

**DELIVERY EXPERIENCES: MALE INVOLVEMENT IN LABOUR AND OTHER  
ASSOCIATED FACTORS AMONG ADULTS IN EVBUOMORE COMMUNITY, BENIN  
CITY.**

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**EDO STATE, NIGERIA.**

**JULY 2023.**

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**BEING A ONE-YEAR PROJECT PRESENTED TO THE DEPARTMENT OF  
COMMUNITY HEALTH, SCHOOL OF MEDICINE COLLEGE OF MEDICAL  
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BACHELOR IN MEDICINE AND BACHELOR IN SURGERY (MBBS) DEGREE IN  
THE UNIVERSITY OF BENIN, BENIN CITY.**

**JULY, 2023.**

## DECLARATION

We hereby declare that this project work titled “**DELIVERY EXPERIENCES: MALE INVOLVEMENT IN LABOUR AND OTHER ASSOCIATED FACTORS AMONG ADULTS IN EVBUOMORE COMMUNITY BENIN CITY**” was conducted under the supervision and has not been submitted in part or in full for any purpose.

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## CERTIFICATION

This is to certify that this research study titled “**DELIVERY EXPERIENCES: MALE INVOLVEMENT IN LABOUR AND OTHER ASSOCIATED FACTORS AMONG ADULTS IN EVBUOMORE COMMUNITY BENIN CITY** ” was carried out by **PRECIOUS ONYEKWERE ENYIOMA** with matriculation number **MED1404690**, **SAMUEL ERHUNMWUNSEE** with matriculation number **MED1404691** and **AGHOGHO GOODLUCK EMUROTU** with matriculation number **MED1404687** under supervision in the Department of Community Health, College of Medicine, University of Benin as part of the requirements for the award of Bachelor of Medicine, Bachelor of Surgery (MBBS).

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## **DEDICATION**

We wish to dedicate this project to the Almighty God, without whom this project would not have been successful, and for his infinite mercy, kindness, and guidance. We also dedicate this work to our respective families whose moral and financial support have brought us this far.

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## LIST OF ABBREVIATIONS

ANC	Antenatal Care
FGD	Focal Group Discussion
ILO	International Labour Organisation
IMNCH	Integrated maternal Newborn and child health
LGA	Local Government Area
MHC	Maternal Health Care
PNC	Postnatal care
PRC	Pregnancy-Related Care
SPSS	Statistical Package for the Social Science
TBA	Traditional Birth Attendant
UBTH	University of Benin Teaching Hospital
UK	United Kingdom
UN	United Nations
UNICEF	United Nations International Children Emergency Funds
USA	United States of America
WHO	World Health Education

## DEFINITION OF TERMS

**Antepartum period:** The period before child birth.

**Antenatal care:** This refers to care provided by skilled healthcare professionals to pregnant women and adolescent girls to ensure the best health conditions for both mother and baby during pregnancy.

**Delivery:** The process of giving birth.

**Delivery experience:** The personal feelings and interpretation of birth processes.

**Focus group discussion:** A discussion that involves gathering people from similar backgrounds or experiences together to discuss a specific topic of interest.

**Intrapartum period:** Occurring during the act of birth

**Labour:** The process by which the fetus and placenta leave the uterus.

**Male involvement:** It refers to the various ways in which men relate to reproductive health problems and programmes, reproductive rights, and reproductive behavior.

**Newborn:** It refers to a baby from birth to about 2 months of age.

**Obstructed labour:** A labour in which progress has come to a complete halt in the presence of good and adequate uterine contractions due to mechanical factors and delivery is impossible without assistance.

**Pregnancy-related care:** It refers to healthcare that a pregnant woman receives.

**Prenatal:** It refers to the period before birth

**Primigravida:** A woman who is pregnant for the first time.

**Primiparous:** A woman who has given birth for the first time.

**Postnatal:** It refers to the period after birth

**Postpartum:** The time after childbirth

**Questionnaire:** A choice of printed or written questions with a choice of answers, devised for a survey or statistical study.

**Spouse:** A husband or wife, considered concerning their partner.

**Traditional birth attendance:** A person who assists a mother during childbirth and who initially acquired her skills by delivering babies herself or through apprenticeship to other TBAs

## ABSTRACT

**Background:** Globally, it is estimated that nearly 500,000 women die annually from causes related to pregnancy and child birth and 99% of these deaths occur in developing countries. Historically, the involvement of men in labor and delivery was limited, with the process primarily being seen as a female domain. However, societal attitudes and expectations have evolved, leading to increased recognition of the role that men can play during childbirth. By actively participating in the childbirth process, men contribute to a supportive and empowering environment, facilitating a positive birth experience for all involved.

**Objectives:** To assess the delivery experiences and the involvement of adult males whose spouses are in labour and other associated factors in Evbuomere Community, Benin City, to improve labour experience and maternal and child health outcomes.

**Materials And Methods:** A descriptive cross-sectional study design was utilized for this study. Five hundred and ninety-seven males were selected using multi-stage sampling techniques. Data were collected using a structured interviewer-administered questionnaire comprising both opened ended and closed questions. Data was analyzed using IBM SPSS version 25.0 and a  $p < 0.05$  was considered significant.

**Results:** The mean age group of the respondents was 40.70(  $\pm$  7.89) years. Out of the total respondents, 504 (90.5%) had good knowledge while 57 (9.5%) had poor knowledge of the role they should play when their spouse is in labour. Five hundred and eighty-two (97.5) of them had a positive attitude while 15 (2.5%) had a negative attitude toward the role they should play when their spouse is in labour. Five hundred and twenty-two (87.4%) of the total respondent had a positive delivery experience while 75 (12.6%) had a negative delivery experience.

**Conclusion:** The majority of the respondents had good knowledge, attitude, and delivery experiences toward spousal labour. The major contributors were monthly income, religion, occupation, and marriage type.

**Keywords:** delivery experience, involvement, spouse and labour.

**Word Count:** 312

# CHAPTER ONE

## Introduction

### 1.1 Background

Human reproduction involves sexual intercourse between a man and a woman which leads to the production of offspring. Though the female carries the pregnancy, the male has a role to play during the period of pregnancy and delivery.<sup>1</sup> In recent times, more focus has been placed on the role men have to play in labour.<sup>2</sup>

The participation of males during labour has increased in western countries since the 1970s. The presence of males during pregnancy and birth is a step towards meeting the psychological and emotional aspects of labour. Understanding the role of the males in labour can help midwives and obstetricians improve the delivery experiences and can also enhance the transition to parenthood for men and women.<sup>3</sup>

Delivery experience is a complex phenomenon that is influenced by social, environmental, organizational, and policy factors.<sup>4</sup> Delivery experiences span the antenatal period, the intrapartum period, and postpartum care. It can be influenced by the fear of childbirth, the mode of delivery, actions of healthcare professionals, subsequent family life, parity, level of education, socioeconomic status, and male partner's involvement.<sup>5</sup> Since every mother perceives and interprets the birth experience differently, the birth of her child can have either positive or negative effects on the new mothers. When a woman's experience matches their expectation, childbirth can be a positive experience for them.<sup>6,7</sup> This positive experience of childbirth can significantly assist a woman in her transition into motherhood and foster the relationship

between mother-child and spouse bonding, which may in turn enhance parenting satisfaction. Social and emotional support received from healthcare professionals and spouses has been found to improve positive childbirth experiences. A study has shown that mothers who received adequate support from healthcare providers and spouses had positive delivery experiences.<sup>7</sup>

Every mother has their own perceived expectations of delivery; however, when the delivery experience is extremely distinct from their expectations, this may make them feel like they are “not in control” and unskilled. This, in turn, may cause women to experience constant psychological pain. The negative experience of delivery can occur when a threat is inflicted on the mother or the baby that causes fear for your safety or that of the baby. Reports of dissatisfaction with a delivery experience are associated with both physiological and psychological factors. Physiological factors contributing to the negative experience of delivery include prolonged labour, emergency caesarean section, severe pain, unplanned interventions during delivery such as instrumental delivery, induction and augmentation of labour, and obstetric complications. Psychological factors include a decreased authority to make decisions, unmet maternal expectations, feeling powerless, a lack of spousal support, a loss of control, anxiety, and poor midwifery care. Social factors, such as a lack of support from their partner or the midwife in the early postpartum period, are also associated with negative childbirth experiences.

Going through a negative delivery experience can result in a longer time interval between having children. Previous research has shown that 38% of women who had a negative experience of delivery avoided having children in the next eight to 10 years compared to 17% who had a positive experience and therefore, had another child. Most women who had a negative delivery

experience specifically requested a caesarean section instead of a vaginal delivery for their second child.<sup>7,8</sup>

Until the 1970s, many maternity hospitals in the United Kingdom (UK) adopted policies that prohibit fathers and other friends and families from attending the birth. In the 1970s, however, medical resistance was overcome by a consumer discussion about pregnancy and childbirth which arose in the United States of America (USA) and the UK. It was instrumental in undermining some of the medical beliefs against fathers and was associated with the emergence of the natural childbirth movement. Fathers who redefined themselves are a valuable resource for the midwives in the delivery room. At the same time, consumer discourses included a greater emphasis on the psychological and emotional aspects of birth, and support of the fathers during childbirth is seen as being a step towards ensuring these needs were met.<sup>3</sup>

Today, labour and birth are significant events for fathers. Whilst the actual labour and birth can provoke a range of emotions, from fear to euphoria, the birth marks a new phase that brings additional roles and responsibilities. The transition to fatherhood begins during pregnancy; however, birth is an important event in the on-going process of adaptation to parenthood. Understanding the process by which fathers are involved or influence decision-making during labour and birth may help midwives and obstetricians improve the birth experience and enhance the transition to parenthood for women and men.<sup>3,9</sup>

Male partners' involvement is an important factor influencing the delivery experience.<sup>10</sup> It denotes the various way in which men relates to reproductive health problems and programs, reproductive rights, and behaviours.<sup>11</sup> Men play an important role which includes identifying skilled birth attendants, deciding where and how the delivery will take place, providing money

for antenatal care, and emergency and procuring birth kits. They also identify possible blood donors in the event of an urgent need for transfusion during labour.<sup>12</sup>

In addition, research has shown that the presence of a father reduces the length of labour, the need for caesarean section and analgesia, and instrumental deliveries while increasing the number of normal births. Male involvement also enhances the relationship of the couple as well as the father-child relationship.<sup>13</sup>

Despite the fact that some men who participated in labour had feelings of discomfort, helplessness, fear, and anxiety, as they watched their partner in pain, they were happy and felt helpful to their partner particularly when the nurses and midwives made them feel comfortable.<sup>14</sup> This shows that health care professional also has a role to play in male involvement during labour.

In different parts of the world, especially in developed countries such as the UK and Denmark, male participation during childbirth is common practice, with a participation rate of around 95%. This is in line with the WHO recommendation that pregnant women are allowed to have a birth companion of choice. Research from these developed countries shows that women who receive ongoing support during marital childbirth feel reassured and emotionally motivated to overcome the pain of childbirth.<sup>15</sup>

One of the main differences between developed and developing countries concerning the presence of a spouse during childbirth may be who is given priority during childbirth. In Western countries, support by husbands is standard procedure, while in developing countries; support by a female relative is preferred. The husband's support is not accepted or appreciated.<sup>16</sup>

In developing countries like Nigeria, male involvement in labour is very low. This can be attributed to the belief that labour is exclusively a women's affair, ignorance, poverty, cultural and religious practices, poor health facilities, and a poor attitude of health workers towards male involvement.<sup>17</sup> However, men with monogamous families and higher socioeconomic status were significantly more involved in labour than husbands with lower economic and social status. It was also noticed that in some cases the staff of the institution and the hospital subtly obstruct the hostile labor of the spouses or use clear text on the doors of the maternity ward, for example, "They don't need you here."<sup>15</sup>

In Nigeria, there is a strong belief in several parts of the country that spousal presence worsens labour pain and prolongs labour. Furthermore, the attitude of spouses toward husband participation in maternal care is strongly opposed to the physical presence of the husband in the labour room during delivery.<sup>15</sup> This is due to the strong cultural and religious effect of Islamic law applicable in the predominantly Muslim population in northern Nigeria. A study carried out in Kano, northern Nigeria, also found limited knowledge of obstetric complications and low male involvement in labour.

This is a sharp contrast from the Christian-dominated southern Nigeria where there is a good percentage of spouses inclined to spousal participation in antepartum intrapartum and postpartum care.

In addition, due to poor health facilities in developing countries like Nigeria where the delivery rooms accommodate multiple parturients at the same time, husbands are prohibited from entering the delivery rooms. The poor knowledge, attitudes, and practices of midwives and other health personnel also discourage male involvement in the labour room.<sup>17</sup>

## 1.2 Statement of problem

Globally, it is estimated that nearly 500,000 women die annually from causes related to pregnancy and child birth and 99% of these deaths occur in developing countries. Developing countries account for 99% of global maternal deaths. In sub-Saharan Africa, for example, a woman's lifetime risk of dying from preventable or treatable complications of pregnancy and childbirth is 1 in 39, compared to 1 in 3800 in the developed region.<sup>18</sup> Many physical aspects of delivery experiences have been evaluated in terms of mortality and morbidity, but there is much less data on the psychological aspect contributing to the delivery experience

In western societies, fathers have become more nurturing and as a result more interested and actively involved in the birthing experience over the past few decades. There were 33920 births in western Australia alone in 2012 with interested percentages of fathers participation to be over 90%.<sup>19</sup> Fathers' desire to participate in women's health has increased in recent years and health systems in some countries have policies that recognize the role of fathers in protecting the health of mothers, babies, and children. Studies show that where these policies exist such policies have not been fully implemented.<sup>20</sup>

Despite clear evidence and the increasing emphasis on respectful maternal care, many health centers still do not allow women to have a mate of their choice during labor and delivery. Several barriers have been identified which include the absence of national or institutional policies for companionship during labour, inadequate hospital infrastructure, negative attitude, and ignorance of health care workers.<sup>21</sup> However, most developing countries generally discourage women from receiving support during childbirth, although studies in some developing countries have clearly

shown the importance of this practice. Studies conducted in Jordan, Nigeria, South Africa, and Iran showed that women had a high preference for psychosocial support.<sup>16</sup>

In fact, in developing countries, the presence of a spouse during labour is not routine. There are also sociocultural and religious barriers in Islamic societies to the presence of males, even the husband during the period of labour.<sup>16</sup> In low-income countries such as Nigeria, which is known to be a male-dominated patriarchal society, where pregnancy and childbirth are considered the exclusive business of women, the participation of the husband during labor and childbirth is still very low. Men traditionally do not accompany their wives for antenatal care and are mostly absent in the labor room during delivery, leaving their support roles to relatives and midwives.<sup>17</sup>

Education has also been shown as a determining factor in some studies, reporting higher participation of educated spouses over 50 who accompany their spouse to the maternity hospital and delivery room than men without education. Usually, most husbands (97.4%) reward their wives and pay bills for antenatal services, but only 63.9% were present at birth, despite studies showing that more than 50% of men are involved in the reproductive process, their participation is closely related to their academic background.<sup>15,17</sup>

On the other hand, most uneducated men in Nigeria think that their presence is not necessary during delivery but rather restricted to only the duty of providing financial support for their spouses. Further probe on why spouses were absent during birth, showed a response of 92(62%) participants with no particular reasons for their absence, and 57(42.3%) believed that their presence was not needed. It is common place here to see parturient women accompanied by aged women or an under-aged female relatives.<sup>17</sup>

There is a paucity of data from the Nigerian community on male involvement in labour. Based on the foregoing, we set out to determine the level of knowledge of male partners of their expected, during labour, the extent of involvement during labour as well as barriers to their participation labour in Edo state, Nigeria.

### **1.3 Justification**

The role of men in women's health, especially maternal health, is receiving increasing global attention and is linked to pregnancy outcomes. In patriarchal societies, men often do not accompany their partners to prenatal and postnatal care services and are not expected to be present when their child is born. Lack of information about labour is seen as the main factor hindering the active participation of men, hence the need for comprehensive education and radical awareness campaigns. This research will help provide men with comprehensive information on maternal health issues and services and will increase active participation in maternal care, promote preparation for childbirth and complications, improve maternal mental health, improve utilization of maternal health services, and promote maternal and fetal health outcomes.

Furthermore, poor knowledge of male involvement in pregnancy, labor, childbirth, and the neonatal period are major factors that may contribute to delaying the decision to seek care in such situations. Therefore, this study was conducted to assess their knowledge and attitude toward maternal and child health care interventions.

Men's actions will affect the reproductive health of their wives and children. Studies have shown that the influence of men's participation on women's health outcomes is directly related to men's perceptions, attitudes, and behaviors. Men's understanding of pregnancy-related care and gender-positive thinking enhances women's health care use and decision-making, while their attitude toward antenatal care significantly increases the chances of women giving birth in health facilities. Women in low-income countries increasingly expect their partners to be involved in

the birthing process, while men are also becoming more interested in labor. Therefore, this study is important to assess adult male attitudes during labour.

Previous studies that have been done have focused more on births and their effects on fathers, mainly on post-traumatic stress disorder, and less on the birth experience itself. Therefore, our study focused on the birth experience of adult men whose partners are in labor. In Nigeria, where culture is considered an important factor influencing women's access to existing reproductive health care facilities, there is little data on men's attitudes towards maternal health. Therefore, this study aimed to assess men's attitudes toward work. This will help understand male tendencies and serve as a guide in designing targeted programs.

Although there is a growing amount of research addressing fathers' experiences and feelings about delivery around the world, there is a dearth of studies in Nigeria describing fathers' feelings and experiences related to their wife's or partners' delivery.<sup>22</sup> Therefore, information regarding their labor and delivery experiences needed to be accessed.

#### **1.4 Research questions**

1. What is the knowledge of males regarding their involvement when their spouse is in labour?
2. What is the attitude of males regarding their involvement when their spouse is in labour?
3. What are the associated factors that affect the involvement of males when their spouse is in labour?
4. What are the delivery experiences of men whose spouses are in labour?

## **1.5 Aims and objectives**

### General

To assess the delivery experiences and the involvement of adult males whose spouses are in labour and other associated factors in Evbuomore Community, Benin City, to improve labour experience, and maternal and child health outcomes.

### Specific Objectives.

1. To assess the knowledge of adult males in Evbuomore Community towards the role they play when their spouse is in labour.
2. To assess the attitude of adult males in Evbuomore Community when their spouse is in labour.
3. To identify the factors affecting adult males' involvement when their spouse is in labour in Evbuomore Community.
4. To assess the delivery experiences of adult males in Evbuomore Community whose spouses are in labour.

## **CHAPTER TWO**

### **Literature Review**

The significance placed on the role of the father has grown, both during pregnancy and childbirth. Although the progress has been gradual, it is now possible to acknowledge the emergence of a more engaged and involved father figure who actively participates in the pregnancy. This shift contributes to the idea of the pregnant mother being replaced by a pregnant couple, with the father embracing the opportunity and appreciating his involvement. The father views his presence at the birth as a privileged experience that not only benefits the mother but also himself as a member of the triad.<sup>23</sup>

There is a mounting global expectation for men to accompany their partners during childbirth. In the past two decades, the increasing availability of prenatal training classes has encouraged men to participate in the delivery process as well.<sup>24</sup> The presence of a woman's spouse during delivery has proven to assist her in managing pain and maintaining control. Therefore, the participation of spouses during childbirth is regarded as beneficial and indispensable.

#### **2.1 Knowledge Of Adult Males Towards The Role They Play When Their Spouse Is In Labour.**

A community-based cross-sectional study was conducted among a total of 145 respondents to assess adult male involvement in maternity care in Enugu south local government area, Enugu State, Nigeria. A four-stage sampling technique was used. A structured questionnaire developed by the researchers based on previous literature was used for data collection. The result showed that less than half of the respondents had good knowledge about their expected role in taking

care of their spouse during the maternity period as only 62 (42.8%) of the respondents identified helping to take care of the other children and 58 (40%) of the respondents identified giving emotional support during pregnancy as their expected role. Study strengths include that the respondents were met in their homes regardless of their level of participation in maternity care, this fostered varied responses that yielded robust data.<sup>25</sup>

A cross-sectional study was carried out in 2020 at Idikan Community in Ibadan, to assess the knowledge, perception, and involvement of male partners' involvement in pregnancy-related care among 367 married men. The sampling technique used was multistage. Necessary information was obtained from them using semi-structured, interviewer-administered questionnaires. The result of the study showed that most of the respondents 218 (59.4%) had good knowledge of Pregnancy-related care in accompanying their partner to labour ward and 357 (97.3%) also had good knowledge in joining their wives in taking decisions that concerns pregnancy. This study was carried out in an urban area in Ibadan hence findings can not be generalized to a rural area. Most of the men were of low social-economic status; hence there may be a need to explore men of high social-economic class.<sup>26</sup>

A cross-sectional study was conducted among 453 married male commercial motorcyclists, operating in Ibadan North Local Government Area to determine the knowledge and attitude of male commercial motorcyclists on pregnancy care and delivery of women. A cluster sampling technique was employed to select study participants. Data was collected using a structured interviewer-administered questionnaire. The results of the study show that the majority of the respondents 359 (79.2%) had good knowledge in choosing the place of delivery of their baby. The limitation of this study is that it utilized only one LGA in the study, and this may limit its generalizability.<sup>27</sup>

A community-based cross-sectional study was conducted in 2021 among 399 fathers to assess the magnitude of husbands' involvement in skilled birth attendant service utilization in Ethiopia. A simple random sampling technique was used. Necessary information was obtained by using an interviewer-administered structured questionnaire. The results of this study showed the majority of respondents 295 (73.9%) were found to have good knowledge regarding skilled delivery attendance as 317 (79.4%) accompanied their partner to the delivery room, 362 (90.7%) saved money and 197 (49.4%) planned for the place of delivery. The limitation of the study is that a large section of the population may not be selected for sampling leading to unrepresentative samples.<sup>28</sup>

A descriptive cross-sectional study was conducted in 2019 among 1091 men to assess men's involvement during pregnancy and childbirth in India. A cluster sampling technique was employed to select study participants. Data were collected using a structured questionnaire by face-to-face interview technique. The results of the study showed that 108 (9.9%) of the respondents had good knowledge in deciding the place of delivery of their spouse. The limitation of this study is that it is prone to high sampling error due to the cluster sampling technique used.<sup>29</sup>

A descriptive cross-sectional study was carried out in 2016 at Coast Level Five Hospital, Mombasa County, Kenya, aimed at establishing the level of male partner involvement and the influence of couple knowledge and perception on male involvement in the choice of the delivery site among 207 couples. The sampling technique used was systematic. Necessary information was obtained from them using interviewer questionnaires. This study established that 129(62.3%) of the male partners interviewed had poor knowledge of male partner involvement in the choice of delivery site. This study was conducted in a health care facility therefore the result may differ

from a community-based study. Also, pregnancy may have influenced the participant's responses and thus, the result.<sup>30</sup>

A descriptive cross-sectional study was conducted among 385 husbands to determine the relationship between husband support and wife delivery in Indonesia. The participants were selected according to the inclusion criteria and through a simple random sampling method. Necessary information was obtained from them using self-administered questionnaires. This study revealed that the majority of the respondent 309 (81.3%) have good knowledge of the role they should play during labour, as 247 (64.9%) accompanied their partner to the delivery room. This study was conducted in a healthcare facility, therefore, the result may differ from a community-based study.<sup>31</sup>

## **2.2 Attitude of Adult Males When Their Spouse Is In Labour.**

A cross-sectional descriptive study was conducted among 372 men in Ugbighokho community a Sub-urban area in Edo State, Nigeria, to evaluate the perception, attitude, and participation of male partners in maternity care (MC). A multistage sampling technique was used to select the Study community. The data was collected with an interviewer-administered questionnaire. This study revealed that the attitude of men towards maternity care was poor as less than half 150 (40.3%) of the respondents agreed that men should be present in the delivery room. The limitation of this study is that a large section of the population may not be selected for sampling leading to unrepresentative samples.<sup>32</sup>

A cross-sectional study was conducted in 2017 among 250 married males to evaluate male partners' attitudes and experiences regarding their level of involvement during pregnancy, labour, and delivery in Ilorin Nigeria. A cluster sampling technique was employed to select study participants. Data was collected using a structured interviewer-administered questionnaire. This

study revealed that 54 (31.6%) respondents believe men should be present in the room to encourage women in labour. The limitation of this study is that it utilized only one LGA in the study, and this may limit its generalizability.<sup>33</sup>

A cross-sectional descriptive study was carried out among 400 adult men of reproductive age in Atelewo community in Osogbo, Osun State, Nigeria 2013, aimed to examine men's perception, attitude, and involvement in maternal care. A multistage sampling technique was used to select the study community. Data were collected using a semi-structured questionnaire. This study revealed 355 (98.1%) respondents agreed that men should ensure skilled hands for delivery and 139 (39.2%) respondents agreed that women are susceptible to delivery complications. The sampling technique used is useful for collecting data from a geographically dispersed population.<sup>34</sup>

A descriptive cross-sectional study was conducted on 300 husbands of nulliparous women referring to Prenatal Clinic of Fatemeh hospital in Hamadan in 2015 to investigate men's knowledge and attitude about participation in their nulliparous wives' perinatal care. The participants were selected according to the inclusion criteria and through a simple random sampling method. Necessary information was obtained from them using self-administered questionnaires. This study shows that the majority of the men 196 (65.3%) had a positive attitude towards their participation in perinatal care with 186 (62.1%) respondents agreeing to transport their wives to the place of delivery. This study was conducted in a health care facility therefore the result may differ from a community-based study.<sup>35</sup>

A cross-sectional study was performed on 280 men in industrial units in Kashan city, Iran, aiming to determine the attitude and participation of men in prenatal, childbirth, and postpartum care in 2015. The participants were selected using the cluster sampling method. Data was

collected using a structured interviewer-administered questionnaire. This study showed that the majority of the men 196 (65.3%) agreed/strongly agreed that their wives are most likely to face delivery complications when attended to by unskilled birth attendance. The limitation of the study was that it is prone to recall bias.<sup>36</sup>

A cross-sectional descriptive study design was conducted with 254 fathers whose partners gave birth in one provincial hospital in China 2015, aimed to evaluate Chinese fathers' feelings about their partners' delivery and views on their presence during labour and birth. Convenience sampling was used to recruit the participants. Necessary information was obtained from them using self-administered questionnaires. This study revealed majority 246(97%) held a positive attitude towards fathers' presence in the delivery room with their partners while 8(3%) had a negative attitude as they do not agree that fathers should be in the delivery room. The generalizability of the results to the nation might be limited by the convenience sampling of only fathers whose partners delivered in one provincial hospital in China.<sup>37</sup>

A community-based cross-sectional study was conducted in 2020 among 411 married men in Nifas Silk Lafto sub-city, Addis Ababa, Ethiopia, to assess the attitude and involvement of the male partner in maternal health care. The participants were selected using a systematic random sampling technique. The data were collected using a structured interviewer-administered questionnaire. This study revealed that 128 (31.1%) respondents agreed that men should determine the place of delivery and 113 (27.5%) respondents agreed that men should be present in the room. The information collected from research participants may be subject to recall bias.<sup>38</sup>

### **2.3 Factors Affecting Adult Males' Involvement When Their Spouse Is In Labour.**

In 2020, a cross-sectional survey was carried out in Muaro Jambi District, Indonesia, involving 381 men. The objective of the study was to evaluate the extent of male involvement in childbirth

and examine the factors influencing their participation. The selection of participants was done through a multistage random sampling method. Data collection was conducted using a structured questionnaire administered by trained interviewers. This study revealed four factors associated with the level of male participation in childbirth, namely; age, number of children, income, and knowledge. Men aged >30 years tended to have a higher participation rate in childbirth than men aged ≤30 years. Men with ≤2 children tended to participate in childbirth more than men with >2 children. Men with higher incomes were more likely to participate in childbirth than those with lower incomes. Men with more knowledge tended to have higher participation in childbirth than those with less knowledge. Knowledge is the main factor correlating with the level of male participation in childbirth. The limitation of this study is that the sample was small and may not represent the entire population.<sup>39</sup>

A community-based cross-sectional study was conducted in 2015 at Mareka Woreda, Southern Ethiopia, to assess male involvement in skilled delivery care utilization among 676 couples currently in the union who have less than one-year old-child. The sampling technique used was stratified. Necessary information was obtained from them using structured questionnaires. The result of the study showed that factors that determine male involvement in skilled delivery care were husbands' positive perception of skilled care [AOR 1.68, 95% CI: 1.13-2.50], educational level of husband [AOR 1.77, 95% CI: 1.13-2.50], husbands preference for skilled assistant at delivery [AOR 1.85, 95% CI: 1.24-2.75] and husbands age below 35 years [AOR 1.77, 95% CI: 1.19-2.62]. In this study, the findings might be subjected to social desirability bias because the findings were based on self-reported responses of couples<sup>40</sup>

A cross-sectional study was conducted in 2017 at Anomabo, Central Region, Ghana to assess male involvement in maternal health care among 100 adult male respondents whose partners were pregnant or had given birth within twelve months preceding the study. The sampling technique used was a simple random sampling technique. Necessary information was obtained from them using a questionnaire. The result of the study showed that male involvement in antenatal care and labour significantly affected their cultural norms 23 (33.3%), work schedule 32 (40.5%), unfavourable health policies 42 (49.4%), financial problems 21 (44.7%) and attitude of health workers 42 (46.7%). The limitations of this study were that the sample size was small and that most respondents were from a monogamous family and of a Christian faith thus can't be generalized to the other part of the country.<sup>34</sup>

A community-based cross-sectional study was conducted in 2021 in urban slum areas in Bangladesh to assess the perception of male involvement in antenatal, childbirth, and postnatal care among 422 women and their husbands living in 12 slums of Chattogram city. The sampling technique used was a convenience sampling technique. Necessary information was obtained from them using pretested, structured, and facilitator-administered questionnaires. The result of the study shows that for men's assistance in delivery care, respondents who had more than two children were ( $p < 0.05$ ) less likely to have their husbands' help in delivery care than those who had one child. In addition, couples that had greater utility facilities (gas, water, and power supply) in the slum areas, women's perception of having a good marital relationship ( $p < 0.05$ ) couples who discussed reproductive health issues together and husbands who had previously discussed maternal and reproductive health issues with a health worker had a more significant association with husbands' positive role during delivery. The findings could be affected by recall bias.<sup>41</sup>

A cross-sectional study was conducted in 2021 among 302 married men in Ibadan north local government area, southern Nigeria to investigate male involvement in birth preparedness. A multistage sampling technique was used to select a male participant for the study. Necessary information was obtained by using an interviewer-administered structured questionnaire. This study showed that low socioeconomic status was the most reported factor by 248(82.9%) of the respondents. 135(45.2%) of the respondents reported being busy as work as a factor, 63(21.2%) reported attitude of health worker, while a cultural factor and inadequate knowledge were reported by 67(22.3%) and 137(46.0%) respondents respectively. The information collected from research participants may be subject to recall bias.<sup>42</sup>

A cross-sectional study was conducted in 2021 among 265 men living in Ife central Osun state, southwest Nigeria to examine the factors associated with male involvement in maternal healthcare services. A multistage sampling technique was used to select male participants for the study. Necessary information was obtained by using an interviewer-administered structured questionnaire. In this study, participants most frequently reported that men's involvement was influenced by their degree of knowledge 244(92.4%), job schedule 243(92.0%) and clinic waiting for time 229(86.4%). The limitation of this study is that the sample was small and may not represent the entire population.<sup>34</sup>

A cross-sectional study was conducted in 2020 in Ibadan, Nigeria to assess male partners' involvement in pregnancy-related care among 367 married men. The sampling technique used was multistage. Necessary information was obtained from them using semi-structured, interviewer-administered questionnaires. The result of the study showed that concurrent job demand 252(68.7%), social stigma 190(51.8%), and long waiting times at the health facilities 186(50.7%) were the reasons reported by respondents as being responsible for the lack of

involvement of men in pregnancy-related care. As a cross-sectional study, the cause and effect relationship cannot be established.<sup>26</sup>

A descriptive cross-sectional study was conducted in 2016 at Jimeta Metropolis, Adamawa State, Nigeria, to assess male involvement in maternal health care among 370 respondents. The sampling technique used was multistage. Necessary information was obtained from them using structured, questionnaires. The result of the study showed that ignorance 89 (25.9%), religious 97 (28.2%), financial constraints 65 (18.9%), and poor attitude of health workers 39 (11.4%) were factors identified to affect male involvement in maternal health care. The limitation of this study owes to the fact that it was conducted in an area with numerous polygamous families, people of low social-economic class and predominantly dominated by Muslims; therefore results can't be generalized to other parts of the country.<sup>43</sup>

#### **2.4 Delivery Experiences Of Adult Males Whose Spouses Are In Labour.**

A cross-sectional study was conducted in 2017 among 818 men to analyze men's perceptions and experiences of childbirth in the northern part of Sweden. A convenient sampling method was used select participants for the study. Necessary information was obtained by using an interviewer-administered structured questionnaire. This study showed 797 (97%) had a positive birth experience and 21 (3%) had a negative birth experience. All participants with negative birth experiences reported longer labours (measured in hours). In all, 597 (73%) of the births were normal vaginal, 73 (9%) were instrumental vaginal births, 57 (7%) were elective caesarean sections and finally 192 (11%) were emergency caesarean sections. The limitation of this study is the inclusion criteria of the study, where parents who did not master the Swedish language were excluded.<sup>44</sup>

A cross-sectional study was conducted in 2016 among 318 participants at the University Medical Center in Mainz, to assess birth experience from the perspective of the fathers. The multistage sampling technique was used to select participants for the study. Father's questionnaires were used to obtain necessary information from them. This study showed fathers' attendance during labor was considered to be beneficial for fathers themselves 254 (79.8%), for the mother 272 (85.5%), for the newborn child 187 (58.8%), and the relationship 234 (73.6%). Only four could not see a purpose in their attendance, 73 (23%) felt helpless, 47 (14.8%) were overwhelmed by the situation, 116 (36.5%) felt fear, 299 (94%) were happy to be present at birth, 27 (8.5%) felt traumatized by experiencing their partners in labor. This study was conducted in a health care facility therefore the result may differ from a community-based study.<sup>45</sup>

A descriptive cross-sectional study was conducted in 2012 among 51 first-time fathers whose wife/partner had given birth in one government hospital in Samar, Philippines aimed to assess and determine the feelings and experiences of first-time fathers during labor and delivery of their partner/wife. A convenient sampling method was used to select participants for the study. Necessary information was obtained by using an interviewer-administered structured questionnaire. Findings indicated that the majority of the respondents felt "happy" 45 (88.24%) and "proud" 35 (68.63%), and at the same time "anxious" 41 (80.39%) during the labor and delivery of their partner/wife. However, 40 (78.43%) were "worried" and "felt guilty about their partner/wife is in so much pain. This study was conducted in a health care facility therefore the result may differ from a community-based study and also the population size was not adequate.<sup>46</sup>

A descriptive cross-sectional study was conducted among 827 expectant fathers to explore Swedish fathers' birth experiences, and factors associated with a less-positive birth experience in western Norrland. A convenient sampling method was used to select participants for the study.

Necessary information was obtained using a self-administered structured questionnaire. This study showed that 604 (74%) of the fathers, indicated that they had a positive or very positive birth experience, while 223(26%) of the fathers indicated they had a negative or very negative birth experience. This study was conducted in a health care facility therefore the result may differ from a community-based study.<sup>47</sup>

A cross-sectional study was conducted in 2017 among 46 participants in Ilorin, North Central Nigeria to evaluate male partners' attitudes and experiences on their level of involvement during pregnancy, labour, and delivery. The sampling technique used was multistage. Necessary information was obtained from them using interviewer questionnaires. Findings from the study reveal that 1 (2.2%) was afraid the baby might die, 4 (8.7%) collapsed during the delivery, 16 (34.8%) were afraid that the partner might die and 25 (54.3%) were happy and satisfied. The strength of the study is in evaluating male partners who are not easily accessible in low-resource countries because they are more often absent at health facilities.<sup>33</sup>

A cross-sectional descriptive study was conducted in 2014 among 142 spouses in Abuja, Nigeria to investigate and provide insight into spousal perceptions during their participation and role in labor pain relief during childbirth. Data were collected through a pretested interview-administered questionnaire; the selection of the participant was made through a convenience sampling technique. The study revealed that 74 (52.1%) believed their spouse's labour pain was severe, 18 (12.7%) believed it was the worst pain ever and 7 (4.9%) were indifferent about their spousal labour pain. Information from this study was drawn from a diversified ethnic population with a widespread minority ethnicity representing a fair percentage of the respondents.<sup>48</sup>

A cross-sectional study was conducted in 2017 among 209 participants in Northern Central Nigeria, to evaluate the experience, attitude, and practice concerning spousal delivery in Nigeria in an hospital facility. Data were collected through a pretested interview-administered questionnaire; the selection of the participant was made through a stratified random sampling technique. The study revealed that 63(30.2%) were afraid, 21 (10.0%) were crying and 5 (2.4%) fainted. This study was conducted in a health care facility therefore the result may differ from a community-based study.<sup>49</sup>

## CHAPTER THREE

### Methodology

#### 3.1 Study Area

This study was carried out in Evbuomore community, Benin City, Edo State. Edo State is one of the 36 states in Nigeria, with its capital being Benin City. It is located in the South-South geopolitical zone of Nigeria and was created/formed in 1991 from the Northern portion of the defunct Bendel State. With a land mass of about 19,743sqkm, it is bounded by Kogi State to the North-East, Anambra State to the East, Delta State to the South-East, and Ondo State to the West and the North-West. Its population estimate as of the 2006 National population census was 3,233,366 and has a projected population of 4,921,058 using a growth rate of 2.8% per year. Its capital Benin City is approximately 25 miles North of the Benin river and 200 miles by road East of Lagos. Population estimate as of 2006 is 1,147,188, with estimates as of 2021 to be 1,745,976 and the dominant tribe is Benin.<sup>50</sup> Benin City is mainly made up of three (3) Local Government Areas namely; Egor, Oredo, and Ikpoba-Okha. The predominant occupations in Edo State are trading artisanry, and farming.<sup>51</sup>

Evbuomore community is located in the Ovia-North East Local Government Area (LGA) of the state which is one of the 18 Local Government Areas within Edo State, with its headquarters located in the town of Okada. Ovia-North East LGA is bounded to the North by Ondo State, to the East by Uhumwode, Egor, Oredo, and Ikpoba Okha Local Government Areas, to the South by the Benin River, and to the west by Ovia South-West Local Government Area. It has an area of 2,301 km<sup>2</sup> and an estimated population of 587,661 using a population projection of 2.8% per annum. The population of Evbuomore is estimated to be 5000.<sup>50</sup> Majority of the residents are

traders and Christians make up a large proportion of the population, and the predominant languages are Benin, English, and pidgin.<sup>50</sup>

### **3.2 Study Design**

A descriptive cross-sectional study design was used for this study.

### **3.3 Study Population**

The study was carried out among male adults in Evbuomore Community, Benin City

### **3.4 Selection Criteria**

#### **3.4.1 Inclusion Criteria**

- I. All male adults who were available at the time of the study and willing to participate in the study.
- II. All male adults who were present with their spouses in the delivery room

#### **3.4.2 Exclusion Criteria**

- I. Male adults whose spouse has not been in labour.

### **3.5 Duration of Study**

The study was carried out within one year from March 2021 and July 2023

### **3.6 Sample Size Determination.**

This was calculated using Cochran's formula for descriptive study.<sup>52</sup>

$$n = \frac{Z^2 pq}{d^2}$$

where,

n = minimum sample size

z = standard normal deviate = 1.96 at 95% confidence interval

p = prevalence rate of a particular characteristic of the target population

= 62.9% was adopted based on a previous study carried out in 2020 among respondents in Idikan community in Ibadan, Oyo State. From this study, 62.9% had good knowledge of pregnancy-related care<sup>26</sup>

$$q = 1 - p = 1 - 0.63 = 0.37$$

d = degree of precision set at 0.05

Substituting the above in the equation;

$$n = \frac{1.96^2 \times 0.63 \times 0.37}{0.05^2}$$

$$n = 358.2$$

$$n = 358$$

**Non-response:** To make up for non-response, 10.0% of the sample size was added to the questionnaire.

$$nf = n / 1 - nr$$

where;

$n_f$  = final sample size

$n$  = minimum sample size

$nr$  = Non-response of 10%

$n_f = 358 / 1 - 0.1$

$n_f = 358 / 0.9 = 398$

Therefore the final sample size ( $n_f$ ) = 398

Applying a design effect (reflecting the sample design to be used in the study) taken as 1.5 to compensate for the deviation from the simple random sampling technique,<sup>53</sup>

$n = 398 \times 1.5 = 597$

### **3.7 Sampling Technique**

A multi-stage sampling technique was used for the study.

#### **Stage 1: Selection of Local Government Area**

There are eighteen (18) Local Government Areas in Edo State, of which Ovia North East Local Government Area was chosen via a simple random sampling technique by balloting.

#### **Stage 2: Selection of Ward**

Ovia North East LGA is made up of 13 political wards (Adolor, Iguoshodin, Isiuwa, Oduna, Ofunmwegbe, Oghede, Okada East, Okada West, Okokhuo, Oluku, Uhen, Uhiere, and Utoka)

Oluku ward was chosen using a simple random technique by balloting.

### **Stage 3: Selection of the Community.**

There are eleven (11) communities in Oluku ward ( Egbaen, Evbuomore, Isihor, Iguosa, Oluku, Okhumwun, Utekon, Uhogua, Olefure, Idumwowina, Ekosodin) from which Evbuomore was chosen via simple random technique by balloting.

### **Stage 4: Selection of Household**

Evbuomore was divided into two clusters A and B using Ohenhen Road running from Benin-Lagos express road through to the boundary road that separates Evbuomore community from Ekosodin. Cluster B was selected using a simple random sampling technique by balloting. Household enumeration was done in cluster B with a total count of 1757. The required sample was 597 which were selected by random sampling technique from the total household count in cluster B.

## **3.8 Data Management**

### **3.8.1 Tools For Data Collection**

Data for this study was obtained using a standardized structured interviewer- administered questionnaire. The questionnaire for this study was adopted from several studies and they include, Male partner involvement in pregnancy in Ibadan,<sup>27</sup> Impact of mode of delivery on the birth experience in first-time father in Switzerland,<sup>6</sup> Male involvement in birth preparedness and complication readiness for emergency obstetric referrals in rural Uganda and Support during pregnancy,<sup>54</sup> labour and childbirth by husbands in Zambia.<sup>55</sup>

The questionnaire contained close and open-ended questions. The questions are grouped into six sections which sought to gather the following information:

**Section A: Socio-Demographic Information of father.**

This section contains 13 questions, which were used to assess the respondents' age, ethnic group, level of education, religion, marital status, number of children, family type, marriage type, occupation and place of residence, housing type, and income of respondents.

**Section B: Socio-Demographic Information of the Partner**

This section contains 5 questions, which were used to assess the respondent partner's ethnic group, level of education, religion, occupation, and income of respondents' partner.

**Section C: Knowledge of Adult Males in Evbuomore Community Towards The Role They Should Play When Their Spouse Is In Labour.**

This section included 16 questions that assessed respondents' knowledge about male involvement in labour.

**Section D: Attitude of Adult Males in Evbuomore Community When Their Spouse Is In Labour.**

This section included 8 questions that assessed respondents' attitude about male involvement in labour.

### **Section E: Factors Affecting Adult Males' Involvement When Their Spouse Is In Labour in Evbuomore Community**

This section included 8 questions that assessed factors affecting male involvement in labour.

### **Section F: Delivery Experiences of Adult Males in Evbuomore Community Whose Spouses Are In Labour.**

This section included 12 questions to assess the respondent delivery experience of males when their spouses are in labour.

#### **3.8.2 Methods of Data Collection**

A questionnaire was interviewer-administered, informed consent was obtained from the respondent and the respondent was assured of confidentiality.

#### **3.8.3 Pretest**

The questionnaire was pretested among male adults in Ugbowo Community, Benin City.

Ten percent (60) of the sample size in the proportion was used for pretesting. The aim was to test the questionnaire for the correctness and appropriate understanding by the respondents to aid in appropriate data collection. Appropriate corrections were made were necessary to the questionnaire before the commencement of the survey.

### **3.8.4 Data Analysis**

The filled questionnaire was thoroughly screened for completeness and accuracy of information. Data coding and cleaning were done. Data were entered and analyzed with IBM SPSS version 25.0 software.

### **3.8.5 Scoring**

Data from questionnaires were collated, screened for completeness and correctness, coded, and entered into IBM SPSS version 22.0 software for analysis.

### **Socio demographics**

#### **Age:**

Age of respondents was grouped into the following categories

21-30 years, 31-40 years, 41-50 years and 51-60years

#### **Occupation:**

Occupation of respondents was grouped using the modified International Labour Organization (ILO) Classification into skill levels 0-4.<sup>56</sup>

Skill level 0 includes retirees, housewives, the unemployed, and students.

Skill level 1 includes labourers, cleaners

Skill level 2 includes traders, receptionists, civil servants, bus drivers, farmers, tailors

Skill level 3 includes technicians, other health workers

Skill level 4 includes doctors, lawyers, engineers, teachers, nurses, accountants, and managers.

### **Number of Children**

The number of children of the respondents was grouped into the following categories:

<2, 3-4, and >5.

### **Socio-Economic Status (SES)**

This was grouped into low, middle, and high based on income, level of education, and occupation.

Low SES included partially skilled or unskilled individuals with no formal education and a monthly income of less than 30,000 nairas.

Middle SES includes individuals with skilled individuals, with a primary or secondary level of education and income ranging between 30,000 – 60,000 naira per month.

High SES included individuals with professional, managerial, or technical skills with a tertiary level of education and a monthly income of greater than 60,000 naira per month.

### **Knowledge**

The knowledge status of respondents was assessed into two domains;

A total of 12 questions were used to assess the knowledge of male involvement in labour. A score of 1 was given to each correct answer and a score of 0 was given to a wrong answer, making a total of 32. The knowledge was converted to percentages such that scores between 0 -

49% were regarded as poor knowledge and scores of 50% and above were regarded as good knowledge. Good knowledge was coded as 1 and poor knowledge was coded as 0.

### **Attitude**

Attitude utilized 8 questions using a 5-point Likert scale and mean score. Score of 1 to 1.8 means strongly disagree, 1.81 to 2.60 means disagree, 2.61 to 3.40 means neutral, 3.41 to 4.20 means agree and 4.21 to 5.0 means strongly agree. The score for attitude was converted to percentages such that scores between 0 - 49% were regarded as negative attitudes and scores of 50% and above were regarded as positive attitudes. A positive attitude was coded as 1 and a negative attitude was coded as 0.

### **Delivery Experiences**

A question was used to assess the delivery experience of the participants. The question contains three options which include joyful, scary, and sad. The options were recoded and categorized into positive and negative delivery experiences. Joyful were coded as positive delivery experiences while scary and sad were coded as negative delivery experiences.<sup>47</sup>

Bivariate analysis was carried out for parametric and non-parametric data. Chi-squared statistical test of association was used for non-parametric data. Fisher's exact test was used to compare associations when the total numbers of expected cells less than 5 were more than 20%. The association between socio-demographics and knowledge, attitude, and delivery experiences was analyzed. The level of significance for all statistically significant associations was set at  $p < 0.05$

Multivariate analysis using binary logistics regression was used to further determine significant predictors of outcome variables such as knowledge, attitude, and delivery experience.

The level of significance for all statistical associations was set at  $p < 0.05$

### **3.9 Data Presentation**

Results were presented in prose, frequency tables, and charts.

### **3.10 Ethical Consideration**

Ethical clearance was obtained from the Ethics and Research Committee, University of Benin Teaching Hospital with protocol number ADM/E 22/A/VOL. VII/14831248. Approval of the study was obtained from the head of Evbuomere Community, informed consent was also obtained from the respondents after they had been educated on the purpose of the study, and confidentiality of the information is assured.

### **3.11 Limitation of the Study**

The information that was obtained may be based on self-reporting and is therefore subject to information bias. To minimize this effect, there was an assurance of full confidentiality of participants, and the researcher or assistant responded to possible questions raised by participants during the data collection. Also, the questionnaire was in simple language.

## CHAPTER FOUR

### Results

A total of 597 participants (men), participated in the study, giving a response rate of 100%. The results are presented in the following sections in line with the specific objectives:

**Section A:** Socio-Demographic Characteristics.

**Section B:** Knowledge Of Adult Males In Evbuomore Community Towards The Role They Should Play When Their Spouse Is In Labour.

**Section C:** Attitude of Adult Males in Evbuomore Community When Their Spouse Is In Labour.

**Section D:** Factors Affecting Adult Males Involvement When Their Spouse Is In Labour In Evbuomore Community.

**Section E:** Delivery Experiences Of Adult Males In Evbuomore Community Whose Spouses Are In Labour.

**SECTION A:**  
**SOCIO-DEMOGRAPHIC CHARACTERISTICS.**

**Table 1: Socio-demographic characteristics of respondents in Evbuomore Community**

<b>Variables</b>	<b>Frequency ( n=597)</b>	<b>Percent</b>
<b>Age group</b>		
21-30	63	10.6
31-40	254	42.5
41-50	214	35.8
51-60	66	11.1
Mean(SD)=40.7(7.9)		
<b>Ethnicity</b>		
Benin	251	42.0
Ibo	92	15.4
Esan	73	12.3
Yoruba	61	10.2
Urhobo	60	10.1
Etsako	27	4.5
Ibibio	17	2.8
Hausa	11	1.9
*Others	5	0.8
<b>Occupation</b>		
Skill level 0	5	0.8
Skill level 1	13	2.2
Skill level 2	301	50.4
Skill level 3	60	10.1
Skill level 4	218	36.5
<b>Religion</b>		
Christianity	567	95.0
Islam	26	4.4
Atr	4	0.6
<b>Marital Status</b>		
Married	563	94.3
Single	18	3.0
Cohabiting	8	1.3
Widowed	4	0.7
Separated	4	0.7
<b>Number of Children</b>		
<2	264	44.2
3-4	274	45.9
>5	59	9.9

\*Owan, Tiv

Two hundred and fifty-four respondents (42.5%) were within the age group of 31-40 while two hundred and fourteen respondents (35.8%) were within the age group of 41-50. Sixty-six respondents (11.1%) were within the age group of 51-60. Sixty-three respondents (10.6%) were within the age group 21-30. The mean age of the respondent was 40.70 with a standard deviation of 7.86.

Two hundred and fifty-one respondents (42.0%) were of Benin ethnicity, ninety-two respondents (15.4%) were of Ibo ethnicity, seventy-three men (12.3%) were of Esan ethnicity while sixty-one respondents (10.2%) were of Urhobo ethnicity.

Three hundred and one respondents (50.4%) had skill level two, two hundred and eighteen respondents (36.5%) had skill level four, sixty respondents (10.1%) had skill level three, and thirteen respondents (2.2%) had skill level one.

Five hundred and sixty-seven respondents (95.0%) were Christians, twenty-six respondents (4.4%) were Muslims and four men (0.6%) practice African Traditional Religion.

Five hundred and sixty-three respondents (94.3%) were married, eighteen respondents (3.0%) were single and eight respondents (1.3%) were cohabiting.

Two hundred and sixty-four respondents (44.2%) had less than two children, two hundred and seventy-four respondents (45.9%) had two to four children while fifty-nine respondents (9.9%) had greater than four children.

**Table 1 Contd: Socio-demographic characteristics of respondents in Evbuomere Community**

<b>Variables</b>	<b>Frequency ( n=597)</b>	<b>Percent</b>
<b>Educational Status</b>		
None	11	1.8
Primary	11	1.8
Secondary	194	32.5
Tertiary	381	63.8
<b>Marriage Type</b>		
Monogamy	587	98.5
Polygamy	9	1.5
<b>Family Type</b>		
Nuclear	581	97.5
Extended	15	2.5
<b>Housing Type</b>		
Flat	352	59.0
Self-contain	130	21.8
Bungalow	54	9.0
Passage house	28	4.7
Duplex	33	5.5
<b>Monthly Income</b>		
<30,000	77	12.9
30,000 – 60,000	205	34.3
60,001 – 90,000	209	35.0
>90,000	106	17.8
Median= 62,369		
Range= 60,000		

Three hundred and eighty-one respondents (63.8%) had a tertiary level of education, one hundred and ninety-four respondents (32.5%) had a secondary level of education while eleven respondents (1.8%) had a primary level of education.

Five hundred and eighty-seven respondents (98.5%) are monogamous while nine respondents (1.5%) are polygamous.

Five hundred and eighty-one respondents (97.5%) had nuclear family type while fifteen respondents (2.5%) had extended family type.

Three hundred and fifty-two respondents (59.0%) stayed in a flat while fifty-four respondents (9.0%) stayed in a bungalow.

Two hundred and nine respondents (35.0%) earned between 60,001 to 90,000 while one hundred and six respondents (17.8%) earned greater than 90,000.

**Table 2: Socio-demographic characteristics of the partner in Evbuomere Community**

<b>Variables</b>	<b>Frequency (n=597)</b>	<b>Percent</b>
<b>Monthly Income</b>		
<30,000	113	18.9
30,000 – 60,000	281	47.1
60,001 – 90,000	136	22.8
>90,000	67	11.2
Median= 49,804		
Range= 60,000		
<b>Educational Status</b>		
None	6	1.0
Primary	24	4.0
Secondary	229	38.2
Tertiary	339	56.8
<b>Religion</b>		
Christianity	572	95.8
Islam	21	3.5
Atr	4	0.7
<b>Occupation</b>		
Skill level 0	8	1.3
Skill level 1	23	3.9
Skill level 2	320	53.6
Skill level 3	132	22.1
Skill level 4	114	19.1
<b>Ethnicity</b>		
Benin	274	45.9
Ibo	98	16.4
Esan	85	14.2
Urhobo	50	8.4
Yoruba	45	7.5
Etsako	23	3.9
Hausa	11	1.8
Ibibio	10	1.6
Other	1	0.2

\*tiv

Two hundred and eight one partners (47.1%) earned between 30,000 - 60,000, one hundred and thirty six partners (22.8%) earned between 60,001- 90,000 while sixty seven partners (11.2%) earned between greater than 90,000.

Three hundred and thirty nine partners (56.8%) had tertiary level of education, two hundred and twenty nine partners (38.2%) had secondary level of education while twenty four partners (4.0%) had primary level of education.

Five hundred and seventy two partners (95.8%) were Christians while twenty one partners (3.5%). and four partner's (0.7%) practice African Traditional Religion.

Three hundred and twenty partners (53.6%) had Skill level two, one hundred and thirty two partners (22.1%) had skill level three while one hundred and fourteen partners (19.1%) had Skill level four.

Two hundred and seventy four partners (45.9%) were Benin, ninety eight partners (16.4%) were Ibo and eighty five partners (14.2%) were Urhobo.

**SECTION B:**

KNOWLEDGE OF ADULT MALES IN EVBUOMORE COMMUNITY TOWARDS THE  
ROLE THEY SHOULD PLAY WHEN THEIR SPOUSE IS IN LABOUR.

**Table 3: Knowledge Of Adult Males In Evbuomere Community Towards The Role They Should Play When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Awareness of male involvement in labour (n=597)</b>		
Yes	597	100
No	0	0.0
<b>*Sources of information</b>		
Radio	411	35.6
Television	404	35.0
Internet	172	14.9
News paper	167	14.5
<b>*Meaning of male involvement (n=833)</b>		
Active participation of men during pregnancy and child birth	422	50.7
Denotes the various ways in which males relate to reproductive health problems and programs, reproductive rights, and behavior	361	43.3
Praying for the spouse	32	3.8
Informing family members and neighbour	11	1.3
Denotes male taking delivery	7	0.8
<b>Presence of male in the delivery room (n=597)</b>		
Yes	436	73.0
No	161	27.0
<b>*Reasons for male presence in the delivery room (n=666)</b>		
To comfort your spouse	419	62.9
To monitor health care workers activities	151	23.5
To recount the delivery	94	14.1
To deliver the baby	2	0.3
<b>*multiple response</b>		

Four hundred and eleven respondents (35.6%) had radio as their source of information, four hundred and four respondents (35.0%) had television as their source of information, while one hundred and seventy two respondents (14.9%) had internet as their source of information.

Four hundred and twenty two respondents (50.7%) thought male involvement was the active participation of men during pregnancy and childbirth, three hundred and sixty respondents (43.3%) thought male involvement denotes the various ways in which makes relate to reproductive health problems and m programs, reproductive rights and behaviours while seven respondents (0.8%) thought made involvement meant for the praying Spouse.

Four hundred and thirty six respondents (73.0%) thought males should be present in the delivery room while one hundred and sixty one respondents (27.0%) do not think made males should be present in the delivery.

Four hundred and nineteen respondents (62.9%) thought males should be present in the delivery room to comfort the spouse, one hundred and fifty one respondents (23.5%) thought males should be present in the delivery room to monitor the activities of health care workers while ninety hour respondents (14.1%) thought make should be present the delivery to recount the delivery experience.

**Table 3 Contd: Knowledge Of Adult Males In Evbuomore Community Towards The Role They Should Play When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>*Reasons for male absence in the delivery room (n=246)</b>		
Because it is a woman thing	116	47.2
I cannot stand to see my wife in pain	67	27.2
The spouse might not want it	41	16.7
Religion does not support it	22	8.9
<b>Presence of Respondents in the delivery room</b>		
Yes	282	47.2
No	315	52.8
<b>*Reasons for respondents absence in the delivery room (n=330)</b>		
Do not feel comfortable going there	197	59.7
Far distance	69	20.9
Religion forbids me to do	34	10.3
Was busy with other children at home	30	9.1
<b>*Roles of male during labour (n=1200)</b>		
Identify place of delivery	400	33.4
Identify skilled health provider	382	31.8
Accompanying her to the delivery centre	372	31.0
Determine the action of health care worker	42	3.5
Create a chaotic environment	4	0.3
<b>Male involvement in decision making (n=597)</b>		
Yes	493	82.6
No	104	17.4
<b>Male involvement in deciding the mode of delivery(n=597)</b>		
Yes	412	69.0
No	185	31.0

\*multiple response

One hundred and sixteen respondents (47.2%) thought males should not be present in the delivery room because it is a woman thing, sixty seven respondents (27.2%) thought males should not be present in the delivering room because they cannot stand to see their wives in pain while forty one respondents (16.7%) thought male should not present in the delivery room because their spouse may not want it.

Two hundred and eighty two respondents (47.2%) have been present in the delivery room while three hundred and fifteen respondents (52.8%) have not been present in the delivery.

One hundred and ninety seven respondents (59.7%) have never been present in the delivery room because they do not feel comfortable going there, sixty nine respondents (20.9%) have never been present the in the delivery room because of distance while thirty four respondents (10.3%) have never been present in the delivery because their religion forbids them to do so.

Four hundred respondents (33.4%) thought the role of males during labour involved identifying the place of delivery, three hundred and eighty two respondents (31.8%) thought it involved identifying skilled health provider while three hundred and seventy the respondents (31.0%) thought it involved accompanying her to the delivery centre.

Four hundred and ninety three respondents (82.6%) thought male should be involved in decision making while one hundred and four respondents (17.4%) thought male should not be involved in decision making.

Four hundred and twelve respondents (69.0%) thought males should be involved in deciding the mode of delivery while one hundred and eighty five respondents (31.0%) thought males should not be involved in deciding the mode of delivery.

**Table 3 Contd: Knowledge Of Adult Males In Evbuomere Community Towards The Role They Should Play When Their Spouse Is In Labour**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>*Reasons for male involvement in deciding the mode of delivery (n=386)</b>		
Man is the decision maker	232	60.1
Woman not in her right state of mind	147	38.1
The woman is the man property.	7	1.8
<b>Male involvement in deciding the use of pain killer during labour (n=597)</b>		
Yes	371	62.1
No	226	37.9
<b>*Reasons for male involvement in deciding the use of pain killer during labour(n=396)</b>		
To reduce the pain of labour	290	73.2
The man is aware of the woman choice	79	19.9
To shorten the time of delivery	27	6.8
<b>Male involvement in deciding the place of delivery (n=597)</b>		
Yes	545	91.3
No	52	8.7
<b>*Reasons for male involvement in deciding the place of delivery (n=888)</b>		
Availability of specialist	462	52.0
Availability of equipment for safe delivery	412	46.4
Family tradition	14	1.6
<b>*multiple response</b>		

Two hundred and thirty two respondents (60.1%) believed males should be involved in deciding the mode of delivery because the man is the decision maker while one hundred and forty seven respondents (38.1%) believed it is because the woman is not in her right state of mind.

Three hundred and seventy respondents (62.1%) believed males should be involved in deciding the use of painkillers during labour while two hundred and twenty six respondents (37.9%) believed males should not be involved in deciding the use of painkillers during labour.

Two hundred and ninety respondents (73.2%) thought males should be involved in deciding the use of painkillers during labour because it reduces the pain of labour while seventy nine respondents (19.9%) thought it was because the man is aware of the woman choice.

Five hundred and forty five respondents (91.3%) believed males should be involved in deciding the place of delivery while fifty two respondents (8.7%) believed males should not be involved in deciding the place of delivery.

Four hundred and sixty two respondents (52.0%) thought males should be involved in deciding the place of delivery due to the availability of specialists, while four hundred and twelve respondents (46.4 %) thought it is due to the availability of equipment for safe delivery.

**Table 4: Knowledge Of Adult Males In Evbuomere Community Towards The Role They Should Play When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Frequency (n=597)</b>	<b>Percent</b>
Good knowledge	540	90.5
Poor knowledge	57	9.5

Five hundred and forty respondents (90.5%) had good knowledge of male involvement in spouse labour as compared to fifty seven respondents (9.5%) who had poor knowledge.

**Table 5: Association Between Knowledge Of Men Whose Spouses Were In Labour And Selected Factors.**

Variables	Knowledge Of Males Whose Spouses Were In Labour		$\chi^2$	p-value
	Good knowledge Frequency (%)	Poor knowledge Frequency (%)		
<b>Age group (years)</b>				
21-30	55(87.3)	8(12.7)	1.385	0.709
31-40	232(91.3)	22(8.7)		
41-50	192(89.7)	22(10.3)		
51-60	61(92.4)	5(7.6)		
<b>Ethnicity</b>				
Benin	224(89.2)	27(10.8)	12.995	0.163
Ibo	87(94.6)	5(5.4)		
Esan	66(90.4)	7(9.6)		
Yoruba	57(93.4)	4(6.6)		
Urhobo	53(88.3)	7(11.7)		
Etsako	27(100.0)	0(0.0)		
Ibibio	13(76.5)	4(23.5)		
Hausa	9(81.8)	2(18.2)		
Others	4(80.0)	1(20.0)		
<b>Religion</b>				
Christianity	517(91.2)	50(8.8)	10.751	0.005*
Islam	21(80.8)	5(19.2)		
ATR	2(50.0)	2(50.0)		
<b>Number of Children</b>				
<2	235(89.0)	29(11.0)	2.049	0.359
3-4	249(90.9)	25(9.1)		
>5	56(94.9)	3(5.1)		
<b>Occupation</b>				
Skill level 0	5(100.0)	0(0.0)	18.434	0.001*
Skill level 1	12(92.3)	1(7.7)		
Skill level 2	257(85.4)	44(14.6)		
Skill level 3	58(96.7)	2(3.3)		
Skill level 4	208(95.4)	10(4.6)		

\*Statistically significant

The majority of the respondents 232 (91.3%) in the age group 31-40 had good knowledge compared to a minority of respondents 22 (10.3%) in the age group 41-50 who had poor knowledge. However, this association was not statistically significant (p =0.709).

The majority of the respondents 87 (94.6%) who are Ibo had good knowledge compared to a minority of respondents 7 (11.7%) who are Urhobo and had poor knowledge. This was not statistically significant ( $p = 0.163$ )

The majority of the respondents 517 (91.2%) who are Christians had good knowledge compared to about one-fifth of respondents 5 (19.2%) who are Muslims who had poor knowledge. This was statistically significant ( $p = 0.005$ )

The majority of the respondents 235 (89.0%) who had less than 2 children had good knowledge compared to a minority of respondents 3 (5.1%) who had greater than 5 children. However, this is not statistically significant ( $p = 0.359$ )

The majority of the respondents 58 (96.7%) with skill level 3 had good knowledge compared to less than one-fifth of respondents 44 (14.6%) who had skill level 2 with poor knowledge. This was statistically significant ( $p = 0.001$ )

**Table 5 Contd: Association Between Knowledge Of Men Whose Spouses Were In Labour And Selected Factors.**

Variables	Knowledge Of Males Whose Spouses Were In Labour		$\chi^2$	p-value
	Good knowledge Frequency (%)	Poor knowledge Frequency (%)		
<b>Educational status</b>				
None	11(100.0)	0(0.0)	11.141	0.011*
Primary	7(63.6)	4(36.4)		
Secondary	179(92.3)	15(7.7)		
Tertiary	343(90.0)	38(10.0)		
<b>Marriage Type</b>				
Monogamy	533(90.8)	54(9.2)	7.415	0.025*
Polygamy	6(66.7)	3(33.3)		
<b>Range of Monthly income</b>				
< 30000	73(94.8)	4(5.2)	5.508	0.134
30000 – 60000	178(86.8)	27(13.2)		
60001 – 90000	191(91.4)	18(8.6)		
>= 90001	98(92.5)	8(7.5)		

\*Statistically significant

Just above half of the respondents 7 (63.6%) with primary level of education had good knowledge compared to a majority of respondents 343 (90.0%) with tertiary level of education who also had good knowledge. This was statistically significant (p =0.011)

The majority of the respondents 533 (90.8%) who were monogamous had good knowledge compared to one-third of respondents 3 (33.3%) who were polygamous and had poor knowledge. This was statistically significant (p-value = 0.025)

The majority of the respondents 73 (94.8%) who earned less than 30,000 naira had good knowledge compared to less than one-tenth of respondents 8 (7.5%) who earned more than 90,000 naira and had poor knowledge. However, this not was statistically significant (p = 0.134)

**Table 6: Logistic Regression Model for Determinant of Knowledge of Males Involvement whose Spouses Were in Labour**

FACTORS	B (REGRESSION CO- EFFICIENT)	ODDS RATIO	95% CI FOR OR		p- value
			LOWER	UPPER	
<b>Age (years)</b>	0.019	1.019	0.984	1.056	0.289
<b>Religion</b>					
Christianity	1.730	5.641	0.421	75.503	0.191
Islam	1.326	3.767	0.239	59.439	0.346
ATR		1			
<b>Number of Children</b>	0.214	1.239	0.971	1.580	0.085
<b>Occupation</b>					
Skill level 0	16.994	<0.01	0.024	<0.01	<0.01
Skill level 1	-0.885	0.413	0.042	4.025	0.446
Skill level 2	-1.521	0.218	0.102	0.466	<0.01
Skill level 3	0.126	1.134	0.240	5.359	0.874
Skill level 4		1			
<b>Educational status</b>					
None	18.509	0.034	<0.01	<0.01	0.998
Primary	-0.903	0.405	0.098	1.675	0.212
Secondary	0.858	2.358	1.199	4.636	0.013
Tertiary		1			
<b>Marriage Type</b>					
Monogamy	0.862	0.344	2.367	0.397	14.117
Polygamy					
<b>Range of Monthly income</b>	0.064	1.066	0.794	1.432	0.669

Reference category- 1, Coefficient of determination - 9.1% to 19.5%

The significant predictors of knowledge of male involvement in spouse labour in this study were the number of children, respondents with skill level 0 and those with skill level 2, and those with a secondary level of education.

As the number of children increases, the likelihood of respondents having a good knowledge of male involvement in spousal labour.

The respondents with skill level 0 and those with skill level 2 were more likely to have good knowledge about male involvement in labour than those with skill levels 1, 3, and 4 ( $p \leq 0.01$  respectively).

The respondents with a secondary level of education had good knowledge of male involvement in labour compared to those respondents with no level of education or those with primary or tertiary education ( $p = 0.013$ )

**SECTION C:**

ATTITUDE OF ADULT MALES IN EVBUOMORE COMMUNITY WHEN THEIR SPOUSE  
IS IN LABOUR.

**Table 7: Attitude of Adult Males in Evbuomere Community When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Strongly disagree, n (%)</b>	<b>Disagree, n (%)</b>	<b>Neutral, n (%)</b>	<b>Agree, n (%)</b>	<b>Strongly agree, n (%)</b>	<b>Mean</b>
<b>Pregnant women susceptible to delivery complication</b>	17(2.8)	8(1.3)	32(5.4)	338(56.6)	202(33.8)	4.17
<b>Severity and hazards of delivery complication for pregnant women</b>	12(2.0)	5(0.8)	17(2.8)	334(55.9)	229(38.4)	4.28
<b>Severity and hazards of delivery complication of newborn</b>	7(1.2)	3(0.5)	18(3.0)	339(56.4)	232(38.9)	4.31
<b>Benefits of presence of skilled health attendance for spouse</b>	3(0.5)	3(0.5)	9(1.5)	295(49.4)	287(48.1)	4.44
<b>Benefits of presence of skilled health attendance for newborn</b>	4(0.7)	1(0.2)	13(2.2)	272(45.6)	308(51.4)	4.47

Five hundred and forty respondents ( 90.4%) strongly agree/agree that pregnant women are susceptible to face delivery, complication, five hundred and sixty three respondents (94.3%) strongly agree/agree that delivery complications can be severe and hazardous for pregnant women while five hundred and seventy one respondents (95.3%) Strongly agree/agree that pregnant women that delivery complication cad be severe and hazardous for a newborn.

The majority of respondents (97.5%) strongly agree/agree that being attended by a skilled delivery attendant is beneficial for the spouse while five hundred and eighty men (97.0%)

strongly agree/agree that being attended by a skilled delivery attendant is beneficial for newborn wellbeing.

**Table 8 Contd: Attitude of Adult Males in Evbuomere Community When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Level of satisfaction of respondents involvement in labour</b>		
Yes	568	94.6
No	32	5.4
<b>*Reasons for dissatisfaction with level of respondent involvement in labour</b>		
Not males role	30	33.0
Not allowed by spouse to participate	34	37.4
Felt ashamed	30	33.0
Not allowed in our culture	27	29.7
<b>*Ways of participate during spousal labour</b>		
Provides mean of transport	487	34.6
Comfort by touching and soothing	363	25.8
Adhere to professional advice	286	20.3
Maintain morale	270	19.2
*multiple response		

Five hundred and sixty eight respondents (94.6%) were satisfied with level at which they were involved when their spouse was in labour. Four hundred and eighty respondents (34.6%) provided a means of transport, two hundred and eighty six respondents (20.3%) encouraged their spouse to adhere to professional advice and two hundred and seventy respondents (19.2%) encouraged their spouse to maintain morale.

**Table 9: Attitude of Adult Males in Evbuomere Community When Their Spouse Is In Labour.**

<b>Variables</b>	<b>Frequency (n=597)</b>	<b>Percent</b>
Positive attitude	582	97.5
Negative attitude	15	2.5

Five hundred and eighty two respondents (97.5%) have a positive attitude as compared to fifteen respondents (2.5%) with a negative attitude.

**Table 10: Association Between Attitude Of Men Whose Spouses Were in Labour and Selected Factors.**

Variables	Attitude Of Males Whose Spouses Were In Labour		$\chi^2$	p-value
	Positive attitude Frequency (%)	Negative attitude Frequency (%)		
<b>Age group (years)</b>				
21-30	60(95.2)	3(4.8)	1.992	0.574
31-40	247(97.2)	7(2.8)		
41-50	210(98.1)	4(1.9)		
51-60	65(98.5)	1(1.5)		
<b>Ethnicity</b>				
Benin	247(98.4)	4(1.6)	10.544	0.308
Ibo	86(93.5)	6(6.5)		
Esan	72(98.6)	1(1.4)		
Yoruba	60(98.4)	1(1.6)		
Urhobo	57(95.0)	3(5.0)		
Etsako	27(100.0)	0(0.0)		
Ibibio	17(100.0)	0(0.0)		
Hausa	11(100.0)	0(0.0)		
Others	5(100.0)	0(0.0)		
<b>Religion</b>				
Christianity	554(97.7)	13(2.3)	8.559	0.014*
Islam	25(96.2)	1(3.8)		
ATR	3(75.0)	1(25.0)		
<b>Number of Children</b>				
<2	258(97.7)	6(2.3)	0.408	0.815
3-4	266(97.1)	8(2.9)		
>5	58(98.3)	1(1.7)		
<b>Occupation</b>				
Skill level 0	5(100.0)	0(0.0)	3.176	0.529
Skill level 1	12(92.3)	1(7.7)		
Skill level 2	293(97.3)	8(2.7)		
Skill level 3	60(100.0)	0(0.0)		
Skill level 4	212(97.2)	6(2.8)		

\*Statistically significant

The majority of the respondents 60 (95.2%) in the age group 21-30 had a positive attitude compared to a minority of respondents 7 (2.8%) in the age groups 31-40 who had a negative attitude during spousal labour. However, this was not statistically significant ( $p = 0.574$ )

The majority of the respondents 247 (98.4%) who were Benin had a positive attitude compared to a minority of respondents 6 (3.8%) who were Ibo and had a negative attitude. However, this was not statistically significant ( $p = 0.308$ )

The majority of the respondents 554 (97.7%) who were Christians had a positive attitude compared to respondent 1 (3.8%) who practiced ATR and had a negative attitude. However, this was statistically significant ( $p = 0.014$ )

The majority of the respondents 258 (97.7%) who had less than 2 children had a positive attitude compared to one respondent 1 (1.7%) who had more than 5 children and had a negative attitude. However, this was not statistically significant ( $p = 0.815$ )

The majority of respondents 293 (97.3%) had a skill level 2 and had a positive attitude compared to a minority of respondents 6 (2.8%) who had a skill level 4 and had a negative attitude. However, this was not statistically significant ( $p = 0.529$ )

**Table 10 Contd: Association Between Attitude Of Men Whose Spouses Were in Labour and Selected Factors.**

Variables	Attitude Of Males Whose Spouses Were In Labour		$\chi^2$	p-value
	Positive attitude Frequency (%)	Negative attitude Frequency (%)		
<b>Educational status</b>				
None	11(100.0)	0(0.0)	3.184	0.364
Primary	10(90.9)	1(9.1)		
Secondary	191(98.5)	3(1.5)		
Tertiary	370(97.1)	11(2.9)		
<b>Marriage Type</b>				
Monogamy	573(97.6)	14(2.4)	3.317	0.190
Polygamy	8(88.9)	1(11.1)		
<b>Range of Monthly income</b>				
< 30000	73(94.8)	4(5.2)	3.777	0.275
30000 – 60000	199(97.1)	6(2.9)		
60001 – 90000	205(98.1)	4(1.9)		
>= 90001	105(99.1)	1(0.9)		

The majority of the respondents 370 (97.6%) who had a tertiary level of education had a positive attitude compared to a minority of respondents 3 (1.5%) with a secondary level of education who had a negative attitude. However, this was not statistically significant. ( p = 0.364)

The majority of the respondents 573 (97.1%) who are monogamous had a positive attitude compared to respondent 1 (11.1%) who was polygamous and had a negative attitude. However, this was not statistically significant (p = 0.190)

The majority of the respondents 73 (94.8%) who earn less than 30,000 naira had a positive attitude compared to respondent 1 (0.9 %) who earned more than 90,000 naira. However, this was not statistically significant (p = 0.275).

**Table 11: Logistic Regression Model for Determinant Of attitude Of Male Involvement In spouse Labour**

FACTORS	B (REGRESSION CO- EFFICIENT)	ODDS RATIO	95% CI FOR OR		p- value
			LOWER	UPPER	
<b>Age (years)</b>	0.018	1.018	0.935	1.108	0.681
<b>Religion</b>					
Christianity	2.281	9.787	0.502	190.672	0.132
Islam	2.094	8.120	0.299	220.280	0.214
ATR		1			
<b>Number of Children</b>	0.029	1.030	0.620	1.710	0.910
<b>Occupation</b>					
Skill level 0	16.292	0.01	0.00	1.267	<0.01
Skill level 1	-1.595	0.203	0.018	2.352	0.202
Skill level 2	-0.127	0.881	0.263	2.944	0.836
Skill level 3	16.473	1.497	<0.01	<0.01	0.996
Skill level 4		1			
<b>Educational status</b>					
None	16.695	0.177	<0.01		0.998
Primary	-0.127	0.881	0.058	13.468	0.927
Secondary	0.848	2.336	0.540	10.105	0.256
Tertiary		1			
<b>Marriage Type</b>					
Monogamy	1.028	2.795	0.161	48.650	0.481
Polygamy		1			
<b>Range of Monthly income</b>	0.500	1.648	0.883	3.077	0.117

Reference category- 1, Coefficient of determination- 2.6% to 12.4%

The significant predictor of the attitude of male involvement in spousal labour is occupation.

As the skill level of the respondents increases, the likely hood of having a good attitude towards male involvement in spousal labour decreases. Respondents with skill level 0 have a good attitude toward male involvement in spousal labour compared to respondents with skill levels 1, 2, 3, and 4.

**SECTION D:**

FACTORS AFFECTING ADULT MALES INVOLVEMENT WHEN THEIR SPOUSE IS IN  
LABOUR IN EVBUOMORE COMMUNITY.

**Table 12: Factors Affecting Adult Males Involvement When Their Spouse Is In Labour In Evbuomere Community.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Effect of occupation on respondents participation in taking care of spouse during labour (n=597)</b>		
Yes	105	17.6
No	492	82.4
<b>*Ways respondents occupation affect participation in caring for spouse during labour(n=103)</b>		
Far distance	68	66.0
Too busy at work	22	21.4
Refusal of boss to grant permission to leave the office	13	12.6
<b>Effect of income on respondents participation in taking care of spouse during labour (n=597)</b>		
Yes	76	12.7
No	521	87.3
<b>*Ways respondents income affect participation in caring for spouse during labour (n=122)</b>		
Low income to afford adequate maternal care	63	51.6
Low income to buy necessary materials	59	48.4
<b>Effect of restriction from health care workers on respondents participation in taking care of spouse during labour (n=597)</b>		
Yes	251	42.0
No	346	58.0

\*multiple responses

Four hundred and ninety two respondents (82.4%) said their occupation did not affect their participation in taking care of their spouse during labour while one hundred and five men (17.6%)

said their occupation affected their participation in taking care of their spouse due to distance and busy schedule at work.

Five hundred and twenty one respondents (87.3%) said their income did not affect participation in taking care of their spouse while seventy six respondents (12.7%) said their income affected their participation.

Three hundred and forty six respondents (58.0%) said restriction from health workers did not affect their participation in taking care of their spouse while two hundred and fifty one respondents (42.0%) said restriction from health workers affected their participation in taking care of their spouse.

**Table 12 Contd: Factors Affecting Adult Males Involvement When Their Spouse Is In Labour In Evbuomere Community.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>*Ways restriction from health care workers affect participation in caring for spouse during labour (n=261)</b>		
Restrictions from entering the delivery room	205	78.5
Bad attitudes from health workers	56	21.5
<b>Effect of beliefs on respondents participation in taking care of spouse during labour (n=597)</b>		
Yes	29	4.9
No	568	95.1
<b>*Ways respondents belief affect participation in caring for spouse during labour (n=47)</b>		
My religion does not support it	24	51.1
My culture forbid it	23	48.9
<b>*multiple responses</b>		

Five hundred and sixty eight respondents (95.1%) said their belief does not affect their participation while twenty nine respondents (4.9%) said their belief affects their participation.

**SECTION E:**

DELIVERY EXPERIENCES OF ADULT MALES IN EVBUOMORE COMMUNITY WHOSE SPOUSES WERE IN LABOUR

**Table 13: Delivery Experiences Of Adult Males In Evbuomere Community Whose Spouses Were In Labour.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Awareness of delivery experience (n=597)</b>		
Yes	597	100
No	0	0
<b>*Sources of information (n=1117)</b>		
Radio	420	37.6
Television	397	35.6
Newspaper	150	13.4
Internet	150	13.4
Others		
<b>*Delivery experience (n=644)</b>		
A man personal feelings and interpretation of birth processes	472	73.3
The feeling before birth	105	16.3
The feeling after birth	46	7.1
What the doctor tells the woman	21	3.3
<b>Kind of delivery experience (n=597)</b>		
Positive	574	96.1
Negative	23	3.9
<b>Awareness of positive delivery experiences (n=868)</b>		
No prolong labour	438	50.5
No birth complication	430	49.5
<b>Awareness of negatives delivery experiences (n=47)</b>		
Emergency caesarean section	21	44.7
Prolonged labour	12	25.5
Birth complication	8	17.0
Unplanned intervention	6	12.8

\*multiple response

All participants are aware of the delivery experience. Four hundred and twenty respondents (37.6%) have radio as their source of information, three hundred and ninety seven respondents

(35.6%) have television as their source of information and one hundred respondents have a newspaper as their source of information.

Four hundred and seventy two respondents (73.3%) thought delivery experiences referred to a man's personal feelings and interpretation of birth processes, one hundred and five respondents (16.3%) thought delivery experience referred to the feeling before birth while forty six respondents (7.1%) thought delivery experience referred to the feeling after birth.

Five hundred and seventy four respondents (96.1%) had a positive delivery experience while twenty three respondents (3.9%) had negative delivery experience.

Four hundred and thirty eight respondents (50.5%) knew that no prolonged labour is a positive delivery experience while four hundred and thirty respondents (49.5%) knew that no birth complication is a positive delivery experience.

Twenty one respondents (44.7%) knew that the emergency section is a negative delivery experience while twelve respondents (25.5%) knew that prolonged labour is a negative delivery experience.

**Table 13 contd: Delivery Experiences of Adult Males In Evbuomere Community Whose Spouses Were In Labour.**

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Outcome of the pregnancy (n=597)</b>		
Alive	591	99.0
Dead	6	1.0
<b>*Kind of delivery experience of respondents (n=596)</b>		
Joyful	522	87.6
Scary	60	10.1
Sad	14	2.3
<b>Effect of respondent presence on spouse delivery (n=592)</b>		
Positive	568	95.9
Negative	24	4.1
<b>*Positive effect (n=1393)</b>		
Emotional support	458	32.9
Reduced anxiety	290	20.8
Shorter delivery	259	18.6
Reduced pain	251	18.0
Reduced caesarean section	135	9.7
<b>*Negative effect (n=26)</b>		
Increased stress	14	53.8
Increased anxiety	6	23.1
Restlessness	6	23.1
<b>Areas of improvement. (n=860)</b>		
Arrival at the hospital on time	368	42.8
Choosing a better place of delivery	329	38.3
Saving for the delivery.	107	12.4
Getting blood ready	56	6.5

\*multiple response

Five hundred and twenty two respondents (87.6%) had a joyful delivery experience while sixty respondents (10.1%) had a scary delivery experience.

Five hundred and sixty eight respondents (95.9%) said their presence positively affected the delivery of their spouse while twenty four respondents (4.1%) said their presence negatively affected the delivery of their spouse.

Three hundred and sixty eight respondents (42.8%) wished they would have arrived at the hospital on time, three hundred and twenty nine (38.3%) wished they would have chosen a better place of delivery while one hundred and seven men (12.4%) wished they would have saved for the delivery.

**Table 14: Delivery Experiences Of Adult Males In Evbuomore Community Whose Spouses Were In Labour**

<b>Variables</b>	<b>Frequency (n=597)</b>	<b>Percent</b>
Positive experiences	522	87.4
Negative experiences	75	12.6

Five hundred and twenty two (87.4%) have positive experience as compared to seventy five respondents (12.6%) with negative experience.

**Table 15: Association Between Delivery Experience Of Men Whose Spouses Were In Labour And Selected Factors.**

Variables	Delivery Experiences Of Men Whose Spouses Were In Labour		$\chi^2$	p-value
	Positive Experience Frequency (%)	Negative Experience Frequency (%)		
<b>Age group (years)</b>				
21-30	9(14.3)	54(85.7)	0.938	0.816
31-40	33(13.0)	221(87.0)		
41-50	27(12.6)	187(87.4)		
51-60	6(9.1)	60(90.9)		
<b>Ethnicity</b>				
Benin	29(11.6)	222(88.4)	6.170	0.723
Ibo	14(15.2)	78(84.8)		
Esan	8(11.0)	65(89.0)		
Yoruba	5(8.2)	56(91.8)		
Urhobo	12(20.0)	48(80.0)		
Etsako	3(11.1)	24(88.9)		
Ibibio	2(11.8)	15(88.2)		
Hausa	2(18.2)	9(81.8)		
Others	0(0.0)	5(100.0)		
<b>Religion</b>				
Christianity	67(11.8)	500(88.2)	8.008	0.018*
Islam	6(23.1)	20(76.9)		
ATR	2(50.0)	2(50.0)		
<b>Number of Children</b>				
<2	35(13.3)	229(86.7)	1.995	0.369
3-4	36(13.1)	238(86.9)		
>5	4(6.8)	55(93.2)		
<b>Occupation</b>				
Skill level 0	0(0.0)	5(100.0)	2.657	0.617
Skill level 1	1(7.7)	12(92.3)		
Skill level 2	42(14.0)	259(86.0)		
Skill level 3	9(15.0)	51(85.0)		
Skill level 4	23(10.6)	195(89.4)		

\*Statistically significant

**Table 16: Association Between Delivery Experience Of Men Whose Spouses Were In Labour And Selected Factors.**

Variables	Delivery Experiences Of Men Whose Spouses Were In Labour		$\chi^2$	p-value
	Positive Experience Frequency (%)	Negative Experience Frequency (%)		
<b>Educational status</b>				
None	1(9.1)	10(90.9)	0.473	0.925
Primary	2(18.2)	9(81.8)		
Secondary	25(12.9)	169(87.1)		
Tertiary	47(12.3)	334(87.7)		
<b>Marriage Type</b>				
Monogamy	71(12.1)	516(87.9)	8.432	0.004*
Polygamy	4(44.4)	5(55.6)		
<b>Range of Monthly income</b>				
< 30000	9(11.7)	68(88.3)	14.441	0.002*
30000 – 60000	26(12.7)	179(87.3)		
60001 – 90000	16(7.7)	193(92.3)		
>= 90001	24(22.6)	82(77.4)		
<b>Knowledge</b>				
Good knowledge	472(87.4)	68(12.6)	0.005	0.946
Poor knowledge	50(87.7)	7(12.3)		
<b>Attitude</b>				
Positive attitude	512(88.0)	70(12.0)	6.043	0.014*
Negative attitude	10(66.7)	5(33.3)		

\*Statistically significant

The relationship between the Delivery experience of males whose spouses were in labour and religion was statistically significant ( $p = 0.018$ )

The relationship between the Delivery experience of males whose spouses were in labour and marriages type was statistically significant ( $p = 0.004$ )

The relationship between the Delivery experience of males whose spouses were in labour and monthly income was statistically significant ( $p = 0.002$ )

The relationship between delivery experiences of males whose spouses were in labour and attitude was statistically significant ( $p = 0.014$ )

The relationship between knowledge of male involvement in spouse labour and delivery experience was not statistically significant ( $p = 0.946$ )

The relationship between the attitude of the male during labour and delivery experience was significant ( $p = 0.074$ )

**Table 17: Logistic Regression Model for Determinant Of Delivery Experiences of men whose Spouses are in Labour.**

FACTORS	B (REGRESSION CO- EFFICIENT)	ODDS RATIO	95% CI FOR OR		p- value
			LOWER	UPPER	
<b>Age (years)</b>	0.002	0.998	0.960	1.038	0.936
<b>Religion</b>					
Christianity	2.245	10.102	0.766	133.148	0.079
Islam	1.554	5.263	0.355	77.930	0.227
ATR		1			
<b>Number of Children</b>	0.224	1.251	0.965	0.090	0.090
<b>Occupation</b>					
Skill level 0	18.640	0.0	0.0	0.0	
Skill level 1	0.353	1.424	0.166	12.219	0.747
Skill level 2	-0.219	0.803	0.433	1.490	0.487
Skill level 3	-0.490	0.612	0.259	1.447	0.264
Skill level 4	0	1			
<b>Educational status</b>					
None	0.280	1.323	0.158	11.062	0.796
Primary	-0.090	0.914	0.138	6.052	0.925
Secondary	0.044	1.045	0.579	1.888	0.883
Tertiary		1			
<b>Marriage Type</b>					
Monogamy	1.450	4.261	0.861	21.082	0.076
Polygamy		1			
<b>Range of Monthly income</b>	-0.424	0.654	0.468	0.914	0.013

Reference category- 1, Coefficient of determination- 3.8% to 7.9%

Range of monthly income was the only significant determinant of delivery experiences of men whose spouses were in labour (p = 0.013)

## CHAPTER FIVE

### Discussion

The participation of men in the care of their wives during labour is viewed as a crucial aspect of the World Health Organization's (WHO) efforts to ensure safe pregnancies. This involvement is especially important in developing countries where men often hold positions of power in both the family and the broader society. Research conducted on a global scale has indicated that men generally express willingness to participate but may underperform due to a lack of knowledge or insufficient understanding of the needs of pregnant women and their roles and responsibilities.<sup>31</sup>

Most of the respondents in this study were between the age group of 31 – 40 years. The mean age (SD) of the respondents was  $40.7 \pm 7.9$ . The main reason responsible for this finding in this study was because the majority of people living in the community are young people. This finding is similar to a study carried out in Enugu Nigeria that assessed adult male involvement in maternity care, where the majority of their respondents were between the age group of 30 – 39 year.<sup>25</sup> The youth can take on leadership roles in promoting maternal care. They can organize community events, volunteer with organizations that support maternal health, and advocate for maternal health policies at local and national levels.

More than two third of the respondents had tertiary level of education. This finding contrasts to a study carried out in Indonesia to assess the level of male participation and to analyze the determinants of male participation in childbirth, where most of the respondents have senior high school education.<sup>57</sup> This is due to the community having good access to high-quality education which has encouraged more individuals to get tertiary education. Individuals with a tertiary level of education will likely have a good understanding of health information, including information

related to pregnancy, childbirth, and infant care. This can help them make informed decisions about their health and the health of their babies.

This study identified that the majority of the male respondents had good knowledge of male involvement in spouse labour and this finding is similar to a study carried out in Ibadan to assess the knowledge of male partners' involvement in pregnancy-related care. The result of the study showed that most of the respondents had good knowledge of Pregnancy-related care of their spouses.<sup>26</sup> The good knowledge of men's involvement in labour observed in this study could be linked to the fact that a significant number of the participants had higher education, indicating they are well-informed individuals. Good knowledge of male involvement in spousal labor can contribute to improved maternal health outcomes as they will render support and assistance to their spouse during labour.

There was however a small proportion of respondents with poor knowledge of male involvement in spouse labour in this study. This is consistent with the finding by Sekoni and Owoaje in Southwest Nigeria among fathers aged 15-65 years, and the study in Varanasi, India where the majority of the respondents had poor knowledge about the role of men in spousal pregnancy.<sup>27</sup> The poor knowledge of male involvement in spouse labor among males can be attributed to traditional gender roles, lack of education, lack of positive role models, cultural and social norms, and work demands. Addressing these factors can help to promote greater knowledge and awareness of the benefits of male involvement in spouse labour.

Most of the respondents in this study agreed that males should be present in the delivery room with the majority identifying comforting their wives as the main reason. This finding is similar to a study carried out in the Netherlands to assess father support in the delivery room. This study

found that most fathers who were present during labor and delivery provided emotional support to their partners and reduced the likelihood of anxiety.<sup>58</sup> This positive response maybe because the majority of them are well informed and the respondents were mainly Christians who in their belief do not oppose men being in the labour room with their spouse. Spouses presence in the delivery room can increase their involvement in the child-birth process and development. This can have long-lasting benefits for the father-child relationship, including improved emotional bonding, increased paternal responsibility and engagement, and improved mental health outcomes for fathers.

Less than one-third of the respondents did not support that males should be in the delivery room with their spouse because they think it is a woman's thing and they can not stand to see their wives in pain. However, this study is a contrast to a study carried out in Indonesia to assess the relationship between husband support and wife delivery.<sup>31</sup> The study revealed that the majority of the respondent supported male presence in the delivery room as they accompanied their partner to the delivery room. Men who are not present during childbirth may feel less involved in the childbirth process and may have a harder time adjusting to their new role as fathers. This can have negative implications for long-term father involvement and engagement.

The majority of the respondents had good knowledge of the role they should play during spousal labour, with most of them identifying the place of delivery, the skilled health provider, and accompanying her to the delivery center. This is similar to a study carried out in Indonesia to assess the relationship between husband support and wife delivery, which revealed that the majority of the respondent have good knowledge of the role they should play during labour, as most of them accompanied their partner to the delivery room.<sup>31</sup> The presence of tertiary health institution and their routine sensitization program to the community must have played a major

role to achieve this good knowledge of the role they played during their spouse labour. Men who have a good understanding of their role during spousal labor can provide emotional support and reassurance to their partners, which can help to reduce maternal anxiety and stress. This can have a positive impact on maternal mental health and well-being.

Most of the respondents in this study supported men in decision making with their spouse during spouse labour. This is similar to a study carried out Idikan Community in Ibadan, to assess the knowledge, perception, and involvement of male partners' involvement in pregnancy-related care. The result of the study showed that most of the respondents had good knowledge of Pregnancy-related care in accompanying their partner to labour ward and also had good knowledge in joining their wives in taking decisions that concern pregnancy.<sup>26</sup> Women who have partners who are involved in decision-making during spousal labour tend to have positive birth experiences and higher levels of satisfaction with their care. This can help to promote patient satisfaction and increase overall trust and confidence in the healthcare system.

The majority of the participants in this study, had good knowledge in deciding the place of delivery of their spouse. This is similar to a study carried out in Ibadan North Local Government Area to determine the knowledge and attitude of male commercial motorcyclists on pregnancy care and delivery of women. The results of the study show that the majority of the respondents had good knowledge in choosing the place of delivery of their baby.<sup>27</sup> The presence of a tertiary healthcare system and a high number of people with tertiary education must have contributed to the good knowledge in deciding the place of delivery. Choosing the right place of delivery can have a significant impact on maternal and infant health outcomes. Men who have good knowledge about the different options for delivery, including hospitals, birth centers, and home

births, can help their partners make informed decisions that can lead to better health outcomes for both mother and baby.

This study found 4 variables that simultaneously have a significant relationship with male involvement in childbirth including religion(christian), occupation(skill level 2), educational status(tertiary) and marriage type(monogamous). This finding further adds to the complexity of the problem and the concept of male involvement in maternal health, especially during childbirth.

In similarity, in a study conducted in Iran, researchers found that cultural and religious beliefs played a significant role in shaping women's preferences for male involvement in childbirth.<sup>59</sup> Specifically, women who held more traditional views of gender roles were less likely to want their husbands present during labor and delivery, while those who held more progressive views were likely to prefer their husbands' presence. By breaking down cultural or religious barriers that prevent men from being involved in labor and delivery, we can help to enhance communication and understanding between partners. This can help to build stronger relationships and increase overall satisfaction with the childbirth experience.

A study published in the Journal of Nursing Education and Practice in 2016 found that men in professional occupations (such as doctors, engineers, and managers) were more likely to be involved in labor and delivery than men in manual or service occupations.<sup>60</sup> Men who have flexible work schedules may be more likely to be able to take time off to attend prenatal appointments and be present during labor and delivery. This can help to provide support to their partners during childbirth and improve maternal and infant health outcomes.

In addition, another study with similar findings conducted in Nigeria found that men with higher educational status were more likely to be involved in their partner's labor and delivery. The study

also found that men who had attended antenatal care with their partners were more likely to be involved in labor and delivery.<sup>61</sup> Men who have higher levels of education will have access to information about the benefits of male involvement in childbirth and the role they can play in supporting their partners. This can lead to increased awareness and understanding of the importance of male involvement in labor and delivery.

The study showed that the majority of respondents had a positive attitude. This is similar to a descriptive cross-sectional study conducted on 300 husbands of nulliparous women referring to the prenatal clinic of Fatemeh Hospital in Hamadan, Iran in 2015 to determine the attitude and participation of men in prenatal, childbirth and postpartum care which showed that over two-thirds of the respondents had a positive attitude.<sup>35</sup> It is also similar to a descriptive cross-sectional study conducted among 380 male commercial motorcyclists operating in Ibadan North local government area in Oyo State, Nigeria to determine their knowledge and attitude on pregnancy care and delivery which showed that many respondents had a positive attitude.<sup>27</sup> This is because the study was conducted in an urban area where respondents have access to many sources of health-related information like television, radio, internet, etc, and the presence of a nearby teaching hospital. The positive attitude of participants in this study would increase male involvement in pregnancy and delivery care as well as women's utilization of reproductive health services leading to reduced maternal and neonatal mortality rates. This is in line with SDG 3 which is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

While religion significantly affected the attitude of men towards labour of their spouse, other demographic factors did not significantly affect attitude. The findings of this study showed that the majority of respondents are Christians and have a positive attitude regarding their involvement when their spouse is in labour which includes being present in the delivery room.

This is in contrast to a cross-sectional study conducted in Kashan City, Iran on the attitude and participation of men regarding prenatal care, childbirth and postpartum care which revealed that respondents agreed that men should not be allowed near the delivery room due to religious reasons.<sup>36</sup> This difference is due to religious beliefs as respondents in Iran where Muslims believe every man and woman is interested in being cared for in a private setting. This will cause reduced male involvement in spousal labour which will lead to poor maternal and neonatal outcome.<sup>19</sup>

This study did not show a significant relationship between educational status and the attitude of males when their spouse is in labour. This is in contrast to a study done on Attitudes and barriers towards the presence of husbands with their wives in the delivery room during childbirth in Riyadh, Saudi Arabia which revealed that the attitude of men regarding their involvement in labour increased with increasing levels of education. This difference may be due to the proximity of the community to a tertiary hospital that regularly does community outreaches.<sup>62</sup>

From this study, the majority of respondents reported that their occupation did not affect their participation in taking care of their spouse. This is in contrast to a descriptive cross-sectional study carried out among 367 married men in Ibadan, Nigeria to assess the knowledge, perception and involvement of male partners in pregnancy-related care which reported occupation as a major factor restricting men's involvement in the care of their partner during labour.<sup>26</sup> This may be due to the increased knowledge and attitude of the respondents towards male involvement in labour and also most of the participants were self-employed. Government can make policies that guarantee leave for workers for the delivery period of their spouse. This can help create a positive male delivery experience and also increase contraceptive use causing smaller family sizes.<sup>63</sup>

In addition, this study showed that restrictions from healthcare workers affected male involvement during the delivery of a spouse. This is similar to a study done among 145 respondents in Enugu, Nigeria to assess adult male involvement in maternity care which showed about two-thirds of respondents did not participate due to a lack of facilities that involve males in maternity care.<sup>25</sup> This is due to poor funding and infrastructure of hospitals In Nigeria. This reduces male involvement in labour and increases negative birth experience, maternal mortality, and neonatal mortality.<sup>17</sup>

The majority of respondents in this study reported that their belief did not affect their participation in taking care of their spouse. This is in contrast to a study done in Kambuga Sub-county, Kanungu District, Uganda among 60 men to investigate factors leading to male partner involvement in care for pregnancy, childbirth which showed that half of the respondents revealed that cultural and traditional beliefs influenced their participation in taking care of their spouse.<sup>57</sup> This difference may be because the study was done in a rural area, unlike this study which was done in an urban area.

This study identified that the majority of the male respondents had good knowledge of delivery experience during spousal labour, with the majority of the respondents identifying no prolonged labour, birth complication as a positive experience, and unplanned interventions, birth complication as a negative experience. This finding is similar to a study carried out in Sweden on birth experiences, and associated factors among male respondents indicated that the majority of the respondents had positive delivery experience.<sup>44</sup> These positive experiences during spousal labour could in part be attributed to the observation that the majority of respondents studied has good knowledge of male involvement in spouse labour. Men who are provided with information and education about childbirth, are more likely to participate in their partner's labor and delivery

process, providing emotional and physical support, and even taking on active roles such as coaching and helping with breathing exercises. This increased involvement will improve better birth outcomes for both the mother and baby, including lower rates of interventions and cesarean sections.

Another observation that must have contributed to the high proportion of positive experiences among males in the community is the relative majority of respondents with a positive attitude during spousal labour. The attitude of men towards their involvement in their spouse's labor and delivery experience can have a significant impact on the birth outcomes and the overall satisfaction of both the mother and the father. Men who have positive attitudes towards their involvement in childbirth are more likely to provide emotional and physical support to their partner during labor, which has been shown to reduce anxiety, pain, and stress levels in the mother. This, in turn, can lead to a more positive birth experience and better health outcomes for both the mother and the baby. This finding is similar to a study carried out in southern Ethiopia on the relationship between male partners' attitudes towards childbirth and maternal perinatal outcomes among male respondents where male partners' attitudes towards childbirth significantly influenced maternal perinatal outcomes. Specifically, male partners who had positive attitudes towards childbirth were associated with better maternal perinatal outcomes, such as increased maternal satisfaction with childbirth, lower rates of instrumental delivery, and shorter duration of labor.<sup>58</sup>

Most of the respondents describe their delivery experience with their spouse as joyful while a smaller percentage describe theirs as scary and sad. This is similar to a study carried out in Mainz to assess birth experience from the perspective of the fathers where the majority of the participant describe their delivery experiences as happy experiences while others describe theirs

as fearful experiences.<sup>45</sup> When fathers are actively involved in the delivery room and have a positive and joyful experience, it can enhance bonding with their partner and the newborn. This emotional connection is crucial for the overall well-being of the family and can contribute to a healthier family dynamic

This study found 3 variables that simultaneously have a significant relationship with the delivery experiences of men during spousal childbirth including religion(christian), monthly income(60,000-90,000) and marriage type(monogamous).

A study conducted in the United States examined the influence of religion on men's childbirth experiences. It found that men who identified as religious tended to have more positive childbirth experiences, reporting higher levels of emotional support and satisfaction with the birth process.<sup>64</sup> Religious beliefs, such as the importance of family and the sanctity of life, were found to shape men's perceptions and experiences of childbirth. Religion can shape men's attitudes and behaviors regarding their involvement in childbirth. Religious beliefs may emphasize the importance of family, care, and support, encouraging men to actively participate and provide emotional and practical support to their partners during labor and delivery. This increased involvement can contribute to improved maternal and infant outcomes and enhance the overall childbirth experience.

Another study was carried out to explore the association between marital satisfaction and childbirth experience. The findings suggested that higher levels of marital satisfaction were linked to more positive childbirth experiences for both men and women. While this study did not specifically focus on different types of marriages, it highlights the overall importance of marital satisfaction in shaping the childbirth experience.<sup>65</sup> Type of marriage can influence the

psychological well-being of men during the childbirth process. A supportive and nurturing marital relationship, regardless of the marriage type, can contribute to positive mental health outcomes for men. This includes reduced stress and anxiety, increased emotional support, and a sense of partnership, which can enhance the overall delivery experience.

## **Conclusion**

This study showed that majority of the respondents had good knowledge and attitude towards male involvement when spouse is in labour which is expected to have a positive effect on male involvement during labour and a positive delivery experience.

Respondents who were Christians, had tertiary level of education and who had monogamous families had good knowledge of male involvement in labour.

The majority of respondents had joyful delivery experiences with their presence positively affecting the delivery of their spouse.

## **Recommendations**

### **To The Head of Local Government Administration**

- To encourage continuous health education programs that emphasize the importance of male participation when spouse is in labour.

### **To The Healthcare Workers**

- Ensure health talks on the role and importance of male involvement in labour are regularly given to women to encourage them to come along with their partners for ante-natal care visits and family planning visits where important decisions will be made.
- Restrictions on males from entering the delivery room due to hospital policy should be removed or reduced and facilities encouraging male involvement should be built.
- To ensure that a special room is considered for women and their spouses in the hospital, thus other people can be prevented from entering and their privacy can be protected.

### **To The Community**

- Encourage men to actively participate in the birth process by attending antenatal classes and accompanying their partners during prenatal visits.
- Emphasize the importance of shared decision-making and equal involvement in planning for the labor and birth experience
- Promote an inclusive and equitable understanding of gender roles.

- Encourage men to challenge traditional gender norms and actively participate in caregiving responsibilities, including postpartum care, breastfeeding support, and household tasks.

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## APPENDIX I

### INFORMED CONSENT FORM

TITLE OF STUDY: Delivery Experiences: Male Involvement In Labour And Other Associated Factors Among Adults In Evbuomore Community, Benin City., Edo State.

INSTITUTION: University of Benin.

PRINCIPAL INVESTIGATORS: Aghogho Goodluck Emurotu

Precious Onyekwere Enyioma

Samuel Erhunmwunsee

SUPERVISOR: Dr. (Mrs) O.E Obarisiagbon

SPONSORSHIP: This study will be self-sponsored.

PURPOSE OF THE RESEARCH: To assess the delivery experiences and the involvement of adult males whose spouses are in labour and other associated factors in Evbuomore Community, Benin City, to improve labour experience and maternal and child health outcomes.

The results obtained from this survey will provide relevant authorities with data on the knowledge and attitude toward male involvement in labour and other associated factors and recommend ways to improve labour experience and maternal and child health outcomes.

PROCEDURES INVOLVED IN THE STUDY: In this study, respondents will be asked questions regarding- knowledge, attitude, and factors affecting male involvement in spousal labour as well as their delivery experience.

**CONFIDENTIALITY:** All information obtained in the course of the survey will be treated with utmost confidence. The name of the participant will not be written on the questionnaire. All information obtained from the questionnaire will be coded in a file on the personal computer of the principal investigators and pass-warded.

**COMPENSATION:** There shall be no financial compensation for participation in this study.

**VOLUNTARY PARTICIPATION:** Your participation in this study is entirely voluntary and you may wish to withdraw from it whenever you choose. If you desire to withdraw from this study at any time, no punitive measures will be meted out against you on account of your withdrawal. Your refusal to participate or withdraw from the study will not involve any negative consequences or loss of benefits to which you are otherwise entitled to.

**RISKS:** It is not expected that any harm will come to you because you participated in this study. The study does not entail any activity that would result in harm to you

**BENEFITS:** Results obtained from this study will help us assess delivery experiences, knowledge and attitude of male involvement in labour as well as the factors affecting their involvement and create awareness among relevant stakeholders and suggest measures to improve outcome.

**FINANCIAL SPONSORSHIP:** This study will be sponsored by both principal investigators.

The under-listed may be contacted in case you have any clarifications to make.

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**APPENDIX II**  
**QUESTIONNAIRE**

**DEPARTMENT OF COMMUNITY HEALTH, UNIVERSITY OF BENIN, BENIN CITY.**

**DELIVERY EXPERIENCES: MALE INVOLVEMENT IN LABOUR AND OTHER ASSOCIATED FACTORS AMONG MALE ADULTS IN EVBUOMORE COMMUNITY BENIN CITY**

Dear respondent, I am an undergraduate student of Community Medicine Department, University of Benin, Benin City. I am currently carrying out a study on Delivery experiences: Male involvement in labour and other associated factors among male adults in Evbuomore community Benin City. The information provided will not be used for any purpose outside this research. Kindly return the duly completed version to us. Thank you for your expected co-operation.

**SECTION A: SOCIO-DEMOGRAPHICS INFORMATION**

1. Age (As at last birthday) .....
2. Ethnicity .....
3. Occupation.....
4. Religion: Christianity [ ] Islam [ ] ATR[ ]  
Others(specify).....
5. Marital status: Single [ ] Married [ ] Widowed [ ] Separated [ ]  
cohabiting [ ]
6. Number of children .....
7. Educational status: None [ ] Primary [ ] Secondary [ ] Tertiary [ ]
8. Marriage type: Monogamy [ ] Polygamy [ ] Polyandry [ ]
9. Family type: Nuclear [ ] Extended [ ]
10. Do you and your partner live together? Yes[ ] No[ ]
11. If No, why? .....
12. Housing type: Passage house[ ] Self-contained [ ] Flat [ ]  
Bungalow [ ] Duplex [ ]
13. What is the range of your monthly income? < 30,000 [ ] 30,000 – 60,000 [ ] 60,001 – 90,000 [ ] ≥ 90,001 [ ]

**SECTION B: SOCIO-DEMOGRAPHIC INFORMATION OF THE PARTNER**

14. What is the range of her monthly income < 30,000 [ ] 30,000 – 60,000[ ] 60,001 – 90,000 [ ] ≥ 90,001 [ ]
15. Occupation.....
16. Educational status: None [ ] Primary [ ] Secondary [ ] Tertiary [ ]

17. Religion: Christianity [ ] Islam [ ] ATR [ ]  
 Others(specify).....
18. Ethnicity .....

**SECTION C: KNOWLEDGE OF MEN TOWARDS THE ROLE THEY SHOULD PLAY DURING LABOUR.**

19. Have you heard of male involvement in labour?  
 Yes [ ] No [ ]
20. Where did you hear of male involvement of labour?  
 Radio [ ] television [ ] newspaper [ ] internet [ ] others specify.....
21. What is male involvement in labour? Denotes the various ways in which males relate to reproductive health problems and programs, reproductive right and behaviours [ ]  
 Active participation of men during pregnancy and childbirth [ ] Praying for the spouse [ ] Denotes male taking delivery. [ ] Informing the family members and neighbours that your spouse is in labour [ ]  
 Others specify.....
22. Should male be present in the delivery room during labour? Yes [ ] No [ ]
23. If yes, why? To comfort your spouse [ ] To recount the delivery to your spouse [ ] To monitor the activities of health care worker [ ] To deliver the baby [ ] others specify.....
24. If no, why? Because it a woman thing [ ] Because I can't stand to see my spouse in pain. [ ] The spouse might not want it [ ] Religions does not support it. [ ] Other specify.....
25. Have you ever been present in the delivery room? Yes [ ] No [ ]
26. If no, why? Because I live in a far distance [ ] Because I was taking care of the other children at home [ ] Because my religion forbids me to do so [ ] I don't feel comfortable going there [ ] others specify.....
27. What are the roles of male during labour? Identify place of delivery [ ] By identifying skilled health care provider [ ] To determine the action of the health care worker [ ] By accompanying you to the delivery Centre [ ] To create a chaotic environment [ ] others (specify).....
28. [ ]Should male be involved in decision making during labour? Yes [ ] No [ ]
29. Should male be involved in deciding the mode of delivery (caesarean section or vagina delivery)? Yes [ ] No [ ]
30. If yes, why? Because the man is the ultimate decision maker [ ] the woman might not be in her right state of mind [ ] because the woman is the man property [ ] others (specify).....
31. Should male be involved in deciding the use of pain killer during labour ?  
 Yes [ ] No [ ]

32. If yes, why? Because the man is aware of the woman choice [ ] to reduce the pain of labour [ ] to shorten the time of delivery [ ] others (specify).....
33. Should male be involved in deciding the place of delivery? Yes [ ] No [ ]
34. If yes, why? availability of specialist [ ] availability of equipment's for safe delivery [ ] family tradition [ ] others (specify).....

**SECTION D: ATTITUDE OF MALE INVOLVEMENT DURING LABOUR**

**SD= Strongly Disagree**

**A= Agree**

**D= Disagree**

**SA= Strongly Agree**

**N= Neutral**

S/N		SD	D	N	A	SA
35	Do you believe pregnant women are susceptible to face delivery complications?					
36	Delivery complication can be severe and may be hazardous for pregnant woman.					
37	Delivery complication can be severe and hazardous for newborn					
38	Do you believe being attended by a skilled delivery attendant may be beneficial for spouse?					
39	Do you believe being attended by a skilled delivery attendant may be beneficial for newborn wellbeing?					

40. Are you satisfied with the level at which you were involved when your spouse was in labour?  
Yes [ ] No [ ]
41. If no why? Not male's role [ ] Not allowed in our local culture [ ]  
Not allowed by spouse to participate [ ] Feel ashamed/embarrassed [ ] others specify.....
42. In what ways did you participate during your spouse labour? Providing means of transportation to maternity centre [ ] Encouraging her to adhere to professional advice [ ] Encouraging her to maintain morale [ ] Comforting her by touching and soothing [ ] others specify.....

**SECTION E: FACTORS AFFECTING MALE INVOLVEMENT DURING LABOUR**

- 43. Does your occupation affect your participation in taking care of your spouse during labour? Yes [ ] No [ ]
- 44. If yes, how? Distance between place of work and delivery center was far [ ] refusal of boss to grant permission to leave the office [ ] too busy at work [ ] others specify .....
- 45. Does your income affect your participation in taking care of your spouse during labour? Yes [ ] No [ ]
- 46. If yes, how? Low income to afford adequate maternal care [ ] low income to buy necessary materials [ ] others specify .....
- 47. Does restrictions from health workers affect your participation in taking care of your spouse during labour Yes [ ] No [ ]
- 48. If yes, how? Restrictions from entering the delivery room [ ] bad attitudes from health workers [ ] others specify .....
- 49. Does your belief(s) affect your participation in taking care of your spouse during labour? Yes [ ] No [ ]
- 50. If yes, how? My culture forbids it [ ] my religion does not support it [ ] others specify .....

**SECTION F: DELIVERY EXPERIENCES OF MALES WHOSE SPOUSES ARE IN LABOUR**

- 51. Have you heard of what delivery experiences is about? Yes [ ] No [ ]
- 52. Sources of information stated above. Radio [ ] television [ ] newspaper [ ] internet [ ] others specify.....
- 53. What is delivery experience? A man’s personal feelings and interpretation of birth processes [ ] what the doctor tells the woman [ ] the feeling before birth [ ] the feeling after birth [ ] others specify.....
- 54. What kind of delivery experience do you know? Positive delivery experience [ ] Negative delivery experience [ ] Others specify.....
- 55. If positive, how? No prolonged labour [ ] no birth complications [ ] others specify.....
- 56. If negative, how? Prolonged labour [ ] emergency cesarean section [ ] unplanned intervention [ ] birth complication [ ] Others specify .....
- 57. What was the outcome of the pregnancy? Alive [ ] dead [ ]
- 58. What kind of delivery experience have you experienced? Joyful [ ] Scary [ ] Sad [ ] others specify.....

59. How did your presence affect your spouse delivery? Positive [  ] Negative [  ] others specify.....
60. If positive, how? Shorter delivery [  ] Reduced pain [  ] Emotional support [  ] Reduced anxiety [  ] Reduced caesarean section [  ] others specify .....
61. If Negative, how?  
 Increased anxiety over the health of the baby [  ] increased stress [  ]  
 Restlessness [  ]  
 Others specify.....
62. What would you have done better? Choosing a better place of delivery [  ]  
 arrival at the hospital on time [  ] getting blood ready [  ] saving for the delivery [  ] Others specify.....

**THANKS FOR YOUR CO-OPERATION!**