.4)	80 (57.6)		
Three and above	26 (39.4)	40 (60.6)		

4.11 Association between Socio demographic factors and Husband's involvement during pregnancy

The results presented in Table 4.13 below, shows that occupation, religion, age of husband of respondent are predictors for involvement of husbands in the maternal care of their wives during the period of pregnancy. The table shows that respondents of the Islamic faith are 4 times less likely to significantly want their husbands to be involved in their maternal care than respondents which are of the Christian faith. (95%CI=0.130-0.563, $p < 0.001$) while, respondents who were from other faiths which were not Christian or Muslim were statistically 17 times less likely to want their husband to be involved in their care as compared with their fellow respondents which were of the Christian faith. (95%CI=0.005-0.85, $p = 0.038$).

The table shows that respondents who their husbands were 40 years and above were six times significantly less likely to want their husbands involved in their care than respondents who their husbands were less than 30 years. (95%CI=0.053-0.596, $P = 0.005$).

Table 4.12: Association between Socio demographic factors and Husband's involvement during pregnancy

VARIABLE	OR	95% C.I		P-Value
		Lower	Upper	
Religion of Respondent				
Christianity (Ref.)				
Islam	0.27	0.130	0.56	<0.001
Number of Previous Pregnancies				
Four (Ref.)				
One	4.14	0.742	23.08	0.11
Two	4.51	0.987	20.60	0.05
Number of living children				
One (Ref.)				
Two	0.98	0.055	2.67	1.00
Does your husband live and work in the same town where you live?				
No (Ref.)				
Yes	1.29	0.531	3.13	0.58
Age of Respondent				
Less than 30 years (Ref.)				
30 to 35 years	1.43	0.690	2.97	0.34
Greater than 35 years	0.44	0.154	1.27	0.13
Age of Husband of Respondent				
Less than 30 years (Ref.)				
30 to 39 years	1.20	0.103	0.41	0.14
40 years and above	0.60	0.005	0.18	0.05

4.12 Association between Socio demographic factors and Husband's involvement during Labour

The results presented in Table 4.13 below, shows that the number of antenatal visits which the husband attended, the age of the respondent and age of the husband of the respondent are predictors for involvement of husbands in the maternal care of their wives during the period of Labour. The table 4.13 shows that respondents whose husbands attended ANC at least twice during the course of pregnancy were two times statistically more likely to want their husbands involved in their care as opposed to those whose husbands did not come for the ANC even for once (95%CI=1.369-13.569, $p < 0.013$). Respondents whose husbands followed for ANC about three times are statistically 7 times more likely to want such husbands to be involved in their labour than respondents whose husbands did not come for ANC even for once. (95%CI=1.835-25.620, $P=0.004$). As also seen within this study respondents whose husbands attended ANC four times and above are even 11 times statistically more likely to want such husbands involved in their care during labour as opposed to those whose husbands did not attend ANC even for once (95% CI=3.131-40.510 $P < 0.001$)

Table 4.13 also showed age of the respondent to be a predictor to husband's involvement in care for their wives during labour as women between the age of 30 to 35 are about 4 times statistically more likely to prefer their husbands to be involved in their maternal care during the period of labour as opposed to respondents who are less than 30 years old. (95%CI=1.589-8.308 $P=0.002$). The age of the husband of the respondent is also a predictor for husband involvement. Results from Table 4.13 showed that men who were between the ages of 30 to 39 years were statistically 4 times less likely to be involved in the care of their wives (95%CI=0.092-0.877 $P=0.029$) than men who were less than 30 years while men who had ages which were greater than 40 were statistically 9 times less likely to be involved in the care of their wives when compared with men who were aged less than 30 years. (95% CI=0.027-0.436 $P=0.002$)

Table 4.13: Association between Socio demographic factors and Husband's involvement during Labour

VARIABLE	OR	95% C.I		P-Value
		Lower	Upper	
Ethnicity of Respondent				
Yoruba (Ref.)				
Igbo	1.08	0.42	2.41	0.99
Hausa	0.27	0.03	2.11	0.21
Others	0.18	0.04	0.78	0.02
Were you living with your partner during pregnancy?				
Yes(Ref.)				
No	0.35	0.073	1.68	0.19
Respondent Living with Partner				
Yes (Ref.)				
No	1.47	0.463	4.67	0.51
Religion of Respondent				
Christianity (Ref.)				
Islam	1.18	.552	2.50	0.68
Husband's level of Education attained				
Primary School (Ref.)				
Secondary School	0.75	.084	6.63	0.80
Tertiary Institution	0.56	.063	4.98	0.60
Number of previous pregnancies				
Four and above (Ref.)				
One	0.05	0.004	0.62	0.02
Two	0.08	0.009	0.65	0.02
Three	1.34	0.297	6.02	0.71
Husband's number of Antenatal Visits				
None (Ref.)				
One	2.43	0.806	7.33	0.12
Two	4.30	1.369	13.53	0.01
Three	6.86	1.835	25.62	0.00

Table 4.13: Association between Socio demographic factors and Husband's involvement during Labour (Cont.)

VARIABLE	OR	95% C.I		P-Value
		Lower	Upper	
Does your husband work in the same town where you live?				
No (Ref)				
Yes	1.25	0.456	3.42	0.67
Age of Respondent				
Less than 30 years (Ref.)				
30 to 35 Years	3.63	1.589	8.31	0.00
Greater than 35 years	1.41	0.411	4.87	0.58
Age of Husband of Respondent				
Less than 30 years (Ref.)				
30 to 39 years	0.28	0.092	0.88	0.03
Greater than 40 years	0.11	0.027	0.44	0.00
Number of living children of Respondent				
One (Ref.)				
Two	2.15	0.632	7.32	0.22
Three and above	0.19	0.025	1.44	0.11

4.13: Association between socio demographic characteristics and preference of women with respect to husband's involvement in wives' care during pregnancy, labour and post-partum

Women who attended primary 14(100%) all preferred their husbands to be lowly involved in the maternal care in general while of those who attended secondary school scores were almost even on both sides as 50% preferred high involvement of husband and another 50 % wanted low involvement of husbands in their care. The same can be said for women who attended tertiary institution with 50 % wanting high involvement of their husbands and 50 wanting husband involvement in their care to be low.

Respondents with low family income of 1N to 10,000N ,25(83%) of them preferred husbands to have low involvement in their care while 114(60%) of those earning an average family income of 10,001N – 50,000N wanted their husbands to be highly involved in their care. Those earning 50,001N to 100,000N , 27(28%) of them wanted high level of involvement of their husbands in their maternal care.

Among our respondents, 111(52%) of the Christians wanted a high level of involvement from their husband in their maternal care while 48(42%) of the respondents who were Muslims wanted such high level of involvement of their husbands in maternal care. With respect to the husband's level of education attained, respondents preferred about the same thing with 50% of respondents with tertiary graduate husbands wanting high level involvement of their husband in their care and 48% of wives with secondary school leavers for husbands also wanting high level of involvement of their husbands in their care.

Among respondents with one living child, 77(61%) preferred low involvement of their husbands in their care from pregnancy to postpartum. Women with two living children, 76(55%) wanted a high level of involvement of their husbands in their care while 49% of women with three children and above wanted a high level of involvement of their husbands in their care. About 63 (58%)of our women who had just one previous pregnancy wanted a low level of involvement of their husband in their care, while 77(58%) also wanted low involvement of their husbands in their maternal care. Within this study 53% of the women who had four and above pregnancies wanted low involvement of their husbands in their care

Table 4.14: Association between socio demographic characteristics and preference of women with respect to husband's involvement in wives' care during pregnancy, labour and post partum

Variable	Low preference for Husband's involvement in care	High preference for Husband's involvement in care	X ²	p- Value
Age of Respondent	63 (45.7)	75 (54.3)	4.513	0.105
30 to 35 years	86 (58.1)	62 (41.9)		
Greater than 35years	26 (54.2)	22 (45.8)		
Age of Husband of respondent			0.669	0.716
Less than 30 years	20 (51.3)	19 (48.7)		
30 to 39 years	99 (51.3)	94 (48.7)		
Greater than 40	54 (56.3)	42 (43.8)		
Level of Edu. Of Respondent			13.272	0.001
Primary school	14 (100.0)	0 (0.0)		
Secondary school	71 (50.4)	70 (49.6)		
Tertiary	89 (50.3)	88 (49.7)		
Ethnicity			4.224	0.238
Yoruba	111 (51.6)	104 (48.4)		
Igbo	45 (48.9)	47 (51.1)		
Hausa	4 (80.0)	1 (20.0)		
Others	15 (68.2)	7 (31.8)		
Marital status of Respondent			1.264	0.536
Single	2 (50.0)	2 (50.0)		
Married	172 (52.9)	153 (47.1)		
Separated	1 (25.0)	3 (75.0)		
Were you living with your husband during pregnancy?			2.972	0.085
No	5 (31.3)	11 (68.8)		
Yes	169 (53.3)	148 (46.7)		
Average family income			39.864	< 0.001
1N – 10,000N	25 (83.3)	5 (16.7)		
10,001N – 50,000N	76 (40.0)	114 (60.0)		
50,001N – 100,000N	68 (71.6)	27 (28.4)		

Table 4.14: Association between socio demographic characteristics and preference of women with respect to husband's involvement in wives' care during pregnancy, labour and post partum (Cont.)

Variable	Low preference for Husband's involvement in care	High preference for Husband's involvement in care	X ²	p- Value
Were you living with your husband during pregnancy?				
No	5 (31.3)	11 (68.8)	2.972	0.085
Yes	169 (53.3)	148 (46.7)		
Average family income				
IN = 10,000N	25 (83.3)	5 (16.7)	39864	< 0.001
10,001N – 50,000N	76 (40.0)	114 (60.0)		
50,001N – 100,000N	68 (71.6)	27 (28.4)		
100,001N and above	6 (33.3)	12 (66.7)		
Family setting of Respondent				
Monogamy	160 (52.5)	145 (47.5)	0.062	0.803
Polygamy	14 (50.0)	14 (50.0)		
Religion of Respondent				
Christianity	103 (48.1)	111 (51.9)	8.395	0.015
Islam	66 (57.9)	48 (42.1)		
Husband's level of Education Attained				
Primary school	8 (100.0)	0 (0.0)	7.72	0.021
Secondary School	57 (51.8)	53 (48.2)		
Tertiary Institution	106 (50.0)	106 (50.0)		
Does your husband work in the same town where you live?				
No	21 (50.0)	21 (50.0)	0.079	0.778
Yes	146 (52.3)	133 (47.7)		

Table 4.14: Association between socio demographic characteristics and preference of women with respect to husband's involvement in wives' care during pregnancy, labour and post partum (Cont.)

Variable	Low preference for Husband's involvement in care	High preference for Husband's involvement in care	χ^2	p- Value
Previous Pregnancy of Respondents				
One	63 (58.3)	45 (41.7)	16.30	0.001
Two	77 (57.9)	56 (42.1)		
Three	17 (28.8)	42 (71.2)		
Four and above	18 (52.9)	16 (47.1)		
Are you living with your husband/ partner				
No	10 (35.7)	18 (64.3)	3.476	0.062
Yes	165 (54.1)	140 (45.9)		
Number of living children				
One	77 (60.6)	50 (39.4)	6.308	0.043
Two	63 (45.3)	76 (54.7)		
Three and above	34 (50.7)	33 (49.3)		

4.14 Association between number of Babies on Scan result and Husband's Involvement in Pregnancy

Results of our study showed that husbands with scan results which indicated that the couple were expecting a single child had a high involvement of about 68% while husbands which were expecting multiple children had a higher involvement in their wives care of about 82% .The results showed statistical significance.

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Table 4.15 Number of Babies on Scan result and Husband's Involvement in Pregnancy

Number of babies on scan result	Low Involvement of Husband	High Involvement of Husband	χ^2	P- Value
Single child	91 (32.5)	189 (67.5)	3.937	0.047
Multiple children	9 (18.4)	40 (81.6)		

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4.15 Association between Husband's involvement in Antenatal care and Admission during pregnancy

On the table 4.16 below we can see that 60 % of our respondents who were not admitted during the course of their pregnancy had their husbands highly involved in their care, while for women who were admitted a higher percentage of 56% of their men offered low involvement in the care of such women.

The results on this table were statistically significant.

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Table 4.16 : Association between Husband's involvement in Antenatal care and Admission during pregnancy

Admission during pregnancy	Low involvement of Husband n(%)	High Involvement of Husband n(%)	χ^2	P- value
No	106 (39.8)	160 (60.2)	5.657	0.017
Yes	30 (57.5)	22 (42.3)		

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4.16 Association between Husband's involvement in Labour and complication during labour and delivery

Table 4.17 shows that women without any complication during delivery had a high percentage of High involvement of Husbands in their care which was about 70% while those with complications the Husbands involvement had come down by 6% to 64.9% but the results were not statistically significant.

Table 4.17 : Association between Husband's involvement in Labor and complication during labor and delivery

Complication during Labour and Delivery	Low involvement of Husband n (%)	High Involvement of Husband n (%)	X²	P- value
No	86 (29.9)	202 (70.1)	0.431	0.512
Yes	13 (35.1)	24 (64.9)		

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CHAPTER FIVE

5.1 DISCUSSION

This study found that the level of participation of men in the care of their wives during pregnancy, labour and post-partum was low and could still be improved upon. Just about a third of the husbands of our respondents accompanied their wives for ANC and about half of the men went with their wives for ultrasound scan. About two-thirds of the husbands of our respondents were around during the onset of Labour and followed their wives to the hospital when she went to deliver the baby. About one-third of the husbands followed their wives for Post natal clinic which included breastfeeding, family planning and immunization clinics. Pregnancy and childbirth seemed to be viewed as purely a women's affair. Evidence showed that women preferred their husbands as support persons during labour (Morhason-Bello 2007). Psychosocial support has been associated with better outcomes of delivery such as reduced C-section rate, shorter duration of labour and less painful labour as well as earlier initiation of breast feeding Morhason-Bello et al (2009).

Within our study we found out that two thirds of the husbands were reportedly present during the onset of labour and did accompany their wives to the hospital for delivery and also ran errands for their wives during labour. This is commendable bearing in mind that in traditional Nigerian society men are not allowed into the delivery rooms with their wives yet there is room for improvement. These findings were expected as it supports the submissions of Adenike et al (2013) that the involvement of men in the health care of their wives was low as only a quarter of respondents had ever followed their wives to family planning clinics, antenatal clinics and delivery rooms. These results show that men still lag behind in their responsibilities in improving maternal health and health workers have work to do in encouraging men to be more involved in the care of their wives during pregnancy and child birth as the benefits outweigh whatever cost there is to such support.

In this study about one third of the husbands accompanied their wives to post natal clinic. When it came to post natal care, responses showed that about two thirds of the men encouraged their wives to breastfeed the new born baby. About half of the men discussed family planning uptake with their wives and close to two thirds of the women reported their husbands woke at night to soothe the baby when he/she was crying. As expected a high percentage of the men reportedly settled any financial obligation involved in PNC of their wives. A little above half of the men reportedly knew how to and changed diapers for their infants, and could also bathe the infant.

This study as part of its objectives, set out to determine the preference and expectation of women with respect to their husband's involvement in their care during pregnancy and childbirth. Findings from this

research showed that women wanted their husbands deeply involved in their care as a very high percentage agreed that the support of their husbands gave emotional security and that women are better off at this trying period with their husband's support. The results of this study showed that women in this part of the country were open to the idea of a paternity leave for their husbands in order to improve their involvement in the care of their wives. This submission supports findings of Sokoya et al (2014) whose study revealed that women considered husbands' support during pregnancy, labour and delivery important to be necessary. Some of the effects of husbands support as described by the women in Sokoya et al's study are encouragement, emotional security and lower level of stress. Men should be further encouraged by the health providers and collaborators at community, state and National level to be more involved in the care of their wives during this period.

Barriers towards the involvement of men according to this study mainly were culture and religion as well as ridicule from other men. These were the possible barriers to the involvement of men in the care of their wives. This findings were supported by a study conducted in Malawi by Kululanga et al (2012) where some of these barriers did come to play including culture. Elderly women in Malawi Considered it a thing of shame for a man to watch his wife deliver a child. This result is expected in line with the context of traditional African societies which exists with its own peculiar norms and specifically assigned gender roles. A study done in Northern Nigeria by Zubairu et al (2010) opines that some of the reasons for low participation of husbands to include: ignorance, poverty, cultural and religious factors. A lot of enlightenment has to be done to disabuse the minds of men in this part of the world and encourage them to involve themselves more in the care of their wives with health care providers also providing concrete roles for men to fit into during pregnancy and childbirth.

Results of this study showed that women with high involvement of their husbands in their care had lesser complications of pregnancy and childbirth as compared to women with low involvement of husbands in their care confirming that spousal support and improved outcomes of delivery was related as postulated by Morhason -Bello et al (2009). This is an important submission as this means that effort has to be intensified to get more husbands involved in the care of their wives as a way of improving outcomes of pregnancy.

Husband's Involvement During Ante Natal Care

Studies have shown husbands and men to be critical partners for the improvement of maternal health and reduction of maternal mortality can be clearly demonstrated in the area of antenatal care (ANC) of which their social, emotional and economical inputs cannot be underestimated Adenike, et al (2013). Within our study the respondents agreed that 9 out of 10 of their husbands were happy to hear that they were pregnant while a high percentage of the husbands of respondents encouraged their wives to book for and attend ANC. Our study showed that a very low percentage of men ever accompanied their wives to ANC showing that Nigerian men were yet to fully grasp the importance of psychosocial support in the care of

their wives. This finding is similar to what Adenike et al reported in 2013 as their results showed only about 24% of men had ever accompanied their wives on ANC. Study conducted by Obi et al (2013) identified low level of male involvement with regard to ANC with marked improvement in attendance being reported during labour/emergencies as against ANC attendance.

Education plays a big role in the level of involvement of our men in the care of their wives. Response from participants of our study showed that men with tertiary institution level of Education had a higher level of involvement of their husband in their care than those who went to either secondary or primary school. Income seems to have a profound effect on the involvement of husbands in the care of their wives. The analysis done on our study data showed that men earning above a hundred thousand naira as monthly family income had high involvement in the care of their wives and the level of involvement seemed to decrease with income. Our results showed that respondents of the Muslim faith were four times less likely than their counterparts from the Christian faith to want the involvement of their husbands in their care. The reasons for this seems to have been stated by Vehviläinen-Julkunen and Emelonye (2014) who said that attitude of spouses toward husband's participation in maternal care is strongly opposes physical presence of husbands in the labour room during delivery due to the strong cultural and religious effects of Islamic law among Muslim faithful especially as seen among husbands in the Northern part of the country. Older women from forty years and above seemed to want less involvement of their husbands in their care as opposed to women with younger husbands. Women with younger husbands wanted such husbands completely involved in their care.

Husband's Involvement During Labour

For Partners who were co-habiting i.e. living together, this study showed husbands in such relationships had a higher involvement in their wives care during labour. This goes to prove the importance of man and wife living together to aid in bonding of the couple. Education also had a role to play as couples within which the husbands attended tertiary institution had a higher percentage of men with high involvement in their wives care during labour. This goes to show that the more educated a man was the more he understood the importance of social support for the wife during the period of labour and pregnancy. With increasing number of pregnancies husbands of respondents within this study got more involved in the labour of their wives. This might be because as the partners of our respondents went through the process of labour they seemed to understand more the dangers involved in labour and thereby involve themselves even more in the care of their wives during labour. These findings were corroborated by Vehviläinen-Julkunen and Emelonye (2014) who said that education is seen as a very significant factor in determining spousal participation in delivery as an evident in the finding that most men that accompany their wives to the hospital in Nigeria are literate and are well informed

about the birth processes. This contrasts with the findings that illiterate spouses that constitute the higher percentage of spouses in Nigeria do not accompany their wives but hold the belief that they only have financial obligation towards childbirth

As expected by the researcher, the number of times a husband attended ANC with the respondent played a role in the level of involvement of the husbands in the care of their wives during labour. Results showed us that with increasing number of visits to the ANC the men had higher scores and higher level of involvement in their wives care during the period of labour. Living in the same town with the husbands of the respondent was also a factor responsible for the level of involvement of the husband in the wives care. Within couples who lived in the same town we observed a higher percentage of such husbands offered high level of involvement in their wives care during labour and delivery while men not living in the same town with their wives could not offer such high percentage of high level of involvement in the care of their wives.

Within this study we observed that age of the wife to be a predictor to husband's involvement in care for their wives during labour as women between the age of 30 to 35 are about 4 times statistically more likely to prefer their husbands to be involved in their maternal care during the period of labour as opposed to respondents which are less than 30 years old. Age of the husband of our respondent also played a role as results showed that men who were between the ages of 30 to 39 years were statistically 4 times less likely to be involved in the care of their wives than men who were less than 30 years while men who had ages which were greater than 40 were statistically 9 times less likely to be involved in the care of their wives when compared with men who were aged less than 30 years. This suggests that the older men got the more involved they got with their wives especially in terms of providing social support for such wives during the period of labour.

Husband's involvement during Post natal care

Culture plays a role on post natal involvement of husbands in the care of their wives. Respondents of the Igbo ethnic group reported a high level of involvement of their husbands in the care during post natal period while respondents from the Yoruba ethnic group had about half of their husband offering high involvement in the care of their wives. This result seemed to suggest that cultural differences play a role in the care offered by husbands for their wives. For women living with their husbands a little over half of them reported a high involvement of their husbands in their care while just about a low percent of those not living with their husbands could provide the same high level of involvement of their husbands in post natal care.

Relationship status whether monogamous or polygamous in nature also had a role to play in the level of care offered by husbands towards their wives during the post natal period. Respondents in monogamous relationships reported a high level of involvement of their husbands in their care during

post natal period while those in polygamous homes and relationships had a much lower percentage of their husbands offering high involvement in their care during the period of post natal care.

Results of this study showed that women without any complication during delivery had a high percentage of High involvement of Husbands in their care while those with complications had a higher percentage of low involvement of husbands but the results were not statistically significant. This goes to show that husband involvement in maternal care goes a long way in bringing forth better outcomes of pregnancy. Within our study, respondents who had high involvement of husband in their care had better outcomes with a much lesser number of such participants having one complication or the other this supports earlier findings by Morhason-Bello et al (2007) that Psycho-social support has been shown to be associated with better delivery outcomes.

Preferences and Barriers towards Male involvement in Maternal care of their Women from Pregnancy to Post-partum

This study was concluded by examining the preferences of women and sampling their opinions towards the involvement of their husbands in their care during the period of pregnancy through to post-partum. The study went a step further to determine the possible barriers if there were any towards the involvement of men in the maternal care of the women involved in this study. Literature has shown a variety of factors that hinder husbands from participating in maternal health care. Family income also seems to play a role in preference of women as women in families earning just below N10,000 wanted more of low involvement of husbands in their care. Women who were in families earning an upwards of above N10,000 had a higher percentage being favourably disposed to having high involvement of their husbands in their care.

The total number of women who agreed or strongly agreed that husband's support was necessary for a woman in pregnancy and labour was very high.

From our results a large percentage of the women agreed that men had a role to play in family planning while 4 out of every 5 women totalling about 83% wanted their husbands to be present in the delivery room while they were giving birth or going into Labour. This supports the findings of Morhason-Bello et al (2007) who said that evidence has shown that Nigerian women desire their spouse as support persons during childbirth. Well over three-quarters of our respondents felt that a paternity leave will help to improve husband's involvement in the maternal care of their wives while just a little over half of our respondents felt that 1-30 days was sufficient time for such a leave. In our study we gathered that about 4 in every 5 of our respondents felt that their husband's support during pregnancy brought them emotional support and strength making it easy for them to carry on in the face of challenges associated with pregnancy and child birth.

When we come to the issue of barriers to male involvement in maternal care, this study found out that a large number of our respondents agreed that ridicule from other men could affect the level of involvement of their husbands in their care and so placed ridicule as one of the barriers to male involvement in maternal care. Respondents felt that health care professionals were doing enough to encourage male participation. On the issue of culture, there was no clear consensus on if cultural differences could be seen to be a barrier to male involvement or if culture did encourage male participation in maternal care according to results of this study. Men are traditionally not allowed into delivery rooms in Nigeria and 65% of our respondents agreed that men should not be allowed into the delivery rooms even though their involvement in their wives care should be improved but not with the men being allowed into the delivery rooms along with their wives.

LIMITATION AND STRENGTHS OF THE STUDY

The responses of our respondents were likely to be prone to social desirability bias as answers of some participants were likely to be socially acceptable responses. By virtue of being a cross-sectional study, temporality bias was a major limitation of this study. The study was conducted only among women attending post natal care in Adeoyo Maternity so results may not represent all women in the region or country and therefore we cannot generalize the results. The participants also suffered from recall bias making them not certain of all answers especially on questions about the involvement of husbands during ANC. This study is based on self reporting and thus may be difficult to verify claims of the respondents.

5.3 CONCLUSION

This study has shown male involvement and support for pregnant women and women in labour or post partum period to be low. The study also went further to prove that male involvement is important and can indeed lead to better outcomes of delivery and less or no complications during pregnancy and delivery. This study has also shown preferences of women, a much larger percentage of the women prefer and in fact want their husbands fully and highly involved in their care. Women sampled in this study want their husbands to get paternity leave from work for about a month to make them more involved in their care.

5.4 RECOMMENDATIONS

Based on the findings of this study:

Men should be encouraged by health care personnel using various means and channels such as mass media and social media to involve themselves more in the care of their wives during pregnancy and childbirth with the benefits of such involvement clearly spelt out for the men to see and understand.

The issue of a paternity leave for men should be extensively researched and studied by government and its agencies as well as policy makers to determine if there is any merit to such an idea and if found to improve male involvement then it should be included in our existing labour laws for workers in our country

There should be improved collaboration between health care providers and others stakeholders such as the Federal Government its ministries and agencies, policy formulators and regulators, religious leaders, Labour leaders, the academia, organized private sector, culture custodians such as Kings, Queens and regents etc. on how to improve maternal health by encouraging spousal support in the care of their wives in order to achieve better outcomes of delivery as the involvement of men is still low and can be improved.

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APPENDIX A
DEPARTMENT OF EPIDEMIOLOGY AND MEDICAL STATISTICS
FACULTY OF PUBLIC HEALTH
UNIVERSITY OF IBADAN, IBADAN
STUDY QUESTIONNAIRE

Questionnaire number

Dear Respondent,

This questionnaire has been strictly designed for academic purpose. All information will be kept confidential and processed anonymously. Please make a cross on the option most appropriate to you, or complete the statement in the spaces provided, information required is for the successful completion of a research work titled "Husband's involvement in maternal care of women attending post natal clinic in Ibadan". Kindly please answer all questions with sincerity in order not to alter the accuracy of the data collected. Thank you for sparing your valuable time to complete this questionnaire

QUESTIONNAIRE

SECTION A – Socio-demographic status of respondents

Age at last birthday _____ (in years)

Level of Education attained (1). Primary school (2) Secondary school (3). Tertiary institution (4). No formal education

Ethnicity (1) Yoruba (2). Igbo (3). Hausa (4). others

Marital status (1). Single (2). Married (3). Separated (4). Divorced (5) Widowed

Are you currently living with your husband/partner? (1)Yes (2)No

Were you living with your husband during the last pregnancy and delivery? (1) Yes (2) No

What is your occupation? _____

What is your average family income ?(1) IN-N10,000 (2) N10,001- N50,000 (3)N50,001- N100,000 (4) N100,001 and above

Family setting (1) Monogamy (2) Polygamy (3) others

If polygamy was your answer in question 7, how many wives has your husband? (1) two (2) Three (3) four and above

If polygamy was your answer in question 7, what position are you? (1) First wife (2) Second wife (3) Third wife (4) Fourth wife and above

Religion (1) Christianity (2) Islam (3) Others

Husband's level of education attained (1). Primary school (2) Secondary school (3). Tertiary institution (4). No formal education

What is your husband's occupation? _____

Husband age at last birthday _____ (in years)

How many previous pregnancies have you had? (1) one (2) Two (3) Three (4) Four and above.

What is the number of living children you have? (1) one (2) Two (3) Three (4) Four and above

SECTION B – HUSBAND’S LEVEL OF INVOLVEMENT

HUSBAND’S INVOLVEMENT DURING PREGNANCY	YES	NO	NOT SURE
Did your husband respond positively to news of the pregnancy?			
Did your husband encourage you to book for ante natal visit			
Did your husband accompany you for any ante natal visit			
Was there any physical violence from your husband during pregnancy?			
Did your husband say kind words to you whenever you were tired?			
Did your husband assist in house chores during pregnancy?			
Did husbands’ buy gifts and presents for you when coming back from work?			
Did husband give massages and back rubs during pregnancy?			
Did husband provide for your financial needs during pregnancy?			

How many ante natal visits did you attend in your most recent pregnancy? (1) None (2) one (3) two (3) three (4) four and above

How many times did your husband visit ante natal clinic with you? (1) None (2) once (3) twice (4) three (5) four and above

Does your husband work in the same town where you live (1) No (2) Yes

What was the timing of your husband’s visit (1) 1st trimester (2) 2nd trimester (3) 3rd trimester

Did your husband accompany you for ultrasound scans? (1) Yes (2) No

How many babies did the scan result show? (1) one (2) Two (3) Three (4) Four and above

Where did you deliver your baby? (1) At home (2) On the way to the hospital (3) At a health centre (4)

At a maternity centre (5) At the hospital

HUSBAND’S INVOLVEMENT IN LABOUR AND DELIVERY	YES	NO	NOT SURE
Was your husband around from the onset of labour?			
Did the hospital allow your husband’s presence in the delivery room?			
Was your husband present in the delivery room during delivery?			
Did your husband run errands for you during the period of labour and			

delivery?			
Did your husband support you financially by paying hospital bills during labour and delivery?			

Was there any complication during your pregnancy (1) Yes (2) No

If yes was your answer in question (39), what complication(s) did you have?

Were you admitted during the course of your pregnancy? (1) Yes (2) No

How would you rate your husband's support during the period of labour and delivery?

Excellent (2) Very Good (3) Good (4) Poor (5) Very Poor

HUSBAND'S INVOLVEMENT IN POST NATAL AND CARE	BABY	YES	NO	NOT SURE
Did your husband accompany you for post natal visits?				
Did your husband discuss family planning uptake with you?				
Did your husband encourage you to breastfeed the baby?				
Did your husband wake up at night to soothe the baby?				
Did your husband provide for your financial needs from the period of pregnancy to the post natal period?				
Did your husband learn to change the diapers of the baby?				
Did your husband change diapers for the new baby?				
Did your husband assist you when you were bathing the child?				
Did your husband help in swabbing of the umbilical cord of the new born?				

Did you get any other kind of social support and help from relatives, friends, neighbours etc. during pregnancy, delivery and post-partum period? (1) No (2) Not sure (3) Yes

How would you rate your husband's support generally from the period of pregnancy, delivery and post-partum? (1) Excellent (2) Very Good (3) Good (4) Poor (5) Very Poor

SECTION C -WOMEN'S PERCEPTION, PREFERENCE AND BARRIERS TO MALE INVOLVEMENT IN MATERNAL CARE

WOMEN'S PERCEPTION, PREFERENCE AND BARRIERS TO MALE INVOLVEMENT IN MATERNAL CARE	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
Husband's support necessary during the period of pregnancy, labour, delivery and post natal period?					
Men have a role to play in family planning in your own opinion					
Husbands should be present during labour and delivery					
A paternity leave will help to improve the level of involvement of husbands in the care of their wives during pregnancy?					
Husband's provision of needs give emotional security during the period of pregnancy and child birth					
The fear of ridicule by other men can discourage your husband from being involved in your welfare during and after pregnancy					

Did you feel encouraged by your husband's support during the period of pregnancy, delivery as well as post-partum? (1) Yes (2) No (3) Not sure

How many days will be alright for a paternity leave? (1) 1-30 days (2) 31-60 days (3) 61 – 90 days

Does your husband feel a need to be involved in your care? (1) Yes (2) No (3) Not sure

In your opinion, does your religion encourage men to be involved in maternal care? (1) Yes (2) No (3) Not sure

In your experience, do health care providers encourage male participation in maternal care? (1) Yes (2) No (3) Not sure

Are men allowed into the delivery room in the health care facility you used? (1) Yes (2) No (3) Not sure

Do you think your culture discourages male participation in maternal care of their wives and partners? (1) Yes (2) Not sure (3) No

Who do you prefer to give you help and social support during pregnancy, delivery and post-partum period? (1) Relatives (2) Mother-in-law (3) Mother (4) Husband (5) Others, Specify



MINISTRY OF HEALTH
DEPARTMENT OF PLANNING, RESEARCH & STATISTICS DIVISION
PRIVATE MAIL BAG NO. 5027, OYO STATE OF NIGERIA

Your Ref. No.

All communications should be addressed to

the Honorable Commissioner quoting

Our Ref. No. AD 13/ 479/995

January, 2016

The Principal Investigator,
Department of Epidemiology and Medical Statistics,
Faculty of Public Health,
College of Medicine,
Ibadan.

Attention: Umezurike Emeka

**ETHICAL APPROVAL FOR THE IMPLEMENTATION
OF YOUR RESEARCH PROPOSAL IN OYO STATE**

This is to acknowledge that your Research Proposal titled: "Husband's Involvement in Maternity Care among Women of Childbearing Age Attending Post Natal Clinic in Ibadan." has been reviewed by the Oyo state Review Ethical Committees.

2. The committee has noted your compliance. In the light of this, I am pleased to convey to you the full approval by the committee for the implementation of the Research Proposal in Oyo State, Nigeria.

3. Please note that the National Code for Health Research Ethics requires you to comply with all institutional guidelines, rules and regulations, in line with this. the Committee will monitor closely and follow up the implementation of the research study. However, the Ministry of Health would like to have a copy of the results and conclusions of findings as this will help in policy making in the health sector.

4. Wishing you all the best.


(Dr) Abbas Gbolahan

Director, Planning, Research & Statistics

Secretary, Oyo State, Research Ethical Review Committee