SOCIO CULTURAL FACTORS ASSOCIATED WITH MATERNAL MORTALITY IN ISIALA MBANO LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA

BY

EKWELEM, ADANNA CHIOMA

(PG/M.Sc./12/64254)

DEPARTMENT OF SOCIOLOGY/ANTHROPOLOGY

FACULTY OF THE SOCIAL SCIENCES

UNIVERSITY OF NIGERIA, NSUKKA

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TITLE PAGE

SOCIO CULTURAL FACTORS ASSOCIATED WITH MATERNAL MORTALITY IN ISIALA MBANO LOCAL GOVERNMENT AREA OF IMO STATE, NIGERIA

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ΒY

EKWELEM, ADANNA CHIOMA

(PG/M.Sc./12/64254)

SUPERVISOR: PROF. J.N. ALUMANAH

SEPTEMBER, 2016

APPROVAL PAGE

THIS RESARCH WORK HAS BEEN APPROVED FOR

THE DEPARTMENT OF SOCIOLOGY/ANTHROPOLOGY,

UNIVERSITY OF NIGERIA,

NSUKKA

ΒY

ASS. PROF. G.N. ONYENEHO

Supervisor

PROF. EZUMH

Head, Dept. of Social Work

PROF. F.C OKOLOCHA

External Examiner

Dean, Faculty of the Social Sciences

CERTIFICATION

The candidate, Ekwelem Adanna Chioma a post graduate student in the Department of Sociology/Anthropology with registration number PG/M.Sc/12/64254 has successfully completed all the requirements for the Master of Science Degree in Sociology/Anthropology. The work embodied in this thesis to the best of our knowledge is original and has not been submitted in part or full for any other diploma or degree of this or any other University.

PROF. J.N. ALUMANAH

PROF. EZUMAH

(Supervisor)

(Head of Department)

DEDICATION

Dedicate to God, the creator of the universe, for His infinite mercy and guidance towards the completion of this work/programme. To the memory of my dad, late Mr. Emmanuel Ekwelem and my younger sister late Miss Chinonyerem Ekwelem, I would have been the happiest being if two of you were here to witness, and to rejoice with the rest of the family over the success of this work which both of you knew when it started, but could not witness the end. Finally to women all over the world who lost their lives through one or more socio cultural factor during pregnancy and child birth.

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Ekwelem Adanna Chioma Department of Sociology/Anthropology, UNN

ABSTRACT

This study was designed to explore the socio-cultural factors associated with maternal mortality among reproductive women (15 to 45 years) in Isiala Mbano Local Government Area of Imo State Nigeria. The study population consists of males and females (18 years and above). Data were collected using questionnaire and focus group discussion guides. The sample size used for the study was 600. The quantitative data gathered were analyzed with Statistical Package for Social Sciences using percentages; Chi-square (x^2) was used to test the hypotheses, while the qualitative data gathered were analyzed in themes as complement to the quantitative data. Findings show that there is a statistically significant relationship (x^2 = 14.642; df=1, p \leq .000, critical value =3.841) between place of residence and likely maternal mortality. Also, it was discovered that there is statistically significant relationship (x^2 = 3.933;df=1, p_ .036, critical value=3.841) between level of education and likely maternal mortality. The findings also show that there is no statistically significant relationship (x^2 = 2.755; df=2,p< .252, critical value= 5.991) between economic status and likely maternal mortality. The result further showed that there is no statistically significant relationship (x^2 = .188;df=1, p $_$.412, critical value=3.841) between decision making power and likely maternal mortality. Again, the findings revealed that majority (58.7%) of the respondents attested that many women in their community had lower education, so most often they may abuse some drugs unknowingly which may lead to some complication and may affect them during child birth and others practice some cultures that can be harmful to their safe delivery. However, Nigerian leaders should be ready to invest for the long-term on female education and women should be ready to embrace male education to enable them get maternal health information. The NGOs in conjunctions with the governments should help to equip our hospital for the upkeep of the women. More so, these aforementioned bodies should devise means of addressing the identified factors to lessen the impending escalation of problems resulting from maternal mortality.

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ACRONYMS/ABBREVIATION

- **CS:** Caesarean Section
- FGM: Female Genital Mutilation
- HIV: Human Immune Virus
- **ICD:** International Classification of Diseases
- LGA: Local Government Area

MDGs: Millennium Development Goals

- **MMR:** Maternal Mortality Rate
- **NDHS:** Nigeria Demographic Health Survey
- NPCN: National Population Census Nigeria
- **NBS:** National Bureau of Statistics
- PRB: Population Reference Bureau
- RR: Return Rate
- UN: United Nation
- **UNDP** : United Nations Development programme
- **UNFPA:** United Nations Population Fund
- **UNICEF:** United Nations International Children's Fund

UNPF: United Nations population Fund

UNSN: United Nations Space Navy

USAID: United States Agency for International Development

USA: United State of America

VVF: Vesico-Vaginal Fistula

WHO: World Health Organization

SMI: Safe Motherhood Initiative

CHAPTER ONE INTRODUCTION

1.1 Background to the Study

Globally women die every minute of each year from complications of pregnancy and childbirth (United Nations International Children's Fund, 2004). Millions of them survive but suffer from illness and disability related to pregnancy and childbirth, (Safe Motherhood Initiative, 2003). It has been annually estimated that 600,000 women aged 15-49 died of pregnancy related causes (Population Reference Bureau, 2002). According to World Health Organization (WHO), the estimated maternal mortality ratio were 422 deaths per 100,000 live births in 1980, 320 in 1990 and 251 in 2008 (World Health Organization, 2005).

Maternal mortality has been described as a major public health problem worldwide; it is seen as one of the most neglected problems of health care in developing countries and a multi– dimensional problem which does not only affect the family involved but has a great effect on the society as a whole (Umeha, 2013). Consequently, reduction of maternal mortality is on the agenda of many global initiatives such as the Millennium Development Goals (MDGs). However, despite all the efforts which have been put forward to reduce maternal mortality by the year 2015, the possibility of meeting the objective remains the greatest challenge (Okeibunor, 2010). Maternal mortality rates in developing countries are said to be 100 times higher than those seen in industrialized countries. The estimated global maternal mortality was 600,000 with 99 percent of the death occurring in sub- Sahara Africa, which Nigeria is inclusive (Audu & Ekele, 2002). With only two percent of the world's population, Nigeria contributes 10 percent of the world's maternal deaths (Chukuezi, 2010). It has been recorded by Roberts (2000) that each year as many as 60,000 Nigerian women die of pregnancy related complications. Women are a formidable force in the development of a nation. However, maternal mortality is a challenge facing women in Nigeria today. The worst hit are largely rural poor women, who even where healthcare facilities exist, find them beyond their reach. Factors such as illiteracy, lack of awareness and poverty militate against Nigeria rural women (Olusanya, & Amehiene 2000).

WHO (2006) defines maternal mortality as the death of a woman while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of the pregnancy from any cause related to, or aggravated by the pregnancy or its management but not from accidental or incidental causes. Maternal mortality can also be referred to as all pregnancy related deaths. In practice, it is often impossible to determine the exact cause of death of a pregnant woman particularly when deaths occur outside health facilities (World Health Organization, 2006). This situation is most in Africa and especially Nigeria with very minimal health facilities and very low accessibility rate. An important challenge is that majority of countries still lack a complete civil registration system with good attribution of cause of death.

Africa is by tradition a patriarchal society in which women are discriminated against from infancy. Evidences from researches have consistently shown that maternal deaths is high in Africa as a result of multiple socio-cultural and economic factors (Adebayo, 2012). In rural setting, gender disparity has been observed with women generally receiving less attention than men thereby, norms, values and expectation are defined and sustained by men in virtually all spheres of life. Poorer access to medical services is compounded by social, cultural and economic factors including gender inequality. This in combination with other direct factors could be why many women and particularly rural women are often trapped in a cycle of ill-health exacerbated by child bearing and hard physical labour (Chukuezi, 2010). Therefore, in the global effort to unravel the factors responsible for maternal mortality, especially in Africa, it is important to adopt a holistic approach which will not only look at the medical factors, but also focus on non-medical factors like socio-cultural variables, which may be contributive to the problem of maternal mortality. The study is therefore based on socio-cultural factors associated with maternal mortality in Isiala Mbano Local Government Area of Imo State.

1.2 Statement of the Problems

The World Health Organization (WHO) in its 2005 World Health Report adopted the slogan; "make every mother and child count". However, despite the 2015 target of achieving a global reduction in maternal mortality rate (MMR), maternal mortality still remains high especially in Nigeria. According to the UN and World Bank statistics, an estimated 144 women die each day in Nigeria from pregnancy-related complications, making her one of the worst countries for women to deliver babies in the world (Okibunor, 2010). Globally, each year, nearly 600,000 women die and 50 million suffer illness and disability because of complications associated with pregnancy and child birth (Hunt, 2007). Maternal mortality is still expected to continue rising because the baseline variables have not changed positively. In terms of global hierarchy of the burden of maternal mortality, wide disparities also exist within countries: Afghanistan (460), Angola, Burundi (800), Cameroon (690), Chad (1100), Guinea-Bissau (790), Liberia (770), Sierra Leone (890) and Somalia (1000) (Ronsmans, et al 2006). Therefore maternal mortality rate (MMR) in developing regions is 239 per 100 000 live births than 12 per 100 000 live births in developed countries (WHO, 2015), which is 19 times higher than the developed regions.

However, maternal mortality is a challenge facing women because Nigeria as a Third World country lacks an adequate and strong health care delivery system, infrastructure and machinery. The worst hit by this inadequacy are the largely rural poor, who even where healthcare facilities exist, find them beyond their reach. Factors such as illiteracy, lack of awareness and poverty militate against rural women to the extent that obstetric care is seen as a luxury (Olusanya & Amiegheme, 2000)

Available statistics indicate that Nigeria's 59,000 annual maternal deaths ranks second after India's 117,000 maternal deaths, in terms of global hierarchy of the burden of maternal mortality. However, India with a population of over one billion people reduced its maternal mortality from 136,000 to 117,000 between 2000 and 2005. By contrast, Nigeria's maternal deaths rose from 37,000 in 2000 to 59,000 in 2005 with a population of 140 million (Okeibunor, 2010).

WHO (2005) and Human Rights Watch, (2009) stated that the major causes of maternal mortality are: severe bleeding (haemorrhage, 25%); infections (15%); unsafe abortions (13%); eclampsia (12%); and obstructed labour (8%), other direct causes (8%), and indirect causes (20%). The direct causes can come from both pregnancy complications and malpractice, while common indirect causes of maternal death in developing countries are HIV, malaria and tuberculosis (Ronsmans, et al, 2006).

A population-based study in Nigeria indicated that maternal mortality ratio is worst in northern Nigeria; an average staggering figure of 2,420 (ranging between 1,373 and 4,477) per 100,000 live births was recorded in Kano state (Yusuf, 2005). Borno State has an estimated maternal mortality ratio of 1,549 per 100,000 live births (NPC, 2004), and 1,732 per 100,000 live births reported from Bauchi State (Mairiga & Saleh, 2009). In Plateau state also, a maternal mortality ratio of 740 per 100,000 live births was reported (Ujah, Aisien, Mutihir, Vander, Glew & Uguru, 2005). Ensuring that every pregnancy is wanted and every birth is safe can

considerably reduce maternal mortality (Gyrmah, 2002). Socio-cultural practices could immensely contribute to women dying in pregnancy, labour and pueperium which include harmful traditional practices such as complications that come from female genital mutilation, fertility induction, poverty, early girl child marriage, socio-economic status such as low income, low education and women's occupation, lack of prenatal care, Son preference, ghost marriage, widow inheritance, and multiple marriages. Other possible non-medical factors includes delays in recognizing problems, lack of health care facilities, distance of health care facility, women's low economic status, lack of access to and control over resources, poor nutrition, lack of decision making power and also religious beliefs. Majority of women in rural Nigeria today still give birth in traditional settings, either at home or in a church instead of going to the hospital. All these problems have turned out to be intractable and exacerbate the problem of maternal mortality even in situations where modern health-care facilities and personnel are available (Obuekwe & Marchie, 2001; Marchie & Anyanwu, 2008; Chukuezi, 2010).

According to Harrison (2010), tradition and religious customs such as female genital mutilation (FGM) for pregnant women in some cultures put women under a huge risk of serious complications. Religion is a problem, not only the effect it has on women but also the harmful beliefs and traditions it has on women's health and childbirth. Distance is also a barrier for seeking medical assistance, for instance in a situation where the health care facilities are near-by, there is tendency of attending to serious complications (UNICEF, 2010). Despite the emphasis of WHO on better health for all, many women of reproductive age, mostly in Nigeria and especially those in rural areas still die of pregnancy and child bearing complications. Women in Isiala Mbano and indeed other similar areas in Nigeria are identified as typical rural women. Majority of them have low socio-economic status, low or no education, poor standard of living and mostly

constrained by the above mentioned socio-cultural factors. It was discovered that women mostly in the eastern region of Nigeria that had female children alone, had endangered their lives by having up to ten children or more in their quest for a male child despite the health implications (Nwosu, 2005). They reasoned that they might be thrown out of their husbands' home or their husbands opting to marry other wives. Moreover, they wanted to give their husband a male child that would protect the name of the family. In comparison, the fate suffered by a barren woman is similar to the fate of a woman with female children all through (Nwosu, 2005).

Lack of adherence to medical advice arises mainly due to cultural beliefs, for instance, when some women are faced with complications in pregnancy and delivery such as narrow pelvics, they are advised that there is no way they could deliver normally except through caesarean section (CS). Such women often reject it because of the cultural belief that they would be mocked in the society as weaklings that could not bring forth a child (Brown & Duffy, 2002). Such behaviours are unexpected from more civilized societies. On the other hand, some women preferred to be running from one prayer house to the other or from one miracle rally to another in search of miracles. Eventually, when the baby had become overdue and the life of the woman is in danger because the baby has become very weak with the mother also weak and unconscious, she would then be rushed to the theatre when the possibility of survival is very slim. Nigeria Demographic Health Survey (2008) observed that maternal mortality depends largely on the environment where women of reproductive age live and whether they have access to information. Pregnancy and child bearing is supposed to be a pleasant experience to women but the constant scourge of complications and death associated with it has indeed turned the stage to be a nightmare to women to the extent of sending hundreds of potential mothers to their early graves.

Despite the enormous loss of life and the grave psychological trauma and emotional disorder occasioned by the loss of our mothers, wives and daughters in pregnancy and child birth related issues, adequate priority and attention has not been directed to unraveling the possible causative factors. In most cases attention are mostly directed to the direct medical factors to the neglect of other possible non medical but potent variables like socio-cultural factors. This situation is common in most parts of Nigeria, but very peculiar in Nigeria rural communities and is quite evident in Isiala Mbano Local Government Area of Imo State.

This study is therefore embarked upon in other to address this gap in priority and also to fill the possible research gap that exists in this area especially as the context of Isiala Mbano Local Government Area, which is within the high fertility zones in Imo State.

1.3 Research Questions

In view of the above problems, the following research questions will be answered in the study.

- What is the level of awareness of maternal mortality by women in Isiala Mbano L.G.A of Imo State?
- 2. What are the major causes of maternal mortality in Isiala Mbano L.G.A of Imo State?
- 3. What are the socio-cultural factors associated with maternal mortality in Isiala Mbano L.G.A of Imo State?
- 4. To what extent do the identified socio-cultural factors affect maternal mortality in Isiala Mbano L.G.A of Imo State?
- 5. What are the ways to curb maternal mortality in Isiala Mbano L.G.A of Imo State?

1.4 Objective of the Study

The general objective of this study is to examine the socio-cultural factors associated with maternal mortality in Isiala Mbano L.G.A of Imo State. The specific objectives derived from the general objective are as follow;

1. To ascertain the level of awareness of maternal mortality in Isiala Mbano L.G.A of Imo State.

- 2. To identify the major causes of maternal mortality in Isiala Mbano L.G.A of Imo State
- To find out the socio-cultural factors associated with maternal mortality in Isiala Mbano, L.G.A of Imo State.
- To examine how the identified socio-cultural factors affect maternal mortality in Isiala Mbano L.G.A of Imo State.
- 5. To suggest the ways forward in reducing maternal mortality in Isiala Mbano L.G.A of Imo State.

1.5 Significance of the Study

This research has both theoretical and practical significance; theoretically, this study will contribute to the existing literature and body of knowledge in medical and health study. The study will also be of immense relevance in the body of knowledge for women studies. The emphasis of the study being non-medical variables, within the context of the rural environment, it is expected that it will further contribute to the need for paradigm shift from medical to other related causes of maternal mortality.

Practically, the study will be of great benefit to the federal, states and local government health agencies in formulating policies and directing their health intervention efforts in Nigeria. The study will also create the much needed awareness of women in Isiala Mbano and other rural areas in Nigeria about maternal mortality issues and thus contribute in providing remedy to the situation.

The study will also facilitate the efforts of non-government organizations and other nonformal agencies that are involved in maternal mortality issues, especially in rural Nigerian settings. Finally it is hoped that the study will provide baseline data and documentation of socio cultural variables associated with maternal mortality in Isiala Mbano Local Government Area of Imo State that will be relevant for future research in this area.

1.6 Operationalisation of Concepts

Anaemia: a reduction in the hemoglobin of red blood cells with consequent deficiency of oxygen in the blood, leading to weakness and pallor.

Antenatal Care Services: this is the care of the woman during pregnancy and the aim is to protect the health of women and their unborn babies during pregnancy so as to achieve at end of a pregnancy a healthy mother and a healthy baby.

Childbirth: It refers to the entire process as an infant makes its way from the womb down the birth canal to the outside world.

Close to maternity centers: those who live 1-10kms from the maternity centers.

Decision Making Power: this is the process of reaching decisions, especially in the family about certain issues.

Eclampsia: is an acute and life-threatening complication of <u>pregnancy</u>, characterized by the appearance of <u>tonic-clonic seizures</u>, usually in a patient who has developed <u>pre-eclampsia</u> (Pre-eclampsia and eclampsia are collectively called "hypertensive disorder of pregnancy" and "toxemia of pregnancy"). It is seizures and coma that happen during pregnancy but are not due to pre-existing or organic brain disorders.

Family: Family is a group of people who are related to one another by blood or relation. In this study family refers to husband and wife and children.

Far from maternity centers: those who live 20-50kms from the maternity centers.

Health care: The prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions.

Hemorrhage: this is a heavy bleeding after childbirth. It can be internally where blood gushes from vaginal.

High Level of Maternal Mortality: a reliably high measure of the death of women while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of the pregnancy from any cause related to, or aggravated by the pregnancy or its management but not from accidental or incidental causes.

High economic status: this consist of people that their income level per month is above 20,000. **Infections:** is the invasion of a <u>host</u> organism's <u>bodily tissues</u> by <u>disease</u>-causing <u>organisms</u>, their multiplication, and the reaction of host tissues to these organisms and the <u>toxins</u> they produce.

Low health facility: this is the absence of quality health facility in a given clinic or hospital.

Low economic status: this consist of people that their income level per month is below 10,000,

Malaria: an intermittent and remittent fever caused by a protozoan parasite which invades the red blood cells and is transmitted by mosquitoes in many tropical and subtropical regions.

Maternal mortality: maternal mortality is the death of women while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of the pregnancy from any cause

related to, or aggravated by the pregnancy or its management but not from accidental or incidental causes.

Maternal mortality rate (MMR): this is the number of maternal mortality during a given time period per 100,000 live births during the same time-period.

Medium economic status: this consists of people that their income level per month is between 10.000-20,000

Obstructed labour: is the failure of the fetus to descend through the birth canal, because there is an impossible barrier (obstruction) preventing it.

Pregnancy: is a state in which a woman carries a fertilized egg inside her body that last from the period of conception to birth.

Puerperium: this is a period of time lasting around a month immediately following childbirth, when the mother's uterus shrinks back to its prenatal state.

Socio-cultural factors: These are the environmental conditions that play a part in adaptive and behaviour of a given society which includes their custom, value, norm that determine their action, attitudes and life style.

Socio-economic factors: this is seen as family income, education, and occupation.

Tuberculosis: is an infectious disease of humans and animals, caused by a species of mycobacterium mainly infecting the lungs where it causes tubercles characterized by the expectoration of mucus and sputum, fever, weight loss, and chest pain, and transmitted through inhalation or ingestion of bacteria.

CHAPTER TWO

LITERATURE REVIEW

2.1 Review of Empirical Literature

2.1.1 Maternal Mortality Issues in Africa

A study carried out by Sidahme (2013) on factors contributing to maternal mortality in Sudan, confirmed that poor rural and women with low education level are at high risk of maternal death in Sudan. Direct obstetric causes are responsible for the majority of deaths. Factors related to late recognition of the obstetric problems, delay in seeking and accessing emergency obstetric care were found to play a paramount role in maternal mortality. Health services related barriers are significantly contributing to each phase of delay. Senah (2003), in his study carried out on maternal mortality in Ghana noted that the determinants of maternal mortality are a complex web of biology and culture. According to him, in Ghana, efforts to reduce the high maternal mortality rate which range from about 200 to 740 deaths per 100,000 live births have given rise to the institutionalization of policies and programmes most of which derive their explanatory model from the medical perspective. The high ratio of maternal mortality is a clear unacceptable example of health in-equity. While the total literacy rate for adult males is 73 percent, it is estimated at only 52 percent for females. Furthermore, women contribute only 23 percent of the country labour-force and occupy 24 percent of the total parliament's seats. The study carried out by Marchie (2012) on socio-cultural factors as correlates of maternal mortality in Edo South Senatorial District, Nigeria showed that the sociocultural variables when taken together contributed positively to maternal mortality. The study showed that in addition to medical causes of maternal mortality, there are socio-cultural factors

that contribute to women dying during pregnancy, labour and pueperium. The implications of these findings in maternal health care were highlighted.

Study by Suwal (2001) on the main determinant of maternal mortality in Nepal unveiled an interesting finding related to prenatal medical visit and maternal mortality. Women were more likely to die if they sought prenatal medical care than those who did not seek prenatal care. Such norms were found in other developing countries as well.

2.1.2 Awareness of Maternal Mortality

Study by Panle B. (2007) on counting on men for safe motherhood, noted that effort should be directed towards educating women about the risk of delivery in homes of traditional birth attendants, maternity homes and health centers. He went further to say that the concept of early referral of women to the hospital should be reinforced and women should be provided with information on prevention of maternal mortality, community participation and mobilisation will help prevent maternal mortality to some extent in Nigeria.

Hanson (2010) in his compilation of data on maternal mortality said that the establishment of national systems of maternal mortality registration started in many countries in mid-nineteenth century, which means it has been in existence even before the registration started. Study carried out by Olusanya & Amiegheme (2000) on bio social factors in maternal mortality in mission hospital Ibadan, noted that lack of awareness, poverty and illiteracy, militate against rural women to the extent that obstetric care is seen as a luxury. The first international classification of disease that leads to death of pregnant women, based on work from the English statistician William Farr and the Frenchman Bertillon was adopted in 1898 in the USA and Canada. The study conducted by Yared & Asnaketch (2002), on Utilisation of Maternal Health Care Services in Ethiopia at Calverton, Maryland, USA, found out that the levels of maternal

mortality is one of the highest in the world, due to the non-use of modern health care services by a sizable proportion.

2.1.3 Causes of Maternal Mortality

According to WHO (2005) maternal mortality is directly related to the number of pregnancies and deliveries. This is supported by descriptive studies that have found that the number of deliveries is related to maternal mortality (Kane, 1992). Using a logistic regression and controlling for other factors, Chowdhury (2007) found that more than six pregnancies increases the likelihood of maternal death. However, Okonofua (1992) found that multiple pregnancies are not a significant determinant of maternal mortality. Maternal mortality has also been linked with poor nutrition (Rush, 2000; Loudon, 2000). Malnutrition has been associated with anemia which is one of the main causes of maternal mortality (Bravin, 2001). Malnutrition may lead to chronic iron deficiency and anemia, which can make women prone to hemorrhage and infections (Rush, 2000). Oyerinde (2013), in her study on antenatal care results in significant maternal mortality reduction in developing countries, states that antenatal care services contribute immensely to newborn survival; it is for this reason that they must be strengthened. Access to antenatal care services will contribute in a little way but will not yield significant reductions in maternal mortality.

In a study carried out by Chukuezi (2010) in socio-cultural factors associated with maternal mortality in Nigeria, it was argued that socio-economic and cultural factors and indeed gender discrimination contribute to high maternal mortality in rural Nigeria. It becomes necessary therefore to identify and address these mitigating factors in the efforts to reduce maternal mortality in Nigeria. This challenge is very vital for the health of the woman.

2.1.4 Ways to Curb Maternal Mortality in Nigeria

Reducing maternal death has become an international goal having received attention by world leaders in 2000 as stipulated in number five of the Millennium Development Goals (MDGs) (Williams, 2008). There have been several efforts in considering strategies of reducing maternal mortality especially in developing countries. Indeed, studies have been conducted on and around the subject matter, yet the desirable results is not attained. This section of the study focuses on reviewing related empirical literature on awareness of maternal mortality. This would highlight strategies, observations and implications of studies in efforts at reducing maternal mortality (William, 2008). Study carried out by Assfaw (2010) on determinants of antenatal care, institutional delivery and skilled birth attendant utilisation in Samre Saharti district, Tigray, Ethiopia confirmed that the proportion of antenatal care, institutional delivery and skilled birth attendant utilisation were very low. Economically, health facility-related and socio-cultural factors were the most frequently identified contributors to the low maternal health care utilisation. In the study carried out by Chryssa and Baskett, (2006) on female education and maternal mortality, it was found that education will have the greatest impact on maternal mortality reduction. Emmanuel and Abimbola (2012), in their study on socio-cultural factors affecting pregnancy outcome which was carried out in Lagos state, Nigeria found out that in spite of modernisation, the culture of the people still plays dominant role in shaping their reproductive behaviour. Hence, the study found positive relationship between socio-cultural factors and pregnancy outcome among them.

2.2 **Review of Theoretical Literature**

2.2.1 Concept of Maternal Mortality in a Global Context

Maternal mortality has emerged as global priority because of a great gap in the status of women's well being between the rich and the poor countries (Adelaide, 2009). Generally, most maternal deaths do occur in poor countries and it is well known that countries that are poor

normally have highest maternal mortality rates (Adelaide, 2009). The poor are not only those with the lowest incomes but also those who are most deprived of health, education and other aspects of human well-being. The state of maternal health is one of the key indicators of a society's level of development, as well as an indicator of the performance of the health care delivery system of a nation (National Population Commission, 2003). Maternal mortality review in this thesis will focus on investigation of the major socio-cultural causes and circumstances surrounding maternal mortality, which is defined as female deaths associated with pregnancy, labor and the puerperium, which is the period immediately following child-birth (Yaukey & Anderson, 2001). Similarly, the Tenth Revision of the International Classification of Diseases (ICD-10) defines maternal death as the death of a woman while pregnant or within 42days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any causes related to or aggravated by the pregnancy or its management (WHO, 2004). According to CBS findings (Central Breau of Statistics; 2009), Sudan National Baseline Survey, 53 percent of the households reported receiving no income during the year preceding the survey. UNDP (2013) noted that the whole country shows a marked gender inequity against women in health care, education and work opportunities. Sudan's gender inequality index puts the country in position 129 out of 148 countries.

According to Hanson (2010), maternal mortality registration started in many countries before any definition on maternal mortality was agreed upon; today the definition of maternal mortality covers the time period from the beginning of the pregnancy to 42 days post-partum or post abortion.

According to WHO (2008), nearly 600,000 women die each year, and 50 million suffer illness and disability because of complications associated with pregnancy. Suwal (2008) found

out that maternal mortality has been neglected in developing countries, most especially in Nepal, where physical and health infrastructures are inadequate and complex traditional cultures predominates. Maternal mortality was estimated to be 539 per 100,000 live-births which was the highest among the South-Asian countries at that time (United Nation, 2000). All these years the strategies to deal with high maternal mortality in Nepal have often been omitted from social and health development policies as in most other developing countries (Suwal, 2008). Suwal further traced the historical cause of maternal mortality and asserted that haemorrhage is the main cause of maternal mortality in Nepal.

Studies has shown that the political commitment was renewed at the September 2005 World Summit and strengthened in 2006 with the additional target of universal access to reproductive health. Therefore, it is imperative to adopt an integrated approach to reproductive health and donors have offered significant assistance for resources to support those activities (UNFPA, 2006).

Adamu (2011) stated that women in the southern region of Nigeria are more likely to utilize services compared to those in the North. She also noted that there are differentials in the prediction of maternal healthcare services utilization in the regions of Nigeria and that education, family wealth index and places of residence are strong predictors in the regions.

2.2.2 Major Causes of Maternal Mortality

In the year 2000, the country with the highest estimated number of maternal death is India 136,000 followed by Nigeria 37,000 (World Health Organization, 2004). Obstetric causes of maternal death are often documented in Nigeria but little attention is paid to the major contributing factors. The 2003 Nigeria Demographic Health Survey reported that one-third of births in Nigeria are attended by doctors, nurses or midwives. One-fifth of births received the assistance of a traditional birth attendant. One in every four births is assisted by a relative or some other untrained persons, while 17 percent are unassisted (National Population Commission, 2004). Apart from this report, several other researches have shown that there were decline in hospital births, apparently as a result of the country's deepening economic crisis. The 2003, Nigeria Demographic Health Survey included a series of questions aimed at obtaining information on the problems which women perceive as barriers to accessing health care for themselves. The most commonly cited problems is getting money for treatment (30%), followed by problem of distance to health facilities and having to take transportation (24%); some women reported the concern that there may not be a female provider (17%), some reported not wanting to go alone (14%) and others reported that getting permission to go to the hospital is a problem.

Direct obstetric death are those resulting from obstetric complications of the pregnant state (pregnancy, labour and the pueperium) from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above. More than 80 percent of maternal deaths worldwide have direct causes, including haemorrhage (34%), infections (21%), unsafe abortion (18%), hypertensive disorders (16%), and obstructed labour (11%).

Indirect obstetric death are those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but was aggravated by the physiological effects of pregnancy (WHO, 2004). The high maternal mortality rate in Nigeria can be attributed to several causes which range from direct medical causes to indirect causes like taboos, inefficient infrastructure and other social and cultural factors. Common approaches for obtaining data on levels of maternal mortality vary considerably in terms of methodology, source of data and precision of results. The main approaches are vital registration of deaths by causes, direct house hold survey methods, indirect sisterhood method (a survey-based measurement technique), direct sisterhood method, reproductive age mortality studies (which involves identifying and investigating the causes of all deaths of women of reproductive age) verbal autopsy and census.

2.2.3 Socio-cultural Factors of Maternal Mortality

In sub-Sahara Africa and Nigeria in particular, the increase in the rates of maternal mortality is not only due to inadequate health services; non-medical factors such as sociocultural practices have turned out to be intractable problems, even in situations where modern health-care facilities and personnel are available (Chukuezi, 2010). In the rural setting, gender disparity has been observed with women generally receiving less attention than men. Sociocultural factors seems to play a role as a cause of maternal mortality since interaction between a person's beliefs, culture and values affect health seeking behaviour together with the personal costs and benefits of doing it (Gillespie, 1995). Social and cultural factors surrounding childbirth play a role both at individual, household and community levels, influencing health seeking behavior (Osubor, 2006, Montaug, 2011). Rather than affecting the delay in reaching a health facility, socio-cultural factors influence the delay in the decision to seek care (Gabrysch & Campbell, 2009). Factors like maternal age, level of formal education, marital status, religion and "traditional" beliefs are factors that can influence the decision on where the woman will give birth (Gabrysch & Campbell, 2009). Women are primary guardians of the health, education, nutrition and social well-being of their children, and in many cases breadwinners of the family which makes the impact of maternal mortality in affected families traumatic. Effort to reduce maternal mortality must therefore address the socio-cultural factors that impact women's health.

Female genital mutilation, women's low status in the society, lack of access to and control over resources, child girl marriage, poverty, limited educational opportunities, poor nutrition and lack of decision making power seems to be some of the prevailing socio-cultural factors in Nigeria that may affect maternal mortality.

Female Genital Mutilation:

Female Genital Mutilation (FGM), commonly known as Female Circumcision involves the cutting off a part or whole of a girl's clitoris and some other parts of her sex organs for cultural or any other non-therapeutic reasons. The WHO Technical Committee in 1995 classified female genital mutilation into four main categories namely: Type I – Excision of the prepuce (the fold of skin above the clitoris) with or without excision of part or the entire clitoris (this is referred to as "Sunna"). Type II – Excision of the prepuce and clitoris (clitoridectomy) together with partial or total excision of the labia minor (inner lip). Type III–Excision of part or all of the external genitalia and stitching/narrowing of the vagina opening (infibulations). Type IV– Unclassified: includes pricking, piercing, or incision of the clitoris and/or labia cauterization by burning of the clitoris and surrounding tissue, scrapping of tissues surrounding the vaginal wall (Gishiri cuts); introduction of corrosive substances into the vagina with the aim of tightening or narrowing it.

The procedures described above are irreversible and their effects last a lifetime. The reasons given to justify FGM include custom and tradition, purification, family honour, hygiene, aesthetic reasons, protection of virginity and preventing promiscuity. The practice of FGM is wide spread in Nigeria and varies from one state and cultural setting to another. In some cultures it is carried out at infancy or childhood as a "rite of passage" to adulthood. In some others it is at first pregnancy and in some at death. According to Nigeria Demographic and Health Survey

(2003), the prevalence rate by zone is as follows: South-west 56.9%, South-south 34.7%, Southeast 40.8%, North-west 0.4%, North-east 1.3% and North central 9.6%. Infibulations, the most extreme form of mutilation is conducted in the north, which accounts for 10 percent of all FGM practiced in Nigeria (UNSN, 2001). FGM can be considered vital in maintaining the high numbers of maternal mortality in Nigeria as it is a major risk factor for obstructed labour. WHO (2007) showed that women who have had FGM are significantly more likely to experience difficulties during childbirth and that their babies are more likely to die as a result of the practice. Serious complications during childbirth include the need to have a Caesarean section, dangerously heavy bleeding after the birth of the baby and prolonged hospitalization following birth. The study showed that the degree of complications increases according to the extent and severity of FGM. Although the practice is globally and nationally prohibited, there is no legislation for effective discontinuation in Nigeria. Recently, State laws banning FGM have been introduced in Cross River, Delta, Edo and Ogun States, with similar laws under consideration in Akwa-Ibom and Bayelsa (UNSN, 2001). The national policy on women recognizes the harmful effects of FGM and other such practices and recommends that the "Government should legislate the mandatory provision of maternal health services..... to all women to protect them from such disabilities as vesico-vaginal fistula (VVF), FGM and other harmful traditional practices (Federal Ministry of Women Affairs and Youth Development, 2000).

Girl – Child Marriage

Age at marriage, age at first birth (maternal age) and how many children to have are very much influenced by the social institution of marriage. Nigerian women marry young and bear on average six children (USAID, 2006). It is believed that girl child marriage lowers the risk of pre-

marital sexuality, as such, it is widely practiced, but at the same time "very early" marriage can put the young particularly the girl at high health risks of morbidity and mortality. A study on maternal death conducted by United Nations Population Fund (2001) reveals that the risk of death at child birth is three times higher among the adolescent girls between the ages of 15-19 years than among their older cohort (20-24). In some traditional communities, girls are engaged in marriage at their very early ages of life (12-13) and they are usually exposed to the pressure of having male children not only to belong to the husband's lineage but also to secure access to inheritance.

Every year, 10 million girls marry before their 18th birthday globally which has been causing negative health problem, higher rates of maternal mortality, sexually transmitted infection, social separation, and domestic abuse compared with older married women which eventually lead to maternal mortality (Malhotra, Warner, McGonagle & Lee-Rife, 2011). According to Jain and Kurz (2007), one in seven girls got married before age 15 in the developing world. In South Asia and Sub-Saharan Africa more than 40 percent of girls are married by age 18 (Amins & WHO, 2001). Girl child marriage has been recognised as a serious human rights violation that threatens the achievement of nearly all the Millennium Development Goals (Clark, Bruce & Dude, 2006). In rural areas, early marriage is traditional (Suwal, 2008). The mean age at marriage for Nepalese women is as low as 19.5 years (Central Bureau of Statistics, 2006). Early marriage also means early pregnancy and childbirth, both of which are harmful to very young women as their body may not be physiologically ready to bear children. Frequent births, then, entail repeated life-threatening processes. Moreover, some reports show that fifty percent of all maternal mortality in Nepal were illegal abortion. UNFPA (2006), defined child girl marriage as any marriage carried out below the age of 18 years, before the girl

is physically, physiologically, and psychologically ready to shoulder the responsibilities of marriage and childbearing. This has been compounding reproductive health of women by introducing long period of exposure to pregnancy.

A UNICEF assessment report stated that culturally-based limitations on the exercise of women's reproductive rights are among the key factors underlying the high levels of maternal mortality (Hodges, 2001). In Nigeria, it is common practice for parents to arrange the marriage of their young daughters, particularly to older men. Marrying out children of 10 to 15 years is premised on the value to protect them from falling victim to teenage pregnancy. In the north of Nigeria for example, 26.5 per cent of marriages are characterized by age difference of 15 years or more between husband and wife (Hodges, 2001). Statistics show that 24.4 per cent of girls between the ages of 15 and 19 are married. In Nigeria, age of marriage and of sexual activity is largely culturally determined. In the northern states, the average age is 15 years, whereas in the south it is 18 and 20 years. Section 18 of the Marriage Act at the Federal level, recognizes a person less than 21 years of age as a minor, but allows minors to marry with parental consent (Chukuezi, 2010).

Girl child marriage has many implications; it robs girls of power over their bodies and their freedom to make decisions about their own reproductive health. Girl child marriage has negative demographic, socioeconomic and socio-cultural consequences (NDHS, 1999). It compounds the general inability of girls and women to claim their constitutional and universal right to education. More severe is the harmful effects of child pregnancy on the health of the mother. In the northern part of Nigeria for example early pregnancy accounts for high incidences of maternal mortality and for very bad conditions such as vesico-vaginal fistula (VVF), which results in incontinence of the bladder and bowel. VVF occurs because the pelvic bones have not developed enough to cope with childbirth. Corrective operations often require the consent of the spouse, and more often than not the sufferers are abandoned by their husbands and ostracized by their communities. The risk of a woman dying in pregnancy and childbirth depends on the general reproductive health of the woman especially those that married early and the number of pregnancies she has had in her lifetime. The higher the number of pregnancies, the greater the lifetime risk of pregnancy related deaths (WHO, 2005). Maternal age also has an impact on increasing the risk of dying. Girls below 18 years and women older than 35 years are more likely to have pregnancy related complications that may lead to maternal death (USAID, 2005).

Poverty and Maternal Mortality

Poverty is a multi-dimensional phenomenon, which can be measured in terms of income and expenditure levels but can also be perceived in terms of individual's social interactions and state of mental well-being (Oduro & Aryee, 2003). In Nigeria, poverty is widespread and severe when compared to the most recent poverty indicators. The World Population Data Sheet (2005) shows that 91 percent of Nigeria's population lives below 2 dollars per day, but in a further research, USAID (2006) reported that close to 60 percent of Nigerians live in extreme poverty, as such, insufficient money to pay for medical expenses serve as a barrier for treatment. Poverty limits accessibility to basic services like health; it influence negatively the ability to utilize modern health facilities, and such limitation tend to cause high mortality especially among the poor.

Problems of poverty limit access to food and balanced diet, thereby causing hunger and malnutrition which are closely related because hunger is manifested by the prevalence of malnutrition. Malnutrition on the other hand is an indication of a population's inability to provide the requisite balanced diet for a healthy living. It has been found that malnutrition causes

increased vulnerability to serious and chronic illness, mental retardation and early death (USAID, 2002). During pregnancy, apart from posing a threat to maternal survival the life of the is at risk (Wermuth, 2003). According to the World Health Organization report (1997), only 31 percent of women in Nigeria deliver with a skilled attendants assistance; this is why the life time risk of a woman dying as a result of pregnancy or childbirth is high (WHO, 1997 cited in Adamu, 2005). Several other factors like cultural restrictions may be responsible for such phenomenon but notwithstanding, it is obvious that women have less access to crucial resources such as education, skill trainings and health. As such, the effect of poverty is more pronounced on them since they have to combine the direct impact of poverty with several cultural restrictions. Poverty is one of the major health determinants. Poor mothers are at high risk of developing pregnancy related complications. Almost all maternal deaths that occur in low and middle-income countries are mainly among the poorest of the poor (WHO, 2005). Maternal deaths perpetuate poverty in the family and represent a loss of potential income and increasing socio-economic burden on the family. Here it refers to wages, salaries, profits, rents, and any flow of earnings received. Income can also come in the form of unemployment or workers compensation, interests or dividends, royalties, trusts, and other governmental, public, or family financial assistance.

Poorer access to medical services is further compounded by social, cultural and economic factors including gender inequality in access to food, by burden of work and by special dietary requirements such as iron supplements. This is why many women and particularly rural women are often trapped in a cycle of ill-health exacerbated by child bearing and hard physical labour. Income can be looked at in two terms, relative and absolute. Absolute income, is the relationship in which as income increases, so will consumption. Income is a commonly used measure of

Socio economic status, because it is relatively easy to figure out for most individuals. Therefore any woman that is not working can easily fall victim of maternal mortality.

Limited Educational Opportunity

Lack of education and poor knowledge about maternal health care can contribute to delays in seeking care during pregnancy and child birth. The improvements in maternal mortality seen in the developed world during the 20th century have not been reflected in the developing world, where 99 percent of maternal deaths occur (Donnay, 2000). Women education influences their health in many ways. A division in education attainment is thus born out of these two differences in child rearing. It was argued that families with lower income can have children who do not succeed to the levels of the middle income children, who can have a greater sense of entitlement.

2.3 **Review of Relevant Theories**

2.3.1 Health Belief Model

This was formulated by Rosenstock (1974). It emanated from a foundation of cognitive theories of behaviour which believed that behaviour is contingent upon the value that an individual places on a desired outcome, and the belief that behaviour if performed well will result in the desired outcome (Bandura 1977). Furthermore, the model explains that a range of health behaviours can be predicted based on information from determinants such as perceived susceptibility, perceived severity, and perceived benefits/barriers.

Perceived Susceptibility: This refers to an individual's judgment of their risk of contracting a health problem. For instance, pregnant women would be more likely to seek medical attention in the case of antenatal services if they believe that they are susceptible to pregnancy complications.

Perceived Severity: This refers to the subjective evaluation of the likelihood that an illness, if left untreated will have severe consequences that reduces quality of life in general (Backer & Maiman, 1977). In the context of this study, willingness of pregnant mother to utilize antenatal care services would depend also on personal evaluation of the seriousness of the consequences associated with pregnancy complications.

Perceived Benefits/Barriers: Choice of behavioural options depends on individual's perception of benefits and barriers. Therefore, a cost benefit analysis allows an individual to evaluate the outcome expectations and assess whether the expected benefit of a behaviour outweighs the perceived expenditure incurred by engaging in the behaviour (Rosenstock 1974). For example, inconveniences such as distance to the health facility would act as barrier. A pregnant woman would opt not to go to the clinic if she sees no benefit in doing so. This theory has been applied on the maternal choice of mode of birth. It helped to specify the factors that can help in predicting the possibility of a woman in choosing a particular mode a birth. It has also been applied in determinants of health care seeking behaviour during pregnancy.

This study focuses on the socio-cultural factors associated with maternal mortality. The Health Belief Model draws attention to attitudes and beliefs of women which could be regarded as central in understanding behavioral varieties that may affect maternal mortality.

2.3.2 Symbolic Interaction

The first major theoretical perspective to challenge Parsons and structural functionalist theory in medical sociology was symbolic interaction which was based largely on the work of George Herbert Mead (1934) and Herbert Blumer (1969), (Cockerham, 2001), symbolic interaction maintained that social reality is constructed on a micro level by individuals interacting with one another on the basis of shared symbolic meaning. Human beings were seen to possess the capacity to think, define situations and construct their behaviour on the basis of their definition and interpretations (Blumer 1969: cited in Cockerham, 2001). The theory consists of three principles: meaning, language and thought. These core principles lead to conclusions about the creation of a person's self and socialization into a larger community (Griffin, 1997). Meaning according to Griffin, humans act towards people and things according to the meaning that they give to those people or things. Language on the other hand gives human a meaning by which to negotiate meaning through symbols. Thought is a mental conversation that requires different points of view. Therefore symbolic interaction believes that people respond to situation on the basis of meaning it has for them in the social association which is also modified through interpretation in dealing with daily need.

This theory gives insight into the causes of maternal mortality and meaning attributed to it. Therefore the interpretation and meaning the society has towards women influences maternal mortality. Often, pregnant women may notice signs of danger, but many of them due to one belief or the other refuse to adhere to such signs which will eventually lead to maternal mortality. It happens mostly to women in rural area.

2.3.3 Social Feminism

Socialist feminism is a two-pronged theory that broadens <u>Marxist feminism</u>'s argument for the role of <u>capitalism</u> in the oppression of women and <u>radical feminism</u>'s theory of the role of <u>gender</u> and the <u>patriarchy</u>. It was propounded by <u>Mary Wollstonecraft</u> (1815-1902). Socialists emphasise that it is not possible to change the roles of male and female within a capitalist patriarchal society, instead it is necessary to amend fundamentally the nature of economic system and replace capitalism with a socialist society in which male and female have equal roles and statues (Hararambos & Holborn, 2008). According to Dayal (1995) cited in Hararambos and Holborn (2008), medicine supports capitalism by defining illness as that which stops workers from being productive. Medicine supports patriarchy by defining women's health in terms of the ability to reproduce physically the next generation of workers, the ability to undertake the domestic tasks needed to run a household, and the ability to act as a reserve army of labour when additional workers are needed. Doyal also said that the basic cause of women's ill-health is the fact that they are expected to work outside the home and then also to take major responsibility for domestic work, which she called double day. According to Doyal, it is the cumulative effects of working in production and reproduction that are major determinants of women's status of health (Hararambos & Holborn, 2008).

Relating the theory to this study, it could be deduced that the division of labor between men and women in the household is such that women often engage in non-remunerable field work with few economic resources, and their household duties during pregnancy are not alleviated by their husbands. Also, the time of delivery, the decision to receive care by trained personnel are often beyond the women's control, resulting in birth-related complications which could result to maternal mortality.

2.3.4 Liberal Feminism

Feminist theory was propounded by <u>Mary Wollstonecraft</u> (1815-1902), <u>John Stuart Mill</u> (1806-1879) and many others. Liberal feminism is an <u>individualistic</u> form of feminist theory, which primarily focuses on women's ability to show and maintain their equality through their own actions and choices. Liberal feminists argue that our society holds the false belief that women are, by nature, less intellectually and physically capable than men; it tends to discriminate against women in the academy, the forum, and the marketplace. The liberal feminist approach focused particularly on inequalities of health between male and female. It sought explanations for the differences within the different roles and economic positions of men and women. From this perspective, if women can obtain the same economic and social status as men, then improvements in standards of health must follow. Liberal feminism also points to the lack of power that women have in their relations with the medical profession, and demands a greater say in women's health particularly in childbirth and contraception. They regard the patriarchal system as the root of the oppression of women and impossible to work within it (Ellen Annandale, 1998: cited in Haralambos & Holborn, 2008). The theory argued that the reason women appear to be intellectually inferior was due to their inferior education and therefore were a result of inequality rather than a justification for it. Liberal feminists regards subordination as resulting from general norms, rather than from biological sex and aim to change these norms. Liberal feminists focus on equal opportunity for men and women in all spheres of endeavor. This theory is relevant to this study because assures that most factors associated with maternal mortality are the result of the subordination of women within the patriarchal.

2.3.5 Three Delays Model

The three delays model was developed by Thaddeus and Maine in 1994. This model focused on the factors that affect the interval between the onset of obstetric complication and its outcome among pregnant women in developing countries. According to Thaddeus and Maine (1994), delay in seeking healthcare can occur at three different levels: (1) delay in decision to seek health care, (2) delay in reaching the appropriate facility and (3) delay in receiving adequate care in the facility. The reason for the first delay may be poor knowledge of the complications and risk factors in pregnancy and the exact time to seek help, the low status of women, unique previous experience of women, financial implications or costs, fear of the hospital and lack of an

available decision maker. The second delay is often caused by difficulty in transportation, that is, distance to health centres and hospitals, poor roads and infrastructure, topography availability and cost of transportation. The third delay is produced by factors such as poor facilities and lack of medical supplies (e.g., blood supplies, equipment and operation theatre), inadequate trained and poorly motivated staff and inadequate referral systems (Maternity Worldwide, 2015; Shah etal., 2009; Thaddeus & Maine, 1994). The three delays model therefore helps explain the peculiar experience of women during pregnancy in the developing countries of the world.

Like other theories that have been reviewed, this model has been empirically validated by researchers (e.g., Shah et al., 2009; Sorensen, BruunNiesel, Raschl & Elsass, 2011). One such endeavour is that of Shah et al. (2009). In the study, the authors described the socio-demographic characteristics and the three delay of maternal mortality in a tertiary teaching hospital in Pakistan. This theory is very relevant to this study because it deals with the causes of maternal mortality which is the basis of this research.

2.4 Theoretical Framework

Several theories have been reviewed, but two theories, the health believe model and social feminism have been selected to form the theoretical framework for this study.

The Health Belief Model is adopted for this study because it best explained the prevalence of maternal mortality, especially in the rural areas of Nigeria. According to the model, a range of health behaviours is predicated on information from such determinants as perceived susceptibility, perceived severity, benefits barriers and modifying factors associated with engaging in behaviour. It is important to note that the interpretation, understanding and meaning attached to any of these determinants are necessarily based on the socio-cultural factors existing within different localities or areas. Therefore, the perceived susceptibility of the women,

for instance, depends on the motive of making the decision or integument, who takes the final decision and to definition of what constitutes health problem. In Nigeria and in particular the rural setting, the woman is not necessarily in control of these variables, and this could further put her at risk of maternal mortality. The factor of perceived severity or benefits is also affected and determined in most cases by socio cultural factors. For instance in situations where the women do not possess the economic power or constrained by factors of culture or tradition, these barriers will definitely weigh in decision outcomes. Also some other perceived barriers include the issues of poverty, distance to clinics, cost of healthcare lack of qualified nurses, lack of equipments and other variables which are predominant in rural areas among the rural women affect the prevalence of maternal mortality.

Social Feminism is also adopted because it explained the structure of household especially in our culture. Women are often been lorded over by men, often they are expected to be submissive and work extra The social feminist model further highlights the precarious condition of women in the capitalist system. Nigeria being a capitalist system is not different from the others. The condition of women in Nigeria seems to be perpetuated by the very system which is supposed to create a change. Women even when they are in pregnancy are made to farm, work in organisations, perform domestic duties and even position as the servant of both the man and the children. Despite the double expectation and contribution of women to both the economy of the home and nation, they are still marginalised, disempowered and made to live the life of second class citizens. Therefore, the condition which the structures of society place on the woman put them at a disadvantage, and predisposes them to complications during pregnancy which inevitably lead to high maternal mortality.

2.5 Study Hypotheses

- 1. Women who live close to maternity centre are less likely to suffer maternal mortality than those who live far away from the maternity centre
- 2. Women with lower level of education are more likely to suffer maternal mortality than those with higher level of education.
- 3. Women with low socio economic status are more likely to suffer from maternal mortality than women with high socio economic status.
- 4. Women who do not posses decision making power are more likely to suffer maternal mortality than those who posses decision making power

CHAPTER THREE

METHODOLOGY

3.1 Research Design

The study employed a cross sectional survey design. According to Obikeze (1990), survey design tries to get an overview of all the subjects and total perception of the situation of things at a given point in time, and it is most appropriate for the purpose of this study. Data for the survey design were collected through the use of questionnaire. The focus group discussion will also provide qualitative data for the study.

3.2 Study Area

The study dealt with socio-cultural factors associated with maternal mortality in Isiala Mbano Local Government Area of Imo State Nigeria. Isiala Mbano is one of the local governments in Imo State, and it is located at north-east of Imo State capital, Owerri. It is traversed by Owerri/Okigwe / Anara/ Umuahia and Okigwe/Umuahia high ways. It is bounded on the north by Onuimo L.G.A. and some parts of Nwangele L.G.A; on the East by Ehime Mbano L.G.A. and on the south by Ikeduru and Mbaitolu L.G.A respectively. It occupies a geographical land mass of 148 sq. kilometers. It has provisional census figure of 197,921 as at 2006 census and a population projection of 263,400 (City population, 2015) . It's made up of three clans namely, Osu, Ugiri and Mbama. The local government is predominantly inhabited by Christians who practice subsistence farming.

The Three Clans of Isiala Mbano

 Osu – consists of eleven communities namely – Osuama, Aňara, Osu-owerre, Ezumoha, Eziama, Umunachi, Ikwuano, Umuduru, Umuneke, Umuozi, and Umunkwo.

- 2. Ugiri–consists of eight communities' namely–Ugiri-nna, Obolio, Luwenneiri, Umuelemai, Amaukwu bollo, Nneato-Nweofor, Amaraku and Amato Amaraku.
- 3. **Mbama** consists of eight communities namely–Ibeme, Ibeme-Amaise, Ekwedim, Umuenyi, Agbor, Oka, Amauzari and Dikenafeiyi.

3.3 The Study Population

Isiala Mbano, the study area has a total population of 197,921 at 2006 census, and 2016 population projection of 272,600, female comprises of 97,086 while male comprises of 100,835, as at 2006 census. The target populations of this study were women of child bearing age (that is women between the age of 15-49) The reason why this set of people is used is that they are old enough and must have been involved in child bearing.

3.4 Sample Size

The sample size of this population will be statistically determined using the statistical formula below.

$$\mathbf{n} = \frac{\mathbf{Z}^2(\mathbf{p}\mathbf{q})}{e\mathbf{2}}$$

Where n =sample size,

z = z score determined for a specific confidence level as desired by the researcher 0.05 confidence level and is 1.96 in z test table.

q = this is gotten from the percentage of the population study,

 $e = error margin (.04^2).$

p = proportion of incidence which is used to measure how relatively varied a target population is. In this study, P is the proportion of adults (males and females) who are 18 years and above in Isiala Mbano local government area of Imo State. This is given in this study to be 50%.

So applying the formula, this becomes; $n=z^2 pq/e^2$ $n= 196^2 (50) (50) /0.04^2$ n= 3.8416 (0.05) (0.05)/0.0016 n= 3.8416 (0.25) /0.0016 $n = \frac{0.9604}{0.0016}$ n = 600.25n = 600

3.5 Sampling Techniques/Procedures

A multi-stage cluster sampling technique was used which involves dividing of population into clusters or groups. Population is grouped into three clusters A, B and C using the three clans, Osu, Ugiri and Mbama. Four communities were randomly selected from each cluster making it twelve communities. The twelve communities selected were Anara, Ezumoha, Ikwunachi and Umoozi for Osu, Obolio, Umuelemai, Ugiri-nna and Amaraku for Ugiri, and Ekedim, Oka, Umuenyi and Amauzari for Mbama. In order to ensure that all the clans and their respondents are truly represented, two villages will be randomly selected from each of the twelve communities making it twenty four villages. The villages selected were, Okwiyi and Uguridi, Ezum and Ohadim, Achira and Ikwuchirim, Umuobam and Ozikwu, Isuchi and Umutamli, Obokolo and Nsuaga, Umueli and Umuagam, Amaikwu and Uruaku, Ugiriala and Ameri, Ekebudu and Umudim, Okankiti and Okpurutu, Enyioha and Uzogidi, from each communities respectively. In each chosen village, all the dwelling unit or compounds are numbered out of which the researcher used purposive sampling technique in selecting the respondents (50x12=600). This made the total number of respondents to be six hundred respondents.

3.6 Instrument for Data Collection

The researcher employed both qualitative and quantitative procedure. In this regards, questionnaire and Focus group discussion were employed because the two methods are suitable for this study. Questionnaire will be the main instrument for collecting data because it guarantees uniformity to a large extent and will be designed to elicit some information that may not be available in the Focus group discussion. The questions were made as simple as possible for all the respondents. The questionnaire were divided into 4 sections; section A – General demographic characteristics, section B – Issues of maternal mortality, section C – Knowledge of health facilities, and Section D –Type of marriage women enter: eg. early marriage polygyny, monogamy, early marriage, ghost marriage, surrogate marriage. The focus group discussion sessions were conducted in the local language of the participants and it was used to collect information from respondents that were not involved in the survey.

3.7 Administration of Instruments

A total of four research assistants were recruited and trained for the study. They are mainly from the locality and able to speak the dialect of study area. The questionnaire administration of the six hundred males and females respondents 18 years and above, will be self administered, and to be conducted on working days, as well as weekends. The entire process of data collection will last for six weeks and will be supervised by the researcher.

Some qualitative data was also be collected with the use of Focus Group Discussion (FGD). Information was obtained from males and females (18 years and above). The overall number of respondents will be sixteen and will consist of two groups about 8 respondents each. The researcher will moderate the FGD while one of the research assistants trained by the researcher will serve as note-taker. The researcher will purposively select sixteen males and

female from the twelve communities. This will be conducted on the completion of the questionnaire study.

3.8 Method of Data Analysis

This study involved qualitative and quantitative data analyses. The data collected from the questionnaire will be sorted out, coded with Statistical Package for Social Science (SPSS), drawn into graphs and tables for easy and systematic analysis. Percentage will be used in assessing and determining the proportion of responses to different issues. Once the researcher is able to establish relationships or associations between variables in the hypothesis, the (X^2) test will be used to test the significance of relationship in the four hypotheses. The data from the focus group will be transcribed on the first day it is gathered from the field to avoid losing vital information meaning that editing and validation would be done on a daily basis. The analysis of the quantitative data placed emphasis on interpretation, description and identification of indigenous categories to which the researcher questions were related. The transcription of the qualitative data will be first done in the local language and, thereafter translated into English language to ensure that English and local language versions portray the same meaning.

CHAPTER FOUR

PRESENTATION OF FINDINGS, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter deals with the presentation and analysis of data obtained from the field. The field work was carried out in September, 2016. Out of a total of six hundred questionnaires that were distributed in the communities selected for the study from the study area (Isiala Mbano Local Government Area of Imo state), five hundred and ninety one copies of the survey instrument were validly filled in and returned by the research assistants. This amounts to a return rate (RR) of 98.5% while 1.5% was not returned. The responses from the entire completed and returned questionnaire were included in the analysis that follows below. Also included in the present analysis were qualitative data collected through FGD during the study.

The sections were structured with tables and figures reflecting the different parts of the study namely: the socio-demographic information of the respondents, issues on maternal mortality, knowledge of health facilities/institutions, and types of marriages women entre. In addition, the qualitative data were used to support and elucidate the quantitative data. Cross-tabulation was used to determine the relationship between the key independent variables and dependent variables. The chi square (x^2) statistics was used to test the study hypotheses while regression analysis was used to determine the effects of independent variables on the dependent variables.

4.2 Socio-demographic characteristics of respondents

The variables of interest analysed in this section comprise of the socio-demographic characteristics of the respondents. These variables include place of residence, age, sex, marital

status, educational qualification, occupation, economic status and religious affiliation. The frequency distribution and sample characteristics of all the socio-demographic variables are presented below:

Place of residence	Frequency	Percentage (%)
Okwiyi	24	4.1
Uguridi	20	3.4
Ezum	19	3.2
Ohadim	23	3.9
Achira	29	4.9
Ikwuchiri	31	5.2
Umuobam,	21	3.6
Ozikwu	32	5.1
Isuchi	26	4.4
Umutamli	31	5.2
Obokolo	20	3.4
Nsuaga	24	4.1
Umueli	22	3.7
Umuagam	30	5.1
Amaikwu	23	3.9
Uruaku	18	3.0
Ugiriala	21	3.6
Ameri	28	4.7
Ekebudu	25	4.2
Umudim	20	3.4
Okankiti	21	3.6
Okpurutu	34	5.8
Enyioha	26	4.4
Uzogidi	23	3.9
Total	591	99.9

 Table 1: Distribution of the respondents by place of residence

Source: Field work 2016

Table 1 shows the distribution of the respondents' place of residence. The table indicated that 4.1% of the respondents were from Okwiyi and Nsuaga respectively, 3.4% from Ugiridi, Umudim and Obokolo, 3.2% from Ezum, 3.9% from Ohadim, Amaikwu and Uzogidi while 4.9% were from Achira. Also, 5.2% of the respondents were from Ikwuchirim and Umutamli respectively. However, 3.6% from Umuobam, Ugiriala and Okankiti, while 5.1% from Ozikwu, and Umuagam, and 4.4% Isuchi and Enyioha. The Table also revealed that 3.7% were from Umueli, 3.0% from Uruaku, 4.7% from Ameri, 4.2% from Ekebudu, and 5.8% from Okpurutu.

Age	Frequency	Percentage (%)
15-19	49	8.3
20-24	142	24.0
25-29	94	15.9
30-34	123	20.8
35-39	105	17.8
40-44	45	7.6
45-69	33	5.6
Total	591	100.0
a =:	11 1 0 0 1 6	

Table 2: Distribution of the respondents by age

Source: Field work 2016

The ages of the respondents ranged from 15-49. Table 2 shows that out of seven categories of the age groups, respondents between the age intervals of 20-24 years were noticeably more than those in any other age interval and accounted for 24.0% of the sample, followed by those aged 30-34 (20.8%), those who identified that they were in the age intervals of 35-39 years were 17.8%,, those who indicated that they were in the intervals between 25-29 years were 15.9%, and those who stated that they were within the intervals of 15-19 years were

8.3%, while those within the intervals of 40-45 years were 7.6. Finally, those in the age intervals of 45-49 years were least in the sample and were 5.6%.

Marital status	Frequency	Percentage (%)
Single	150	25.4
Married	384	65.0
Separated	23	3.9
Divorced	11	1.9
Widowed	23	3.9
Total	591	100.0
~		

 Table 3: Distribution of respondents by marital status

Source: Field work 2016

Table 3 shows that majority of the respondents (65.0%) were married while single respondents constituted 65.4%. Small proportion of the respondents were separated or divorced from their partners (3.9% or 1.9%) respectively, while 3.9% was widowed. This showed that majority of the respondents are married followed by those that are single. Only small proportion of the respondents was divorced.

Table 4: Distribution of the respondents on sex

Sex	Frequency	Percentage (%)
Male	199	33.7
Female	392	66.3
Total	591	100.0

Source: Field work 2016

Table 4 shows the distribution of the respondents by sex. Data from the table shows that majority (66.3%) of the respondents are female while 33.7% are males

Frequency	Percentage (%)
10	1.7
200	33.8
319	53.9
62	10.5
591	100.0
	10 200 319 62

 Table 5: Distribution of the respondents by level of education

Source: Field work 2016

Table 5 shows the respondents' level of education. A critical look at the result in the table revealed that respondents with no formal education were 1.7%. Those with primary education were 33.8%. Respondents with secondary education were 53.9%; while those that attained tertiary education were 10.5%. This implies that the majority of the respondents had obtained secondary education.

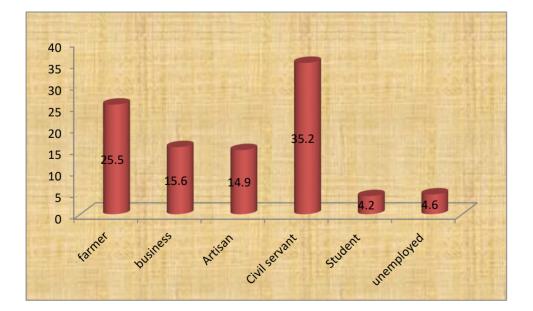


Fig 1: Percentage distribution of the respondents by occupation **Source:** Field work 2016

The occupational distribution as shown in Figure 1 revealed that 25.5% of the respondents were farmers, 15.6% traders, 14.9% artisans, 35.2% civil servants and 4.2% students, while 4.6% were unemployed. This revealed that out of 591 respondents, civil servants, civil servants and farmers constituted majority of the sample while traders, artisans, students and unemployed were in the minority.

Table 6: Distribution of the respondents by their economic status

Frequency	Percentage (%)
396	67.1
41	6.9
154	26.1
591	100.0
	396 41 154

Source: Field work 2016

The Table 6 shows the respondents' economic status. The data on the table revealed that out of 591 respondents, 67.1% were at low economic status. This is followed by 6.9% that were at high level, while only 26.1% were at medium level. The above result showed that the greater number of respondents was at low level of economic status.

Table 6: Distribution of the respondents by religious affiliation

Religious aff.	Frequency	Percentage (%)
Christian	556	94.1
Islam	6	1.0
Atheist	6	1.0
African Trad. Rel.	23	3.9
Total	591	100.0

Source: Field work 2016

Table 6 shows the religious affiliation of the respondents. The result revealed that 94.1% of the respondents were Christians, and 1.0% was Islam and Atheist respectively, while 3.9% belonged to African Traditional Religion. The findings revealed that the majority (94.1%) of the respondents used for the study was Christians and this is not surprising because the study was carried out in Imo state which is predominantly Christian.

4.3 Issues on maternal mortality

This section presents the results of data analysis concerning respondent's knowledge on issues as it concerns maternal mortality.

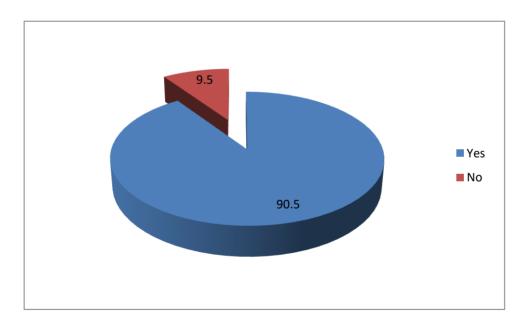


Fig 2: *Percentage distribution of respondents on whether they have heard of pregnant women dying during/after child birth in their community* **Source:** *field work 2016*

A critical look at the pie chart in Figure 2 shows that 90.5% of the respondents indicated that they have heard of pregnant women dying during/after child birth in their community while % stated "No" revealing that they have not heard of pregnant women dying in their community

during/after child birth. This revealed that a high proportion of respondents (90.5%) indicated that they have heard of pregnant women dying in their community during/after child birth.

Table 7: Distribution of the respondents by difficulties pregnant women have in their community

Diff. pregnant women have	Frequency	Percentage (%)
Poor nutrition	125	31.2
Lack of health care	230	38.9
Poverty	171	28.9
Illness	60	10.2
Others specify	5	.8
Total	591	100.0

Source: Field work 2016

Data on Table 7 shoes that 31.2% of the respondents stated that poor nutrition is one of the difficulties pregnant women pass in their community, 38.9% mentioned lack of health care facility, 28.9% indicated poverty, and 10.2% mentioned illness and diseases, while .8% indicated others like distance of health centre from their house. The findings from the study showed that majority of the respondents (38.9%) mentioned lack of health care as one of the difficulties pregnant women have in their community.

Table 8: Distribution of the respondents on whether pregnant women in their community deliversafely

Safe deliveryFrequencyPercentage (%)

	-11	20000	
Total	591	100.0	
No	102	17.3	
Yes	489	82.7	

Source: Field work 2016

Data on Table 8 shows that 82.7% of the respondents stated that they pregnant women in their community deliver safely, and 17.3% indicated "No" meaning that pregnant women in their community do not deliver safely. The findings revealed that among those that responded to the question, 82.7% stated that women in their community deliver safely.

Table 9: Distribution of the respondents on why pregnant women die in their community

Why preg. Women die	Frequency	Percentage (%)
Lack of equipment in the	42	41.2
hospitals		
Lack of qualified staff in the	49	48.0
hospital		
Limited health centre	12	11.8
Total	102	100.0

Source: Field work 2016

Table 9 shows why the respondents indicated their reasons for saying that pregnant women do not deliver safely in their community. The result as shown in the above table indicated that 41.2% mentioned lack of equipment in the hospitals, 48.0% mentioned lack of qualified staff in the hospital, while 11.8% mentioned limited health centre. The finding showed that majority of the respondents stated lack of qualified nurses as the reason why pregnant women do not deliver safely in their community. Data from the FGD with the women of child bearing age in Obolio explained this better. In the FGD, one of the participant said;

Between last year and this year, we lost four women during child birth because the health centre in this our community did not have qualified nurses that will take care of these women especially when there is complications. One of the women that lost her life within this period was my co wife, she had a protracted labour, and the nurse there decided to induce her. Immediately after the injection was given to her, she started vomiting, and before she could be rushed to the next hospital, she gave up. But had it being that they have qualified nurses in that our health centre, that women wouldn't have died.

Table 10: Distribution of the respondents by where women who have complications with pregnancy/childbirth in their community go for treatment

Where women go for treat.	Frequency	Percentage (%)
Government hospital	385	65.1
Private hospital	176	29.8
Both	30	5.1
Total	591	100.0

Source: Field work 2016

The respondents were asked to state where women who have complications with pregnancy/child birth in their community go for treatment. A look at Table 10 shows that 65.1% mentioned government hospital and 29.8% mentioned private hospital, while 5.1% indicated both government and private hospital.

Table 11: Distribution of the respondents by what category of women that are most likely to die during childbirth in their community

Category of women	Frequency	Percentage (%)
Women with low economic status	274	46.4
Women with high economic status	16	2.7
None of the above	220	37.2
Others specify	81	13.7
Total	591	100.0

Source: Field work 2016

Data on Table 11 shows that 46.4% of the respondents indicated that the category of women that are most likely to die during childbirth in their community was women with low economic status, 2.7% mentioned women with high economic status, and 37.2% indicated none of the above, while 13.7% stated others like ladies that got pregnant out of wedluck. The finding revealed that majority (46.4%) of the respondents stated women with low economic status as category of women that are more likely to die during childbirth.

4.4 Knowledge of Health Facilities/Institutions

In this section, the researcher tries to find out whether the respondents have knowledge of health facilities/institutions

Maternity home	Frequency	Percentage (%)
Yes	560	94.8
No	26	4.4
Don't know	5	.8
Total	591	100.0

Table 12: Distribution of the respondents on whether there is maternity home in their community

Source: Field work 2016

The respondents were asked to indicate whether they have maternity home(s) in their community. A critical look at Table 12 shows that 94.8% of the respondents indicated that they have a maternity home in their community, 4.4% stated "No" meaning that they don't have

maternity home in their community, while .8% indicated that they don't know whether they have maternity home in their community or not. The finding from the study revealed that over whelming majority (94.8%) of respondents indicated that they have maternity home(s) in their community. Field observation further confirmed that there maternity homes in the study area.

Table 13: Distribution of the respondents on whether the maternity is government or private owned

Govt. or private owned	Frequency	Percentage (%)
Government	209	37.3
Private	208	37.2
Both	143	.25.5
Total	560	100.0

Source: Field work 2016

Data on Table 13 shows that out of 560 respondents that indicated that they have maternity home(s) in their community, 37.3% mentioned that the one they have is being owned by the government, 37.2% stated private, while 25.5% indicated that they have both government and private owned maternity home(s) in their community.

Table 14: Distribution of the respondents by the distance of maternity home from their house

Distance of maternity home	Frequency	Percentage (%)
Far (20-30km)	283	47.9
Very far (40-50km)	44	7.4
Very close (1-5km)	210	.35.5
Close (5-10km)	54	9.1
Total	591	100.0

Source: Field work 2016

Data on Table 14 reveals that 47.9% of the respondents stated that the maternity home is far from their house, 7.4% mentioned very far, and 35.5% indicated very close while 9.1% said close. The finding showed that the majority of the respondents (47.9%) stated that the maternity

home is close to their house. Data from the FGD with the male group in Dikenafeiyi explained this better. During the FGD, one of the men said;

There is no maternity home in this our community, the closest one we can say we have is in our neighbouring community and is far from us. This is why most often we lose our women during child birth. For example, last year, three women were lost because there is no maternity any hospital here where they can deliver, so by the time we could rush them to hospital, they have given up. There is no access road and if you are unfortunate, your wife's labour starts in the mid-morning, count that one off. Is only by god's grace that she will survive. So we are pleading with the government to come and build maternity for us.

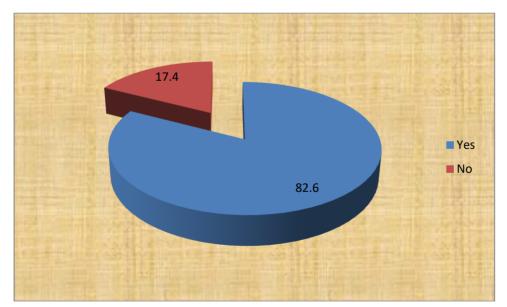


Fig 3: Percentage distribution of respondents on whether the road to the maternity home is motorable **Source**: Field work 2016

A critical at the pie chart in Figure 3 shows that 82.6% of the respondents indicated that the road leading to the maternity home is motorable, while 17.4% mentioned that the road is not motorable.

Table 15: *Distribution of the respondents by how long it will take them by autocycle to reach the maternity home from their house*

How long will it take them	Frequency	Percentage (%)
Less than 1 hour	266	45.0
1 to 2 hours	200	33.8
2 to 3 hours	108	.18.3
3 hours and above	17	2.9
Total	591	100.0

Source: Field work 2016

The respondents were asked to indicate how long it will take them to reach maternity home from their house. Data on Table 15 revealed that 45.0% of the respondents indicated less than one hour as how long it will take them to reach maternity home from their house. Those who stated that it will take them 1 to 2 hours were 33.8%, followed by 18.3% who mentioned 2 to 3 hours, while those who stated 5 hours and above were 2.9%.

Table 16: Distribution of the respondents on whether there are adequate equipment in thematernity home

Safe delivery	Frequency	Percentage (%)
Yes	316	53.5
No	275	46.5
Total	591	100.0

Source: Field work 2016

Data on Table 16 reveals that 53.5% said that there are adequate equipments in the maternity home, while 46.5% answered no meaning that there is no adequate equipments in the maternity home.

Problem women experience	Frequency	Percentage (%)
Unqualified nurses	242	40.9
Inadequate equipment	292	49.4
Other specify	57	.9.6
Total	591	100.0

Table 17: *Distribution of the respondents on the kind of problem women experience when they go to hospital to deliver*

Source: Field work 2016

A critical look at Table 17 reveals that majority of the respondents (49.4%) indicated lack of equipment in the labour room as one of the problems women experience when they go to hospital for delivery, 40.9% said unqualified staff, while 9.6% indicated other like non-challant attitude of health officers.

Table 18: Distribution of the respondents on whether they are satisfied with the management ofthe maternity home

Satisfy with the management	Frequency	Percentage (%)
Yes	248	42.0
No	343	58.0
Total	591	100.0

Source: Field work 2016

The respondents were asked to state whether they are satisfy with the management of the maternity home. Table 18 reveals that 42.0% indicated that they were satisfied with the management of the maternity home, while 58.0% indicated "No" meaning that they were not satisfied with the management of the maternity home. The finding showed that majority of the respondents (58.0) was not satisfied with the management of the maternity home. During

the FGD with the women in Ekwedim, one of the participants, commenting on whether they are satisfied with the management of maternity home said;

We are not satisfied at all with the management of maternity home. Most often, if you are having labour in the night, if you come to the maternity, they will be no light, atimes you will see only one nurse that is on night duty, who may not be able to attend to all their patients. Most often, they do not have the drugs they prescribe for you in the maternity home. So the management of the maternity home has to wake up and do something.

Table 19: Distribution of the respondents on major problem of maternity home

Reason for not being satisfied	Frequency	Percentage (%)
Inadequate equipment	228	66.5
Lack of proper care	98	28.6
Lack of maintenance	17	4.9
Total	343	100.0

Source: Field work 2016

The respondents were asked to state the problems of maternity home. Data on Table 19 reveals that 66.5% of the respondents mentioned inadequate equipment, 28.6% mentioned lack of proper care, while 4.9% stated lack of maintenance.

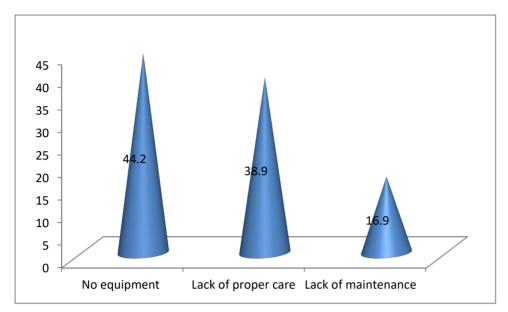


Fig 4: *Percentage distribution of respondents on whether women in their community prefer women doctor to attend to them* **Source**: *Field work 2016*

In response to the question on women in their community prefer women doctors to attend to them, Figure 3 shows that 44.2% of the respondents indicated that women in their community prefer women doctor to attend to them, and 38.9% said "No" meaning that they did not prefer women doctors to attend to them, while 16.9% indicated that they don't know whether women in their community prefer women doctors to attend to them or not. Thus, majority of the respondents indicated that women in their community prefer women doctors to attend to them.

Reason for preferring women doctors	Frequency	Percentage (%)
Humility	128	47.1
Caring	109	41.8
Others specify	29	11.1
Total	261	100.0

Table 20: Distribution of the respondents on why women in their community prefer women

 medical doctors

Source: Field work 2016

Data on Table 20 reveals that out of 261 respondents that stated that women in their community prefer women doctors to attend to them, 47.1% stated humility as their reason for stating that women in their community prefer women doctors to attend to them, 41.8% mentioned caring, while 11.1% stated others like they are their fellow women, so they will know how to handle them.

Seek for health care during pregnancy	Frequency	Percentage (%)
Yes	283	47.9
no	201	34.0
don't know	107	18,1
Total	591	100.0

Table 21: Distribution of the respondents on whether there is any other place women in their community seek for health care services during pregnancy apart from health care centres

Source: Field work 2016

Data on Table 21 shows that 47.9% of the respondents indicated that apart from health centres, women seek health care from other places during pregnancy, 34.0% said "No" showing that women in their community apart from health care centres do not seek for health care from other places during pregnancy, while 18.1% of the respondents indicated that they don't know whether women in their community apart from health centres seek for health care from other places or not.

Table 22: Distribution of the respondents on where women in their community seek for healthcare during pregnancy apart from health care centre

Where women seek for health care during	Frequency	Percentage (%)
pregnancy aside health care centre		
Churches	74	26.1
Traditional healers	164	58.0
Others specify	45	15.9
Total	283	100.0

Source: Field work 2016

The respondents were asked to state other places where women go for health care during pregnancies apart from healthcare centre. A critical look at Table 22 reveals that 26.1 % of the respondents mentioned churches, and 58.0% mentioned traditional healers, while 15.9% stated other like self-medication.

Table 23: Distribution of the respondents on whether they know any maternal death incident in their community

Maternal death incident	Frequency	Percentage (%)
Yes	344	58.2
No	247	41.8
Total	591	100.0

Source: Field work 2016

Data on Table 23 shows that 58.2% of the respondents indicated that they knew of a maternal death incident in their community, while 41.8% said "No" meaning that they don't know of any maternal death incident in their community. The finding showed that majority knew of a maternal death incident in their community.

Table 24: Distribution of the respondents on who decides on the number of children women in their community will have

Number of children	Frequency	Percentage (%)
Husband	62	10.5
Wife	68	11.5
Both	461	78.0
Total	591	100.0

Source: Field work 2016

The respondents were asked to indicate who decides on the number of children women in their community will have. A look Table 24 shows that 10.5% of the respondents mentioned husband, and 11.5% mentioned wife, while 78.0% mentioned both husband and wife. The

finding showed that is both husband and wife that will decide on the number of children women

will have in their community.

Table 25: *Distribution of the respondents on their view that women who actively participate in decision making about their reproductive health are most unlikely to suffer maternal mortality*

Participate in decision	Frequency	Percentage (%)
Strongly agreed	274	46.4
Agreed	237	40.1
Strongly disagreed	61	10.3
Disagreed	19	3.2
Total	591	100.0

Source: Field work 2016

Data on Table 25 shows that 46.4% of the respondents stated that they strongly agreed that women who participate actively in decision making about their reproductive health are most unlikely to suffer maternal mortality, 40.1% stated agreed, and 10.3% indicated that they strongly disagreed to the idea, while 3.2% disagreed with the statement.

Table 26: Distribution of the respondents on the major complications a young mother mayexperience during pregnancy and child birth

Complications young	Frequency	Percentage (%)
mothers may experience		
Bleeding	286	48.4
fluid rupture	93	15.7
Epilepsy	212	35.9
Total	591	100.0

Source: Field work 2016

The respondents were asked to state the major complications a young mother may experience during pregnancy and child birth. A critical look at Table 26 shows that 48.4% mentioned bleeding, and 15.7% mentioned fluid rupture, while 35.9% stated epilepsy.

4.5 Cross tabulation of research variables

The main objective of the study was to examine socio cultural factors associated with maternal mortality in Isiala Mbano LGA of Imo state. However, other related variables were also looked at with the hope that they may throw more light on the major issues. The study examined the relationships between several independent variables and some dependent variables. The independent variables include place of residence, level of education, economic status and marital status. The dependent variable used includes "views on whether the women in their community achieve safe delivery". Chi-Square test was used to determine whether there was any significant relationship between the variables.

In this subsection also, some data were re-coded for easier understanding of the variables. Under marital status, divorced, separated and widowed were re coded as ever married. Under level of education, no formal education, FSLC, primary and secondary education was re-coded as lower education while tertiary education was re-coded as higher education.

Place of residence

The place of residence was examined as one of the factors that determine women achieving safe delivery. This was drawn from the fact that in many African countries, there exists a wide known gap between the location of health facilities and ability to actually access the facility. Thus the researcher finds out whether there is any significant relationship between place of residence ability to access the health facility and some of the views expressed by the respondents. This is shown in Table 27

Do women in this community achieve safe	Place of residence Close to Far from maternity maternity		Place of residence Total	Total
delivery				
Yes	258(53.0%)	229(47.0%)	487(100.0%)	
No	35(33.7%)	69(66.3%)	104(100.0%)	
Total	293(49.6%)	298(50.4%)	591(100.0%)	

Table 27: Place of residence and their view on whether women in their community achieve safe delivery.

^{x2}= 12.801;df=1, p∠ .000

Source: Field work 2016

Table 27 shows that out of all the respondents that said that women in their community achieve safe delivery, 53.0% live close to the health facility while 47.0% live far from the health facility. Of all those that indicated that women in their community do not achieve safe delivery, 33.7% live close to the health facility while 66.3% live far from the health facility. The result however reveals that more respondents that live far from the health facility had greater proportion of respondents that do not achieve safe delivery. The reason for this may be as a result of the fact that most often, there is the problem of easy access to the health centre because of distance, bad road, and scarce transportation. Hence, they mostly patronize risky alternatives. The chi-square value: $x^2 = 12.801$; df= 1, p ≤000 showed that there is a statistically significant relationship between respondents' place of residence and their view on women achieving safe delivery. This showed that place of residence influence achieving safe delivery.

Education

Education status is an important factor that can influence one's views on women achieving safe delivery as was noted in the literature. As a result, this study examined the relationship between education and views women achieving safe delivery. In this study, respondents' level of education was re-coded as follows: no formal education, primary and secondary education were re-coded as lower education while tertiary education was re-coded as

higher education. This is shown in Table 28

Table 28: *Level of education and their view on whether women in their community achieve safe delivery.*

Do women in this community achieve safe			Total
delivery			
Yes	218(44.8%)	269(55.2%)	487(100.0%)
No	61(58.7%)	43(41.3%)	104(100.0%)
Total	279(47.2%)	312(52.8%)	591(100.0%)
$v^2 = 6.624$ df = 1 m = 007			

^{*x*²}= 6.634;df=1, p∠ .007

Source: Field work 2016

Table 28 shows that out of all the respondents that said that that women in their community achieve safe delivery, 44.8% had lower education while 55.2% had higher education. Of all those that indicated that women in their community do not achieve safe delivery, 58.7% had lower education while 41.3% had higher education. The result however reveals that more respondents that had lower education had greater proportion of respondents that do not achieve safe delivery. The reason for this may be because some of the persons with lower level of education cannot read nor write, so, most often they may abuse some drugs unknowingly which may lead to some complication and may affect them during child birth. The chi-square value: v^2 = 6.634; df= 1, p \leq007 showed that there is a statistically significant relationship between respondents' level of education and their view on women achieving safe delivery. This showed that level of education influence achieving safe delivery.

Economic status

The researcher investigated economic status as the determinant of women achieving safe delivery.

Do women in this community	Economic status		Total	
achieve safe delivery	Low	Medium	High	
Yes	116(21.8%)	341(70.0%)	30(6.2%)	487(100.0%)
No	38(36.5%)	55(52.9%)	11(10.6%)	104(100.0%)
Total	154(26.1%)	396(67.0%)	41(6.9%)	591(100.0%)

Table 29: Economic status and their view on whether women in their community achieve safe delivery

^{x2}= 11.486; df=2,p< .003

Source: Field work 2016

Table 29 shows that out of all the respondents that said that that women in their community achieve safe delivery, 21.8% belong to low economic status, 70.0% medium economic status while 6.2% belong to high economic status. Of all those that indicated that women in their community do not achieve safe delivery, 36.5% belong to low economic status, 52.9% medium economic status while 10.6% were in high economic status. The chi-square value: x^2 = 11.486; df= 2, p \leq ...003 showed that there is a statistically significant relationship between respondents' economic status and their view on women achieving safe delivery. This showed that economic status influence achieving safe delivery.

Marital status

The marital status was examined as one of the factors that determine woman achieving safe delivery. The researcher tries to find out whether there is any significant relationship between marital status and some of the views expressed by the residence of Isiala Mbano LGA.

Do women in this community	Mari	ital status		Total
achieve safe delivery	Single	Married	Ever married	
Yes	125(25.7%)	317(65.1%)	45(9.2%)	487(100.0%)
No	25(24.0%)	67(64.4%)	12(11.5%)	104(100.0%)
Total	150(25.4%)	384(65.0%)	57(9.6%)	591(100.0%)
$y^2 - 565$, df - 2 n < 754				

Table 30: Marital status and their view on whether women in their community achieve safe delivery

 χ^2 = .565; df=2,p< .754

Source: Field work 2016

Table 30 shows that out of all the respondents that said that that women in their community achieve safe delivery, 25.7% were single, 65.1% were married while 9.2% were ever married. Of all those that indicated that women in their community do not achieve safe delivery, 24.0% were single, 64.4% were married while 11.5% were ever married. The result however revealed that respondents who are married had greater percentage of people who indicated that women in their community achieve safe delivery and at the same time, had greater proportion of those who said that women in their community do not achieve safe delivery. The reason for this may be as a result of numerical strength of respondents who are married used in the study. The chi-square value: x^2 = .565; df= 2, p \leq ...754 showed that there is no statistically significant relationship between respondents' marital status and their view on women achieving safe delivery. This showed that marital status does not influence achieving safe delivery.

4. 6 Test of hypotheses

The study was designed to determine socio-cultural factors associated with maternal mortality in Isiala Mbano LGA of Imo state, Nigeria. For this reason, a total of four hypotheses designed for this study were tested in this section using chi square (^{x2}). In this section also, four

independent variables were cross-tabulated with one dependent variable to test the hypotheses. The independent variables include "place of residence" "level of education", "economic status" and decision making power" while "likely to suffer maternal mortality" will be used as dependent variables.

Moreover, the variables above were re-coded as follows: "under level of education", no formal education, primary education and secondary education was re-coded as lower level of education, while tertiary education was re-coded as higher level of education. Also, question 41(see appendix A) was used to measure "posses decision making power". To do that, under question 41 (women who actively participate in decision about their reproductive health are most unlikely to suffer maternal mortality), strongly agreed and agreed were re-coded to be posses decision making power. More so, under the dependent variables, question 18 (see appendix A) were used to measure "suffers maternal mortality". To do that, under question 18 (are there health centre in your community?), yes was regarded as likely to suffer maternal mortality while no and don't know were regarded as not likely to suffer maternal mortality. Respondents that answered yes were deemed likely to suffer maternal mortality.

Hypothesis one

Substantive hypothesis: Women who live close to the maternity centre are less likely to suffer

from maternal mortality than those who live far away from the maternity centre. *Null hypothesis*: Women who live close to the maternity centre are not less likely to suffer maternal mortality than those who live far away from the maternity centre.

Suffer maternal mortality	Place of residence		Total
	Close to maternity	Far from maternity	
Not likely to suffer	288(51.4%)	272(48.6%)	560(100.0%)
likely to suffer	5(16.1%)	26(83.9%)	31(100.0%)
Total	293(49.6%)	298(50.4%)	591(100.0%)

Table 31: Place of residence and their view on likely to suffer maternal mortality.

^{*x*2}= 14.642;df=1, p∠ .000, critical value=3.841 Source: *Field work 2016*

Source. I leta work 2010

To test hypothesis one, place of residence was cross tabulated with likely to suffer maternal mortality. The result revealed a pattern which suggested that respondents who live close to the maternity centre (51.4%) and those who live far from maternity centre (48.6%) respectively are not likely to suffer maternal mortality. Also, respondents who live close to maternity centre (16.1%) likewise 83.9% of those who live far from the maternity centre are likely to suffer maternal mortality. This revealed that greater proportions of respondents from rural area are likely to suffer maternal mortality. However, with the computed $x^2 = 14.642$; and critical χ^2 value of 3.841; df = 1, the test shows that there was a statistically significant relationship (P <.000) between place of residence and likely to suffer maternal mortality. As a result, the substantive hypothesis which stated that women who live close to the maternity centre are less likely to suffer maternal mortality than those who live far away from the maternal centre is hereby upheld while the null hypothesis which stated women who live close to maternal centre are not less like to suffer maternal mortality than those who live far away from maternal centre is hereby is hereby rejected. Thus, place of residence as hypothesized in this study is an indicator of likelihood to suffer maternal mortality.

Hypothesis two

Substantive hypothesis: Women with lower level of education are more likely to suffer maternal

mortality than those with higher level of education

Null hypothesis: Women with lower level of education are not more likely to suffer maternal

mortality than those with higher level of education

Table 32: Level of education and their view on suffering maternal mortality.

Level of education		Total	
Lower	Higher		
259(46.2%)	301(53.8%)	560(100.0%)	
20(65.0%)	11(35.0%)	31(100.0%)	
293(49.6%)	298(50.4%)	591(100.0%)	
	Lower 259(46.2%) 20(65.0%)	LowerHigher259(46.2%)301(53.8%)20(65.0%)11(35.0%)	

^{*x*2}= 3.933;df=1, p∠ .036, critical value=3.841 Source: *Field work 2016*

To test hypothesis two, level of education was cross tabulated with likely to suffer maternal mortality. The result revealed a pattern which suggested that respondents with lower (46.2%) and those with higher (53.8%) level of education respectively are not likely to suffer maternal mortality. Also, respondents with lower (65.0%) likewise 35.0% of those with higher level of education are likely to suffer maternal mortality. This revealed that greater proportions of respondents with lower level of education are likely to suffer maternal mortality. However, with the computed $x^2 = 3.933$; and critical χ^2 value of 3.841; df = 1, the test shows that there was a statistically significant relationship (P <.036) between level of education and likely to suffer maternal mortality. As a result, the substantive hypothesis which stated that women with lower level of education is hereby upheld while the null hypothesis which stated that women with lower level of education are not more likely to suffer maternal mortality than those with higher level of

education is hereby rejected. Thus, level of education as hypothesized in this study influences maternal mortality.

Hypothesis three

Substantive hypothesis: Women with low economic status are more likely to suffer maternal

mortality than those with high economic status

Null hypothesis: Women with low economic status are not more likely to suffer maternal

mortality than those with high economic status

Suffer maternal mortality	Economic status			Total
	Low	Medium	High	
Not likely to suffer	144(35.7%)	375(67.0%)	41(7.3%)	560(100.0%)
Likely to suffer	10(32.3%)	20(64.5%)	1(3.2%)	31(100.0%)
Total	154(26.1%)	395(66.8%)	42(7.1%)	591(100.0%)

Table 33: Economic status and likely to suffer maternal mortality

 χ^2 = 2.755; df=2,p< .252, critical value= 5.991

Source: Field work 2016

To test hypothesis three, economic status was cross tabulated with likely to suffer maternal mortality. The result revealed a pattern which suggested that respondents with low (35.7%), medium (67.0%), and those with high (7.3%) economic status respectively are not likely to suffer maternal mortality. Also, respondents with low (32.3%), medium (64.5%), likewise 3.2% of those with high economic status are likely to suffer maternal mortality. However, with the computed $x^2 = 2.755$; and critical χ^2 value of 5.991; df = 2, the test shows that there was no statistically significant relationship (P <.252) between economic status and likely to suffer maternal mortality. As a result, the substantive hypothesis which stated that women with low economic status are more likely to suffer maternal mortality than those with high economic status is hereby rejected while the null hypothesis which stated that women with low economic

status are not more likely to suffer maternal mortality than those with high economic status is hereby upheld. Thus, economic status as hypothesized in this study is not an indicator of likely to suffer maternal mortality.

Hypothesis four

Substantive hypothesis: Women who did not posses decision making power are more likely to

suffer maternal mortality than those who posses decision making power

Null hypothesis: Women who did not posses decision making power are not more likely to

suffer maternal mortality than those who posses decision making power

Table 34: Decision making power and their view on suffering maternal mortality.

Suffer maternal mortality	Decision making power		Total
	Did not posses	Posses	
Nott likely to suffer	75(13.4%)	485(86.6%)	560(100.0%)
Likely to suffer	5(18.1%)	26(83.9%)	31(100.0%)
Total	80(13.5%)	511(86.5%)	591(100.0%)

^{x2}= .188;df=1, p∠ .412, critical value=3.841 Source: *Field work 2016*

To test hypothesis four, possession of decision making power was cross tabulated with likely to suffer maternal mortality. The result revealed a pattern which suggested that respondents did not posses (13.4%) and those who posses (86.6%) decision making power are not likely to suffer maternal mortality. Also, respondents who did not posses (18.1%) likewise 83.9% of those who posses' decision making power are likely to suffer maternal mortality. This revealed that greater proportions of respondents who posses decision making power are likely to suffer maternal mortality and at the same time, had greater percentage of respondents who will not suffer for maternal mortality. However, with the computed $r^2 = .188$; and critical χ^2 value of 3.841; df = 1, the test shows that there was no statistically significant relationship (P <.418)

between decision making power and likely to suffer maternal mortality. As a result, the substantive hypothesis which stated that women who did not posses decision masking are more likely to suffer maternal mortality than those who posses' decision making power is hereby rejected while the null hypothesis which stated that women who did not posses decision making are not more likely to suffer maternal mortality than those who posses' decision making power is hereby upheld. Thus, decision making power as hypothesized in this study is an indicator of likely to suffer maternal mortality.

4.7 Discussion of the findings

This study investigated the socio cultural factors associated with maternal mortality in Isiala Mbano LGA of Imo state. The study was conducted in 24 villages of Isiala Mbano LGA. The study has five objectives, research questions were raised based on these objectives and hypotheses were postulated to guide the study. Data were obtained by self administered questionnaire to five hundred and ninety one women of child bearing age.

Findings from this study revealed that majority (90.5%) of the respondents indicated that they have known of women in their community who die of maternal mortality. This implies that the knowledge about maternal mortality is high among women of child bearing age. This finding is in disagreement with that of Paul (2003), Onyema (2011) and Rush (2008) who maintained that majority of the respondents indicated that they have not heard of maternal mortality in their community. Onyema (2011) in his study in Ebonyi state revealed that the respondents indicated that they don't know of any woman in their community who died of maternal mortality.

Also findings from the study showed that majority of the respondents (79.5%) stated that they have maternity home in their community. This is in disagreement with the findings of Marchie (2012); .Onyema (2011); Hogan, Foreman and Naghavi (2010). Onyema (2011) pointed out that a good number of women of child bearing age indicated that they did not have maternity home in their community. This is supported by Marchiel (2002), who reported that majority of the women of child bearing age used for the study mentioned that they did not have maternity home in their community, the only one they have is dilapidated and nobody including the government is doing anything about it.

Moreover, findings from this study revealed that 47.9% of the respondents maintained that the maternity home is far from their house as shown in Table 15. This is in agreement with the findings of WHO, UNICEF, UNFPH, (2005), Onyeama (2011) and WHO (2012). Also participants in rural FGDs confirmed this by stating that the maternity is very far from their residence that is why we do witness maternal mortality here.

In addition, this study investigated place of residence as one of the socio cultural factors that would influence maternal mortality. Findings from this study have shown that more respondents who live far away from maternal centre (66.3%) indicated that they did not achieve safe delivery. The finding is in agreement with that of Sidahmed (2013), Onyema (2011), Okeibunor (2010), and Paul (2003). The findings of Sidahmed (2013) revealed that women of child bearing age in rural areas are more likely to suffer maternal mortality. This was drawn from the concern over the effect of lack of health care facilities, poor decision making power, as was shown in the literature in the findings of Sidahmed (2003), in his study in Imo State of Nigeria which stated that lack of health care facilities, distance of health care facility, women's low economic status, lack of access to and control over resources, lack of decision making power and also religious beliefs, can cause maternal mortality. However, from the finding in Table 27, it was revealed that more respondents in the rural area indicated that women do not deliver safely in their community. The chi-square value, $x^2 = 12.801$; df=1, p $\leq .000$ was obtained showing that there is a statistically significant relationship between place of residence and safe delivery. This

being the case, it can be seen that the findings of Sidahmed (2013) in Sudan and that of Onyema (2011) in Ebonyi state of Nigeria can be said to be in agreement with that of Isiala Mbano LGA of Imo State.

Finally, in the literature, several scholars found out that education is one of the important socio cultural factors influencing maternal mortality. In the view of Onyema (2011), level of education is very important in determining whether a young woman knows the physiology of reproduction or not. Also studies by Chryssa and Baskett (2006), Graczyk (2007), Onvema (2011), and Sidahmed (2013) stated that education had great influence on the young women suffering maternal mortality. Finding in Table 32 with a chi-square value of χ^2 =3.933; df=1, $p_{-.036}$ with critical value of 3.841, which shows a statistically significant relationship between respondents' level of education and their views on likely to suffer maternal mortality is in agreement with Onyema (2011) in his study in Ebonyi state of Nigeria which reported that educated women have more understanding of the physiology of reproduction and are less disposed to accept the complications and risks of pregnancy as inevitable than illiterate or uneducated women. Also, in the study carried out by Chryssa and Baskett (2006) on female education and maternal mortality, it was found that education will have the greatest impact on maternal mortality reduction. This can also be said to be in agreement with the findings in Table 28 which showed that persons with higher level of education (55.2%) indicated that women in their community achieve safe delivery.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings

The instruments used for collecting data were the questionnaire and focus group discussion. From the analysis of data for this study presented in the preceding chapter, several research findings were made and summarized below. The study had a total of 591 respondents and 16 FGD participamts. The study showed that 4.1% of the respondents were from Okwiyi and Nsuaga respectively, 3.4% from Ugiridi, Umudim and Obokolo, 3.2% from Ezum, 3.9% from Ohadim, Amaikwu and Uzogidi while 4.9% were from Achira. Also, 5.2% of the respondents were from Ikwuchirim and Umutamli respectively. However, 3.6% from Umuobam, Ugiriala and Okankiti, while 5.1% from Ozikwu, and Umuagam, and 4.4% Isuchi and Enyioha. The Table also revealed that 3.7% were from Umueli, 3.0% from Uruaku, 4.7% from Ameri, 4.2% from Ekebudu, and 5.8% from Okpurutu.

Also, over half of the respondents (65.0%) were married. In addition, majority (66.3%) of the respondents are females while 33.7% are males. Moreover, the study showed that majority of the respondents (53.9%) had secondary education. This is followed by respondents with primary education (33.8%). Next are those with tertiary education, though only a few of them have no formal education (1.7%). Furthermore, the percentage of the respondents that were civil servants (35.2%) was higher than the others and it is followed by those that were farmers (25.5%), traders (15.6%), artisan (14.9%) and the last were students (4.2%). In addition, the percentage of the respondents that their economic status were low (67.1%) was highest, followed by the medium economic status (26.1%), and high (6.9%). In terms of religion, the study showed that almost all the respondents (94.1%) were Christians except for a few (3.9%) that belong to

ATR, and 1.0% that belong to Islam respectively. The participants for FGDs in the urban and rural areas were gender balanced (8 males and 8 females) and all Christians.

The study further showed that majority of the respondents (90.5%) have heard of pregnant women dying during/after child birth in their community and majority (38.9%) mentioned lack of health care as one of the difficulties women have in their community. Data from the FGDs in the rural area revealed that most of the respondents have heard of maternal mortality. Majority of the respondents (82.7%) indicated that pregnant women in their community deliver safely while 48.0% of the respondents mentioned lack of qualified staff as one of the reasons why pregnant women do not deliver safely in their community. The findings showed that majority of the respondents (65.1%) indicated that women who have complications with pregnant/child birth in their community go to government hospital for treatment while majority (46.4%) stated that it is women with low economic status that are most likely to die during child birth in their community.

The study also found that over half of the respondents (94.8%) indicated that they have maternity home in their community; 37.3% stated that the maternity home is being owned by the government. On the issue of the distance of maternity home from their house, 47.9% said that the maternity home is far from their house while 82.6% of the respondents indicated that the road leading to the maternity home is motorable and 45.0% said that it takes them less than 1 hour to get to the maternity home from their house. Again, the study showed that 49.4% indicated inadequate equipment as one of the problems women experience when they go to hospital to deliver, the finding revealed that a greater percentage of them (58.0%) stated that they are not satisfied with the management of the maternity home and 66.5% mentioned that the reason why

equipment. Moreover, on the issue of whether there are other places women in their community seek for health care services apart from health care centre, 47.9% said yes. 58.0% of the respondents mentioned traditional healers as one of the places women in their community seek for health care during pregnancy. The study shows that over 48.4% mentioned bleeding as the major complications a young mother may experience during pregnancy and child birth.

Findings from the study revealed that place of residence, level of education, and economic status have statistically significant relationship with views on whether women in their community achieve safe delivery while occupation had no statistically significant relationship with views on whether women in their community achieve safe delivery. In addition, a total of four hypotheses were tested and the findings were as follows; there was a statistically significant relationship between respondents' place of residence and maternal mortality. In addition, there was a statistically significant relationship between respondents' level of education and maternal mortality as revealed by the chi-square value. On the other hand, there was a no statistically significant relationship between respondents' economic status and maternal mortality. Also, there was no statistically significant relationship between respondents having decision making power and maternal mortality as revealed by chi-square value. Furthermore, hypothesis one was accepted while the null hypothesis was rejected based on the findings that women in the rural area are more likely to suffer maternal mortality than those in urban area. Moreso, hypothesis two was upheld while the null hypothesis was rejected based on the findings that women with lower level of education are more likely to suffer maternal mortality than those with higher level of education. Moreover, hypothesis three was rejected while the null hypothesis was upheld as it was revealed that women with low economic status are not likely to suffer maternal mortality than those with high economic status. The last hypothesis was also rejected while the null

hypothesis was upheld based on the finding which showed that women that did not posses decision making power are not more likely to suffer maternal mortality than those who posses decision making power.

5.2 Relationship between findings and theoretical framework

Maternal mortality is seen as one of the most neglected problems of health care in developing countries and a multi-dimensional problem which does not only affect the family involved but has a great effect on the society as a whole. The researcher assessed socio-cultural factors associated with maternal mortality. In order to gain a better understanding of the issues, the researcher used the Health Belief Model [HBM] as a theoretical frame work to gain more insight into the topic under study. The model was based on some constructs representing the perceived threat, perceived susceptibility, perceived severity, perceived benefits and perceived barriers (Rosenstock, Strecher & Becker, 1974).

The HBM emphasizes on the perceived susceptibility which refers to an individual's subjective estimation of personal judgment of the seriousness of the condition (ie, risk of maternal mortality). In the theoretical framework, the researcher made reference to the point that distance to clinic and other variables which are predominant in rural area among the rural women affect the prevalence of maternal mortality. This may explain why majority (83.9%) of the respondents from the rural area are more likely to suffer maternal mortality. This may also explain the reason for other findings in this study where overwhelming majority (90.5%) of the respondents indicated that they have heard about maternal mortality in their community.

The HBM addresses individual's perceived barrier that could cause maternal mortality. The respondents were asked to state the reasons why pregnant women die in their community. The findings revealed that 41.2% mentioned lack of equipment, 48.0% mentioned lack of qualified nurses, while 11.8% indicated no health centre. This is in line with what the researcher made reference to in the theoretical framework where it was mentioned that some other perceived barriers that can affect the prevalence of maternal mortality include the issues of poverty, distance to clinics, cost of healthcare lack of qualified nurses, lack of equipment and other variables which are predominant in rural areas among the rural women These barriers may explain the reason why 58.2% of the respondents indicated knowledge of maternal death incident in their community. Also according to the social feminist theory and according to the field observation, the patriarchal space which prevails in the study area do not enable the women to have high economic status which directly affect their ability to access good maternity care.

In addition, another important point that the researcher made reference to as a perceived barrier that could cause maternal mortality is inconveniences such as distance to the health facility. A pregnant woman would opt not to go to the clinic if she sees no benefit in doing so. This barrier may also explain the reason why 58.0% of the respondents stated that pregnant women in their community go to traditional healers to seek for health care apart from health centre.

5.4 Conclusion

The current study sought to explore the socio cultural factors associated with maternal mortality in Nigeria. Maternal mortality is one of the challenges facing Nigeria, knowing the socio cultural factors that is associated with maternal mortality is very important. From this study it can be concluded that there is a need to build health centres in all the communities since majority of the respondents used in this study complained that the health centre is far from their residence. In conclusion, the findings revealed that the respondents have heard of maternal mortality and have good knowledge of some of the factors that can cause maternal mortality.

5.5 Challenges

A study of this nature would not have become a reality without one scaling through some unavoidable constraints. Some of the constraints which were experienced by the researcher were as follows:

The most important limitation of this study was unfavourable dispositions towards research exhibited by some health personnel. There was initial non -co-operation on the part of health personnel's who have been warned by the hospital management not to give out information to outsiders on any matter, otherwise they will be sacked from their jobs.

The researcher also encountered some problems in administering the questionnaire especially to the less educated respondents who were unable to read and write. The researcher had to interpreting the questionnaire for them. The research involved a lot of traveling since the communities were at their very dispersal location. Finally, it was also difficult for the researcher because some of the respondents misconstrued the study to be an investigation into their private affairs.

5.6 Recommendations

Based on the findings of this study, the researcher proposes the following recommendations to guide the government, organizations, institutions, and general public in addressing socio cultural factors associated with maternal mortality. These are:

i Government should join efforts with the NGOs and community members to build health centres in all the communities especially in the rural areas, so that maternity homes should be closer to the people ii Government should create enabling environments for empowering Nigerian women because limited economic choices and opportunities affect the women. In fact the women should be educated on the need to improve their self image, they should be given opportunities for skills training and assisted to engage in income generating activities that would reduce their dependence on men. If women are empowered economically they will be better able to overcome the fear of reprisals when they need to take decisions on issues that affect their sexuality.

iii Nigerian leaders should be ready to invest for the long-term on female education and women should be ready to embrace male education, this will enable them get maternal health information

iv The NGOs in conjunctions with the governments should help to equip our hospital, as well as necessary facilities that will help for the upkeep of the women.

V The spread of maternal health problem among women should be reduced through massive campaign in the mass media, churches, market places, motor-parks, hospitals etc

Vi The government, organizations, institutions, and the general public should be quickly awakened to their separate responsibilities in providing proper information and services that will help in reducing maternal mortality. More so, these bodies should devise means of addressing the identified factors to lessen the impending escalation of problems resulting from maternal mortality.

5.7 Areas for further study

The research on socio cultural factors associated with maternal mortality in Isiala Mbano LGA of Imo state is not an all conclusive study. And for the fact that women are usually at risk of dying during pregnancy/child birth, the researcher suggested for further research to be carried out in the following areas:

- Studies of this type should be conducted in other local government areas in Imo state and beyond to ascertain the socio cultural factors associated with maternal mortality.
- Studies should also be carried out on challenges to women reproductive health: maternal mortality
- Studies should also be carried out to determine the relevance of health care services to rural areas.
- There should also be studies on the influence of culture on maternal mortality
- Knowledge and attitude of health workers involved in the delivery of health care services to women during pregnancy and child birth

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APPENDIX I

LETTER OF INTRODUCTION

Department of Sociology/Anthropology, Faculty of the Social Sciences, University of Nigeria, Nsukka, Enugu, State. Date:

Dear Respondent,

I am a postgraduate student of the aforementioned Department, carrying out research on maternal mortality among women of child bearing age (15-49) in Isi-ala Mbano Local Government Area of Imo State. This is in partial fulfillment for the award of Masters Degree (M.Sc.) in Sociology/Anthropology Department.

I would be grateful if you could please answer the questions to the best of your knowledge. The information provided here will be strictly confidential and will be used only for research purposes.

Thank you.

Yours sincerely

Ekwelem Adanna C. (PG/M.Sc./12/64254)

Appendix II

Questionnaire

Section A

General Demographic Characteristics: (please tick ($\sqrt{}$) as appropriate)

1. Place of Residence: (i) Urban (ii) Rural
2. What is your age at your last birthday?
3. Marital Status: (i) Single (ii) Married (iii) Separated (iv) Divorced
(v) Widowed
4. Educational Attainment: (i) No formal education (ii) Primary (iii)Secondary
(iv) Tertiary
5. Occupation: (i) Farming (ii) Business (iii) Public servant (iv) Civil servant
(v) Student (vi) Unemployed
6. Economic Status: (i) Low (ii) High (iii) Medium
7. Religion: (i) Christian (ii) Muslim (iii) atheist (v) Africa Traditional Religion
8. Husbands education: (i) No formal education (ii) primary (iii) Secondary
(iv) Tertiary
9. Husbands occupation: (i) Farming (ii) Business (iii) Public servant
(iv) Civil Servant (v) student (vi) Unemployed
Section B Issues of Maternal Mortality
10. How often do women die while pregnant and after delivery? (i) Ofter (ii) Very of
(iii) rarely

11. What difficulties do pregnant women have in this community? (i) Nutrition (ii) lack of
health care iii) Poverty iv) Illness hers specify
12. Do women in this community achieve safe delivery? (i) Yes (ii) No
13. If No why
14. Have you heard about women dying during/after birth in this community? (i) Yes
No
15. If yes how often does this happen (i) often (ii) very often iii) rarely
16. Where do women who have complications with pregnancy/childbirth in this community go
for treatment?
17. What category of women are most likely to die in childbirth in this community?
(i) Women with low economic status (ii) Women with high economic status
(iii) Non of the above (iv) others specify
Section C
Knowledge of Health Facilities/Institutions
18. Are there maternity homes in your town? (i) Yes (ii) No iii) don't know
19. If yes is it private or government owned
20. What is the distance of the maternity home from your house? (i) Fat (ii) very far
close (iv) Very close
21. Is the road to the maternity home motorable or not? (i) Yes (ii) No
22. How long will it take one to reach the maternity home from your house? (i) Less than 30
minutes (ii) 30 minutes (iii) 1 hour (iv) two hours and above
23. Are there adequate equipment in the health care centres? (i) Yes (ii) No

24. What kind of problem do women experience when they go to hospital to deliver? (i)
Unqualified nurses (ii) Lack of equipments in the labour room (iii) Others specify
25. Are you satisfy with the management of the maternity home (i) yes (i) No
26. If no why?
27. Do women of this community prefer women doctor/nurses to attend to them? (i) Y
(ii) No 🗌 (iii) Don't know
28. If yes what are their reasons? (Specify)
29. Who decides when to seek health care? (i) husband (ii) wife iii) both
30. Apart from maternity home, is there any other place women of this community seek for
health care during pregnancy? (i) yes ii) no
31. If yes where? (i) Churches (ii) Traditional health believe system (iii) Others
(specify)
Section D Type of Marriage Women Enter: eg. Early Marriage, Polygyny, Monogamy, Ghost Marriage, Surrogate Marriage
32. What is the appropriate age for women to get married in this community?
33. Do you have any reason why this age is regarded appropriate by the members of this community?
35. Do you know of any maternal death incident in the village/hospital? (i)Yes No
If yes answer the following
36. How old was she?
37. Married? (i) Yes (ii) No
38. At what age did she got married? (i) 12 iii) 15 iii) 20 and above
39. Was she the first wife or second? (i) First (ii) second (iii) third (iv) and above
40. What is her economic status? (i) Low i) high

- 42. Who decide on the number of issues women in this community have
 - (i) husband (ii) wife iii) both
- 43. Women who actively participate in decision about their reproductive health are mostly unlikely to suffer maternal mortality (i) strongly agree agree (iv) other specify
- 44. What are the cultural factors preventing a young pregnant woman from seeking medical help when needed? (Specify)

45. How many pregnancies have you ever had? (i) 1 ii) 2 iii) 3 v) 4 and above (v) none

46. What are the major complications a young mother may experience during pregnancy and child birth? (Specify)

Appendix III

Focus Group Discussion Guide

Name of Facilitator	Name of Note taker
Date	Place of discussion
Time discussion started	Time ended
Number of Participant	

Age of participants, 15-49

Introduce moderator, note taker, participant and introduce the objective of the discussion and topic.

I am interested in knowing about the experience, concerns and problems of this community about maternal mortality. I am especially interested in understanding the issues of socio cultural factors that contribute to maternal mortality in this very community. I hope that your answers to our discussion will help to improve maternal health in this community. I expected our discussion to last about 40-60 minutes. I hereby assure you of the confidentiality of our discussion. I request your permission to tape our discussion. The tape record is to help me remember what you said during the discussion.

Question

1. What are the major causes of maternal mortality in this community?

2. What kinds of problems do mothers experience here? Have the problems gotten worse, better, or stayed the same in the last year?

3. How does the community get information about maternal health care? Can you give some examples?

4. What can you say about women participating in decision making on the issue of their health and the use of antenatal care services during pregnancy.

5. Are there any socio - cultural factors that contribute to maternal mortality in this community?

6. What can you say about the issue of early marriage? Does it have any contribution to women having serious complication or dying during pregnancy?

7. Suggest ways you think government can help in order to stop maternal mortality in this community, and to help women of this community to improve their health during pregnancy.

Thank you all for your time and ideas. This has been extremely helpful. As I said in the beginning, the purpose of this discussion was to know about the socio-cultural factors associated with maternal mortality in this community. I hope this study will be helpful in addressing the problems and improve the services in this area.

Thank you for your participation.