

**PREVALENCE AND CAUSES OF MATERNAL MORTALITY AMONG WOMEN IN
OREDO LOCAL GOVERNMENT AREA OF EDO STATE.**

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BENIN CITY, NIGERIA**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF SOCIOLOGY AND
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CERTIFICATION

We, the undersigned, certify that this research work was carried out by Amiah Promise with Matriculation Number **SSC2105893** of the Department of Sociology and Anthropology, Faculty of Social Sciences, University of Benin, Benin City, in partial fulfillment of the requirement for the award of the Bachelor of Science (B.Sc) Degree in Sociology and Anthropology.

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DEDICATION

I dedicate this project to God Almighty, my creator, sources of inspiration, and my educator. He has been my strength and my strong tower all through the program in the University of Benin.

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The researcher would like to express his profound gratitude to God Almighty for His guidance and all round wisdom throughout the course of this Project work. The researcher also want to extend his sincere gratitude to his dad, Mr. Amiah Larry Onyema and his lovely mom Mrs. Esther Okokobi for their encouragement, invaluable support and motivation throughout the entire process.

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TABLE OF CONTENTS

| | |
|--------------------------------------------------------|----------|
| Title Page | ii |
| Certification | iii |
| Dedication | iv |
| Acknowledgements | v |
| Table | vi |
| Abstract | x |
| | |
| CHAPTER ONE: INTRODUCTION | 1 |
| | |
| 1.1 Background to the Study | 1 |
| 1.2 Statement of the Problem | 3 |
| 1.3 Research Questions | 6 |
| 1.4 Objectives of the Study | 6 |
| 1.5 Significance of the Study | 7 |
| 1.6 Scope of the Study | 8 |
| | |
| CHAPTER TWO: REVIEW OF RELATED LITERATURE | 9 |
| | |
| 2.1 Conceptual Framework | 9 |
| 2.2 Theoretical Framework | 10 |
| 2.3 Concept of Maternal Mortality | 12 |
| 2.4 Causes of Maternal Mortality | 14 |
| 2.4.1 Medical (Direct) Causes | 14 |

| | |
|--------------------------------------------------|-----------|
| 2.4.2 Non-Medical (Indirect) Causes | 15 |
| 2.5 Prevalence of Maternal Mortality | 16 |
| 2.6 Effects of Maternal Mortality | 19 |
| 2.7 Empirical Review | 20 |
| 2.8 Summary of Literature Review | 21 |
| | |
| CHAPTER THREE: METHODOLOGY | 23 |
| | |
| 3.1 Introduction | 23 |
| 3.2 Research Design | 23 |
| 3.3 Area of the Study | 24 |
| 3.4 Population of the Study | 24 |
| Sampling Technique | 25 |
| 3.6 Sample Size | 25 |
| 3.7 Method of Data Collection | 25 |
| 3.8 Instrument for Data Collection.... | 25 |
| 3.9 Method of Data Analysis | 26 |
| | |
| CHAPTER FOUR: DATA PRESENTATION, ANALYSIS | |
| | |
| AND INTERPRETATION | 27 |

| | |
|-------------------------------------------------------------------------------|----|
| 4.1 Introduction | 27 |
| 4.2 Analysis Based on Research Questions | 27 |
| Research Question One: Direct and Indirect Causes of Maternal Mortality | 28 |
| Research Question Two: Educational Status and Maternal Mortality | 30 |
| Research Question Three: Income Level and Maternal Mortality | 32 |
| Research Question Four: Healthcare System and Maternal Mortality | 34 |
| 4.3 Discussion of Findings | 35 |

CHAPTER FIVE: DISCUSSION OF FINDINGS, CONCLUSION

AND RECOMMENDATIONS..... 39

| | |
|-------------------------------------------|-----------|
| 5.1 Summary of Findings | 39 |
| 5.2 Conclusion | 40 |
| 5.3 Recommendations | 40 |
| 5.4 Suggestions for Further Studies | 42 |
| References..... | 43 |
| Appendix | 46 |

ABSTRACT

This study examined the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State, Nigeria. Maternal mortality, defined as the death of a woman during pregnancy or within 42 days of the termination of pregnancy, remains one of the most critical public health challenges in developing nations, especially Nigeria. Despite national and global efforts to reduce maternal deaths through initiatives such as the Safe Motherhood Initiative, Millennium Development Goals (MDGs), and Sustainable Development Goals (SDGs), Nigeria continues to rank among the countries with the highest maternal mortality ratio (MMR) globally.

The study adopted a descriptive survey research design, and data were collected from one hundred (100) women of reproductive age (15–45 years) selected through random sampling from various wards within Oredo Local Government Area. A structured questionnaire was the main instrument for data collection. The data were analyzed using descriptive statistics such as mean and standard deviation to interpret the responses according to the research questions.

Findings revealed that maternal mortality in Oredo Local Government Area is influenced by both medical and non-medical factors. The major causes identified include lack of access to skilled birth attendants, poor nutrition, delay in seeking medical attention, cultural beliefs, and poor road infrastructure, with a grand mean of 3.30. The educational status of women also plays a significant role (grand mean = 3.24), as illiteracy and low awareness contribute to poor maternal health decisions. Income level emerged as a crucial determinant (grand mean = 3.58), as low-income women often cannot afford quality healthcare, leading to home deliveries and increased mortality. Similarly, deficiencies within the healthcare system—such as shortage of qualified personnel, inadequate facilities, and poor emergency services—were found to significantly enhance maternal mortality (grand mean = 3.17).

The study concluded that maternal mortality in Oredo LGA results from an interplay of socio-economic, educational, cultural, and infrastructural factors. It therefore recommended improved investment in healthcare infrastructure, promotion of women's education, economic empowerment initiatives, and stronger maternal health awareness campaigns. The study contributes to existing sociological and public health knowledge by emphasizing that maternal mortality is not only a medical issue but also a manifestation of broader social and structural inequalities that demand multidimensional interventions.

Keywords: *Maternal mortality, Women, Socio-economic factors, Health system, Education, Oredo Local Government Area*

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

A woman is powerfully created with superior structures. She is impeccably and uniquely made by her creator and the importance of women in achieving positive national development cannot be over-emphasized. Agbalajobi (2010) posit that, women assume five key roles: mother, producer, home-manager, community organizer and socio-cultural and political activists. While motherhood is a thing of joy, it is a source of sadness to many households as many women lose their life giving birth in Nigeria. Every single day. Nigeria loses about 2,300 under-five year olds and 145 women of childbearing age. This makes the country the second largest contributor to the under-five and maternal mortality rate in the world (Ayanleye, 2013).

Maternal death is 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 (Amoo and Ajayi, 2019). Similarly, Samani, Jamali, Parvar, Moghadam and Hoseini (2017) posit that maternal mortality during pregnancy or while delivery and to 42 days after termination of pregnancy for any reason, except for accidents, can be attributed to complications of pregnancy and delivery. As opined by Mojekwu and

Ibekwe, (2012) maternal mortality, also known as maternal death, continues to be the major cause of death among women of reproductive age in many countries and remains a serious public health issue especially in developing countries.

Olonade, Olawande, Alabi and Imhonopi (2019) disclose that maternal mortality has been on the increase in recent time with detrimental effects on the socioeconomic development of the nation. According to Olonade, et al (2019) approximately 830 women die every day from preventable causes related to pregnancy and childbirth. More worrisome is the fact that 99% of all maternal deaths occur in developing countries (Nigeria inclusive).

It has been realized that complications of childbirth and pregnancy are leading causes of death among women of reproductive age (Evanco, Godfrey, Honorati and Kathleen, 2013). It is due to this that complications of childbirth and pregnancy have remained a core issue in the focus of international development efforts, this is clearly illustrated by the fact that improved maternal health and safety is named as a target for the fifth millennium development goal (MDG) set for accomplishment by the year 2015 (Evanco, Godfrey, Honorati and Kathleen, 2013). According to Usman, Audu, Kallima, Bilkisu and Sanusi (2018) the millennium development goal (MDG) 5 which aimed at achieving reduction in maternal mortality by 75% by the end of 2015 turned out to be a mirage for most developing countries. Based on the annualized rates of change, only few countries, mostly in the developed nations, achieved the 75% target in reduction of maternal

mortality while almost all the African sub-region may likely arrive at this target well past the year 2040 (Usman, Audu, Kullima, Bilkisu and Sanusi, 2018). In 2015, when much decline was expected, the African sub-region accounted for 99% of the global maternal mortality with Nigeria carrying the highest burden of 19% (580000 deaths) (Usman, Audu, Kullima, Bilkisu and Sanusi, 2018). What is more devastating is that these deaths could have been prevented by basic investment in primary healthcare and infrastructure by the government. The high rate of maternal mortality is a source of grave concern and the need to improve maternal health cannot be over emphasized (Ayanleye, 2013).

In the light of the above discussion, the study examines prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State.

1.2 Statement of the Problem

Nigeria is one of the countries in Sub-Saharan Africa where maternal mortality has remained a problem. However, the country's progress towards cutting the number of maternal deaths has been largely insufficient (Meh, Thind, Ryan and Terry, 2019). Maternal mortality persists in Nigeria despite strategies like the promotion of institutional deliveries, training and deploying new skilled health workers. It is also among the top six countries in the world that contribute to more than 50% of all global maternal deaths (Meh, Thind, Ryan and Terry, 2019).

Despite the progress made toward reduction in maternal mortality since the late 1980s, such as the International Safe Motherhood Initiative (SMI) in 1987, International Conference on Population and Development (ICPD) in 1994, Fourth World Conference on Women, Beijing 1995, United Nations Millennium Development Goals (MDGs) 2000 and Sustainable Development Goals (SDGs) 2015, in addition to other country-specific programs, many women and babies still die during pregnancy and childbirth in developing countries, including Nigeria (Azuh, Azuh, Iweala, Adeloye, Akanbi and Mordi, 2017).

The worrisome aspect of this situation is that in Sub-Sahara Africa, there has been no discernible or perceptible change over the past two or more decades (Azuh, Azuh, Iweala, Adeloye, Akanbi and Mordi, 2017). Akokuwebe and Okafor (2015) concluded that for real sustainable transformation of Nigeria, maternal health should be accorded priority through reducing the maternal mortality rate by the government and other stakeholders.

However, it is also imperative to mention that, within the Benin City, Edo State context, there is dearth of research studies that have shed light on the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. Some of the prior studies on maternal mortality are the work of Meh. Thind, Ryan and Terry (2019); Amoo, and Ajayi (2019), Usman, Audu, Kullima, Bilkisu and Sanusi (2018), Samani, Jamali, Parvar, Moghadam and Hoseini (2017) and Azuh, Azah, Iweala, Adeloye, Akanbi and Mordi, (2017). The study of Meh, Thind, Ryan and Terry (2019)

examine the levels and determinants of maternal mortality in northern and southern Nigeria. Amoo, and Ajayi (2019) investigate maternal mortality and factors affecting it among pregnant women in Abeokuta South, Nigeria. Usman, Audu, Kullima, Bilkisu and Sarusi (2018) worked on a continuing tragedy of maternal mortality in a rural referral center in northeast Nigeria: A wake-up call. Samani, Jamali, Parvar, Moghadam and Hoseini (2017) investigate the causes of maternal mortality: Autopsy results. While Azuh, Azuh, Iweala, Adeloye, Akanbi and Mordi, (2017) explore the factors influencing maternal mortality among rural communities in southwestern Nigeria.

Therefore, none of these studies have made use of the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. This create room for knowledge gap, and that there is dearth of economic literature on comprehensive analysis of the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State apparently leaves a gap between what people perceived to be the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. Hence this research tries to fill this gap by empirically investigate the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. Premised on the above problem, this study would seek to answer the following research questions;

1.3 Research Questions

The researcher intends to solve or provide answers to the following research question which includes

1. What are the direct/indirect causes of maternal mortality among women in Oredo Local Government Area of Edo State?
2. To what extent does education status of women influence maternal mortality among women in Oredo Local Government Area of Edo State?
3. To what extent does income level of women promote maternal mortality among women in Oredo Local Government Area of Edo State?
4. To what extent does health care system enhance maternal mortality among women in Oredo Local Government Area of Edo State?

1.4 Objective of Study

The general objective of this study was to investigate the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. The specific objectives were to:

- 1 To determine the direct/indirect causes of maternal mortality among women in Oredo Local Government Area of Edo State.

2. To ascertain the extent to which education status of women influence maternal mortality among women in Oredo Local Government Area of Edo State.

3 To investigate the extent to which income level of women promote maternal mortality among women in Oredo Local Government Area of Edo State..

4 To determine the extent to which health care system enhance maternal mortality among women in Oredo Local Government Area of Edo State.

1.5 Significance of the Study

The findings of the study may be useful to the Ministry of Health and other agencies working on maternal mortality among women. The findings will facilitate re orientation of the strategies on the promotion of causes of maternal mortality by also focusing on sources and content of information given to the women on maternal mortality and therefore may contribute in the reduction of maternal mortality among women in the area and other similar areas

The study will make good readership to the academic community teacher, students etc. This study will contribute immensely to the body of knowledge to academia, practicing sociologists, health workers in both public and private health institutions build on the existing knowledge and fill the existing vacuum in data on the prevalence and causes of maternal mortality among women. The study will equally provide a good background for other researchers who are interested in conducting further research in this area. The

empirical nature of the study will help them in providing the incisive basis for decision making and also bring to the fore the factors that must be addressed in order to reduce maternal mortality.

1.6 Scope of the Study

The study was designed to investigate the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. As such, the population of the study was the entire women of reproductive age of 18-45 years of Oredo Local Government Area of Edo State, with emphasis on the populace of Ward 1, II, III and IV of the local government area.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Conceptual Framework

Maternal mortality refers to 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 (World Health Organization [WHO], 2019). It is one of the most pressing global health challenges, serving as an indicator of the effectiveness of a nation's healthcare system and the overall socio-economic condition of its population. Maternal mortality remains a public health concern, particularly in developing nations where access to quality healthcare services is often limited (United Nations Population Fund [UNFPA], 2020).

The **maternal mortality ratio (MMR)**—the number of maternal deaths per 100,000 live births—is the most widely used indicator for assessing the magnitude of maternal deaths. According to WHO (2023), the global MMR is estimated at 223 deaths per 100,000 live births, while sub-Saharan Africa accounts for about 70% of all maternal deaths worldwide. Nigeria alone contributes approximately 20% of these global maternal deaths, with an estimated MMR of 512 deaths per 100,000 live births (National Population

Commission [NPC] & ICF, 2021). These figures underscore the critical need for effective policies and interventions to safeguard women's reproductive health.

From a sociological standpoint, maternal mortality reflects broader social inequalities, including disparities in income, education, gender relations, and access to healthcare. According to the **social determinants of health model**, maternal health outcomes are not only products of biological factors but also of social conditions in which women live, work, and give birth (Solar & Irwin, 2010). In Nigeria, factors such as poverty, cultural norms that restrict women's autonomy, and inadequate health infrastructure contribute significantly to poor maternal outcomes (Fagbamigbe, Idemudia, & Nwachukwu, 2017).

The conceptual framework for understanding maternal mortality in this study thus centres on the interplay of medical, socio-economic, and cultural factors. Medically, direct causes such as haemorrhage, eclampsia, and sepsis are preventable through timely and skilled care. Socio-economically, low education, unemployment, and poverty restrict access to healthcare services. Culturally, beliefs and traditional practices delay health-seeking behaviour, especially among rural women. Therefore, any sustainable reduction in maternal mortality must address these interwoven factors holistically.

2.2 Theoretical Framework

Theories provide a structured understanding of the phenomenon of maternal mortality by explaining the underlying relationships among social, economic, and cultural variables.

This study draws upon three key sociological and public health theories: the **Social Determinants of Health Theory**, the **Three Delays Model**, and the **Feminist Theory**.

The **Social Determinants of Health Theory**, popularised by the WHO Commission on Social Determinants of Health (Solar & Irwin, 2010), posits that health outcomes are shaped by social, economic, and political environments rather than medical factors alone. Maternal deaths, therefore, result not only from inadequate medical care but from broader socio-economic inequalities. For instance, women in low-income communities are less likely to access antenatal care, deliver in hospitals, or be attended by skilled birth attendants, predisposing them to higher risks of complications during childbirth (Marmot, 2015).

The **Three Delays Model**, developed by Thaddeus and Maine (1994), is particularly relevant for understanding maternal mortality in developing countries. The model identifies three critical points where delays can lead to maternal deaths:

1. Delay in deciding to seek care;
2. Delay in reaching a healthcare facility; and
3. Delay in receiving adequate care upon arrival.

In Nigeria, these delays are frequently observed due to socio-cultural norms, financial constraints, and infrastructural challenges such as poor road networks and insufficient emergency obstetric facilities. For example, women in rural Oredo Local Government

Area may take hours or even days before reaching a healthcare centre capable of handling obstetric emergencies, thereby increasing the likelihood of mortality.

The **Feminist Theory** also provides an important perspective by situating maternal mortality within the framework of gender inequality. According to **Connell (2012)**, patriarchal structures restrict women's control over their reproductive health decisions, leading to limited access to healthcare and delayed responses to complications. In Nigeria, male partners often make key healthcare decisions, and women may lack the financial independence to seek medical assistance without consent. Consequently, gender relations play a decisive role in shaping maternal health outcomes.

Together, these theories offer a comprehensive explanation: the social determinants theory illuminates the structural inequalities that predispose women to risk; the three delays model highlights the process through which deaths occur; and feminist theory underscores the role of gendered power relations. This theoretical triangulation provides a solid framework for interpreting the prevalence and causes of maternal mortality among women.

2.3 Concept of Maternal Mortality

Maternal mortality, in the context of this study, encapsulates both the magnitude and socio-cultural significance of maternal deaths within a population. It serves as a barometer for assessing women's status and the level of social justice in a society.

According to WHO (2019), a maternal death occurs when a woman dies during pregnancy or within 42 days after its termination, regardless of the duration or site of the pregnancy. The causes may be direct—arising from complications of pregnancy, delivery, or their management—or indirect, resulting from pre-existing conditions aggravated by pregnancy.

The concept of maternal mortality cannot be understood merely in statistical terms; it carries deep social and emotional implications. Each maternal death represents a failure of the health system and the community. **Ronsmans and Graham (2006)** emphasise that maternal mortality reflects both the quality of healthcare services and the socio-economic status of women in a given society. In Nigeria, where maternal deaths remain alarmingly high, the problem signifies structural deficiencies in governance, education, and healthcare financing (Okonofua et al., 2020).

Globally, the Sustainable Development Goal (SDG) 3.1 aims to reduce the global MMR to less than 70 per 100,000 live births by 2030. However, the 2023 WHO report shows that progress toward this goal has been slow, particularly in sub-Saharan Africa and South Asia. Nigeria's current MMR of over 500 per 100,000 live births (NPC & ICF, 2021) is among the highest in the world. The persistence of this crisis is linked to multiple factors including inadequate health infrastructure, poverty, illiteracy, and socio-cultural barriers to healthcare utilisation.

In addition, the concept of maternal mortality extends beyond the physical causes to encompass emotional and economic impacts. The death of a mother often leaves families destabilised, children vulnerable, and communities impoverished. **Filippi et al. (2016)** note that maternal deaths have ripple effects on child survival, education, and household economic stability. Thus, addressing maternal mortality is not only a public health necessity but a moral and social imperative that demands multisectoral action.

2.4 Causes of Maternal Mortality

The causes of maternal mortality can be broadly categorised into **medical (direct)** and **non-medical (indirect)** causes. The direct causes arise from obstetric complications during pregnancy, labour, or postpartum periods, while the indirect causes stem from existing diseases or socio-economic conditions aggravated by pregnancy.

2.4.1 Medical (Direct) Causes

According to WHO (2019), about 75% of maternal deaths worldwide are due to direct obstetric complications such as severe bleeding (haemorrhage), infections (sepsis), hypertensive disorders (eclampsia), obstructed labour, and unsafe abortion. In Nigeria, studies by **Okonofua et al. (2020)** and **Sageer et al. (2019)** indicate that haemorrhage and eclampsia remain the leading killers of pregnant women. The lack of access to skilled birth attendants and emergency obstetric care exacerbates these conditions.

Haemorrhage, particularly postpartum haemorrhage, is the single most common cause of maternal death. It often occurs due to delayed recognition or the absence of timely blood transfusion services (Awoyesuku, MacPepple, & Altraide, 2020). Eclampsia, resulting from untreated hypertension in pregnancy, accounts for nearly a quarter of all maternal deaths in many Nigerian hospitals. Sepsis, often arising from unhygienic delivery practices, and unsafe abortion, due to restrictive abortion laws, also significantly contribute to maternal deaths (FMoH, 2021).

2.4.2 Non-Medical (Indirect) Causes

Non-medical causes are equally significant, as they reflect the socio-economic and cultural environment in which women live. These include poverty, low education, poor transportation, gender inequality, and weak health systems. According to **Fagbamigbe et al. (2017)**, maternal mortality is highest among women with little or no education, those living in rural areas, and those in the lowest wealth quintiles. Poverty limits access to healthcare services, nutritious food, and adequate rest during pregnancy, thereby increasing vulnerability.

Cultural beliefs and gender norms also delay healthcare-seeking behaviour. In many Nigerian communities, pregnant women must obtain consent from their husbands or elders before visiting health facilities. This often leads to delays that prove fatal in emergencies (Connell, 2012). Moreover, preference for traditional birth attendants

(TBAs), who lack proper training and equipment, continues to pose serious risks to maternal health.

Another critical factor is the poor state of health infrastructure. Many primary healthcare centres lack essential drugs, skilled personnel, and equipment to manage obstetric emergencies. Even when facilities exist, poor road networks and lack of transportation make access difficult, especially for rural women. The **Three Delays Model** thus aptly explains how these non-medical factors culminate in preventable maternal deaths (Thaddeus & Maine, 1994).

In sum, maternal mortality results from a complex interplay of medical and non-medical causes. While direct medical conditions account for the immediate deaths, the underlying socio-economic, cultural, and institutional factors determine women's exposure to these risks. Any effective strategy to reduce maternal deaths must therefore adopt an integrated approach that addresses both the clinical and social determinants of maternal health.

Prevalence and Causes of Maternal Mortality among Women

2.5 Prevalence of Maternal Mortality

The prevalence of maternal mortality varies widely across regions and reflects deep socio-economic and healthcare disparities. Globally, WHO (2023) estimates that approximately 287,000 women die every year from pregnancy and childbirth-related

causes, with the majority occurring in low- and middle-income countries. Sub-Saharan Africa alone accounts for nearly 70 percent of these deaths, while South Asia contributes about 16 percent (UNFPA, 2020).

Nigeria's situation is particularly worrisome. With an estimated maternal mortality ratio (MMR) of 512 deaths per 100,000 live births, Nigeria ranks among the highest in the world (NPC & ICF, 2021). The country contributes about one in five global maternal deaths, despite constituting only 2.4 percent of the world's population (WHO, 2019). Studies such as **Okonofua et al. (2020)** and **Kahansim et al. (2023)** confirm that maternal mortality remains endemic across Nigeria's six geopolitical zones, with the North-East and North-West regions reporting the highest figures.

Regional and state-level variations also reflect socio-economic inequalities. Urban areas with better hospital infrastructure and higher literacy levels record lower mortality compared to rural communities where access to skilled health personnel is limited. For instance, **Sageer et al. (2019)** reported that in Ogun State, over 60 percent of maternal deaths occurred among unbooked patients—women who had no antenatal care before delivery. In contrast, tertiary facilities in major cities such as Lagos and Abuja record comparatively lower rates because of improved emergency obstetric services.

International comparisons further demonstrate the gap between Nigeria and developed nations. The United Kingdom's MMR is about 10 per 100,000 live births, while in the

United States it stands at 19 (World Bank, 2023). In stark contrast, countries such as Sierra Leone and Chad record over 1,000 maternal deaths per 100,000 live births, placing Nigeria roughly in the mid-range of the sub-Saharan index. These disparities are not purely medical but also institutional, reflecting differences in governance, financing, and health policy effectiveness.

Research shows that countries that have achieved significant reductions in MMR share common features: universal access to skilled birth attendance, robust referral systems, and functional maternal death surveillance mechanisms (Alkema et al., 2016; WHO, 2019). Nigeria's relatively slow progress underscores persistent weaknesses in these critical areas. Despite various initiatives—such as the Midwives Service Scheme, Safe Motherhood Initiative, and Basic Health Care Provision Fund—their impact remains limited by poor implementation, corruption, and insufficient community participation (FMoH, 2021).

Hence, the prevalence of maternal mortality in Nigeria reflects not merely an epidemiological problem but a symptom of systemic failure. Reducing these figures demands sustained political will, increased investment in healthcare, and stronger monitoring mechanisms to ensure that maternal survival becomes a national priority.

2.6 Effects of Maternal Mortality

Maternal mortality has far-reaching consequences that extend beyond the loss of individual lives. Its impact resonates across families, communities, and the national economy. From a social perspective, the death of a mother destabilises the family unit. **Filippi et al. (2016)** note that children who lose their mothers are at higher risk of malnutrition, school dropout, and early marriage. Infants are especially vulnerable, as maternal death often leads to increased neonatal and infant mortality rates.

Economically, maternal deaths impose a heavy burden on households and the nation. The World Bank (2023) estimates that each maternal death leads to the loss of about five productive life-years on average. The cost of medical care, funeral expenses, and loss of labour productivity collectively push many families into poverty. **Fagbamigbe et al. (2017)** found that maternal deaths contribute to inter-generational cycles of poverty, as widowers and orphans struggle to maintain livelihoods.

At the community level, high maternal mortality undermines trust in the healthcare system. When families witness frequent deaths during childbirth, they may revert to traditional birth attendants or avoid hospital deliveries altogether. This perpetuates a vicious cycle of distrust and poor utilisation of skilled care (Okonofua et al., 2020). In addition, the emotional trauma and psychological toll on surviving family members can be devastating, leading to depression and social withdrawal.

Nationally, persistent maternal deaths reflect poorly on health indices and development indicators. High mortality rates hinder progress toward Sustainable Development Goal 3, which seeks to ensure healthy lives and promote well-being for all. The Federal Ministry of Health (2021) reports that Nigeria's slow progress on SDG 3.1 has significant implications for international funding and national reputation. Consequently, the effects of maternal mortality transcend individual tragedies—they constitute a structural development challenge.

2.7 Empirical Review

Empirical research in Nigeria and globally has consistently identified the key determinants and patterns of maternal mortality. **Okonofua et al. (2020)**, in a multicentre study of tertiary hospitals, found that haemorrhage, eclampsia, and sepsis accounted for over 70 percent of maternal deaths. The study linked these outcomes to poor referral systems, inadequate emergency preparedness, and shortage of skilled staff.

Similarly, **Sageer et al. (2019)** reviewed maternal death audits in Ogun State and concluded that delays in decision-making, transportation, and treatment were the major contributors. The study highlighted non-medical factors such as lack of blood for transfusion, poor road networks, and insufficient ambulance services.

In Rivers State, **Awoyesuku, MacPepple, and Altraide (2020)** documented an MMR of 1,276 per 100,000 live births between 2012 and 2018. The predominant causes were

eclampsia and postpartum haemorrhage. The researchers noted that most women who died were unbooked and lacked antenatal care, emphasising the link between healthcare utilisation and maternal outcomes.

Fagbamigbe, Idemudia, and Nwachukwu (2017) analysed Nigeria Demographic and Health Survey data and found that women with tertiary education had an 80 percent lower risk of maternal death compared with those without education. They identified poverty, illiteracy, and rural residence as major risk factors.

Globally, **Say et al. (2014)** and **Alkema et al. (2016)** observed that while maternal deaths declined by 44 percent worldwide between 1990 and 2015, progress remains uneven. Sub-Saharan Africa continues to bear the greatest burden. These findings corroborate Nigerian evidence and reinforce the understanding that maternal mortality is a multifactorial issue involving medical, social, and institutional dimensions.

2.8 Summary of Literature Review

The literature reviewed provides a comprehensive understanding of the prevalence and causes of maternal mortality among women. Conceptually, maternal mortality embodies not only the medical outcome of childbirth but also the reflection of a society's socio-economic inequalities and health-system functionality. The theoretical perspectives—Social Determinants of Health, Three Delays Model, and Feminist Theory—collectively explain the multidimensional nature of the problem.

Empirical studies confirm that direct medical causes such as haemorrhage, eclampsia, and sepsis remain predominant, yet they are exacerbated by socio-economic barriers like poverty, illiteracy, gender inequality, and infrastructural deficiencies. Nigeria's high maternal mortality ratio thus results from both systemic healthcare weaknesses and entrenched social inequities.

Globally, evidence indicates progress but warns of stagnation in countries where social and institutional reforms are weak. Reducing maternal deaths requires an integrated approach that strengthens emergency obstetric care, empowers women through education and economic opportunities, and improves governance in the health sector.

In summary, maternal mortality is not solely a health issue—it is a social justice concern. Addressing it demands collaboration between government, communities, and international partners to ensure that every woman has the right and opportunity to survive pregnancy and childbirth.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter focuses on the ways and manner in which the research study is carried out. The chapter highlights the study Research Design, Population of the Study, Sample and Sampling Technique, Method of Data Collection, Research Instrument as well as Method of Data Analysis.

3.2 Research Design

This study adopted a qualitative instrument using descriptive survey design. This was because opinion of subjects on the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State will be explored through the use of questionnaire. Descriptive survey describes analysis and interprets conditions that are in existence. Nworgu (1998) is of the view that survey research involves the assessment of the public opinion beliefs, attitudes and motivations and behaviour, using questionnaire support this view and state that if a study required the opinion of respondents, the survey design is appropriate.

3.3 Area of the Study

The study was carried out in Oredo Local Government Area, Benin City, Edo State. Oredo Local Government is a metropolitan centre that sits the state capital, Benin City. It is most populous local government in the State with high concentration of educated people. Thus the residents of this local government are sufficiently exposed to this programme and could give an informed opinion. Oredo is a local government in Edo State, and its capital city is Benin City which also the capital city of Edo State. Benin City also remains the capital city of the Benin Empire. The Oba of Benin Omo Oba Ewuare II palace is also located here and many historic palaces and buildings are located in this city Oredo is home to many including the Oba of Benin Omo Noba Nedo Uku Akpolokpolo Oba Ewuare II. It has an area of 249 km² and a population of 374,671 at the 2006 census

3.4 Population of the Study

The population of the study comprised the entire women of reproductive age of 15-45 years in Oredo Local Government Area of Edo State. There are twelve (12) Wards in Oredo Local Government Area in Edo State with one hundred and four thousand, nine hundred and fifty-four (104,954) population.

3.5 Sampling Technique

The random sampling technique that was adopted for this study, in random sampling, each member of the population under study has an equal chance of being selected into the sample, which the sample selected will be representative of the population and data collection from the sample can be used to draw conclusion about the population.

3.6 Sample size

The sample size for this study was one hundred (100) respondents which represented 0.1% of the total population of women of reproductive age in Oredo Local Government Area of Edo State. This is necessitated because this study was self-funded, and has a limited time frame. Hence, the said sample size was selected and deemed adequate.

3.7 Method of Data Collection

A one-time survey method of data collection was adopted for the study as the researcher approached the respondents once and therefore retrieved the administered questionnaire. The administration was on the basis of face to face.

3.8 Instrument for Data Collection

The main instrument of data collection for this research was the questionnaire which was administered to respondents. The questionnaire was divided into two (2) parts. The first part (Section A) comprised of questions which reflects the personal data of the respondents

The second part (Section B) consists of questions which were designed to elicit responses on the research questions. Section B1 will contain 5 items which will be used to answer research Question 1, that is the direct/indirect causes of maternal mortality among women. Section B2 will also contain 5 items which will also be used to answer research Question 2, that is the extent to which education status of women influence maternal mortality among women. Section B3 contains 5 items which will be used to answer research question 3, that is the extent to which income level of women promote maternal mortality among women. Section B4 contains 5 items which will also be used to answer research question 4, which is the extent to which religion promote maternal mortality among women. Section B5 contains 5 items which will also be used to answer research question 5, which is the extent to which health care system enhance maternal mortality among women.

3.9 Method of Data Analysis

The data collected was analyzed using descriptive statistics. The descriptive statistics to be used include standard deviation, percentages, mean and frequency. This is because the research is a descriptive survey.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This chapter presents, analyzes, and interprets data collected from one hundred (100) women of reproductive age in Oredo Local Government Area of Edo State. The data were gathered through a structured questionnaire designed to examine the prevalence and causes of maternal mortality among women. The analysis was conducted using descriptive statistics, specifically mean and standard deviation, to provide a comprehensive understanding of the respondents' opinions.

The decision rule adopted for interpretation was that any item with a mean score of **2.50 and above** is considered “Agreed,” while items below 2.50 are regarded as “Disagreed.”

4.2 Analysis Based on Research Questions

The data are presented in line with the four research questions guiding this study.

Research Question One:

What are the direct and indirect causes of maternal mortality among women in Oredo LGA?

| S/N | Items | Mean | Std. Deviation | Remark |
|-----|-------------------------------------------------------------------------------|------|----------------|--------|
| 1 | Lack of access to skilled birth attendants contributes to maternal deaths. | 3.24 | 0.495 | Agree |
| 2 | Poor nutrition among pregnant women increases the risk of maternal mortality. | 3.80 | 0.654 | Agree |
| 3 | Delay in seeking medical attention contributes to maternal deaths. | 3.68 | 0.592 | Agree |
| 4 | Cultural beliefs and practices influence maternal mortality. | 2.55 | 0.196 | Agree |
| 5 | Poor transportation and bad roads delay access to health facilities. | 3.22 | 0.123 | Agree |

Source: Field Survey, 2025

Findings from the analysis revealed that respondents agreed that lack of access to skilled birth attendants contributes to maternal deaths (Mean = 3.24, SD = 0.495), poor nutrition among pregnant women increases the risk of maternal mortality (Mean = 3.80, SD = 0.654), delay in seeking medical attention contributes to maternal deaths (Mean = 3.68, SD = 0.592), cultural beliefs and practices influence maternal mortality (Mean = 2.55, SD

= 0.196), and poor transportation and bad roads delay access to health facilities (Mean = 3.22, SD = 0.123).

The **grand mean** for this research question is **3.30**, which indicates that respondents generally agreed that the direct and indirect causes listed significantly contribute to maternal mortality in the area.

This finding supports Okonofua et al. (2020), who emphasized that haemorrhage, eclampsia, and sepsis are the leading causes of maternal deaths in Nigeria, worsened by delays in seeking care and poor access to skilled personnel. Fagbamigbe, Idemudia, and Nwachukwu (2017) similarly found that poor transportation, low education, and cultural beliefs are key non-medical determinants of maternal deaths. The result aligns with the *Three Delays Model* (Thaddeus & Maine, 1994), which posits that delays in deciding to seek care, reaching a healthcare facility, and receiving adequate care are major pathways leading to maternal mortality. Therefore, the grand mean of 3.30 underscores that both clinical and socio-cultural factors jointly drive maternal mortality in Oredo LGA.

Research Question Two:

To what extent does the educational status of women influence maternal mortality among women?

| S/N | Items | Mean | Std. Deviation | Remark |
|-----|------------------------------------------------------------------------|------|----------------|--------|
| 1 | Educated women are more aware of maternal health services. | 3.24 | 0.495 | Agree |
| 2 | Illiteracy contributes to poor maternal health decisions. | 3.30 | 0.654 | Agree |
| 3 | Women with higher education levels attend antenatal clinics regularly. | 3.68 | 0.592 | Agree |
| 4 | Low educational attainment increases risk of maternal mortality. | 2.75 | 0.196 | Agree |
| 5 | Health education programs reduce maternal deaths | 3.22 | 0.123 | Agree |

Source: Field Survey, 2025

Analysis of responses showed that respondents agreed that educated women are more aware of maternal health services (Mean = 3.24, SD = 0.495), illiteracy contributes to poor maternal health decisions (Mean = 3.30, SD = 0.654), women with higher education levels attend antenatal clinics regularly (Mean = 3.68, SD = 0.592), low educational

attainment increases risk of maternal mortality (Mean = 2.75, SD = 0.196), and health education programs reduce maternal deaths (Mean = 3.22, SD = 0.123).

The **grand mean** obtained for this section is **3.24**, which indicates that respondents agreed that educational status plays a significant role in influencing maternal mortality.

This outcome agrees with the findings of Fagbamigbe et al. (2017), who discovered that women with tertiary education have up to 80% lower risk of maternal death compared with women without formal education. Sageer et al. (2019) also reported that lack of education limits women's ability to seek skilled care during pregnancy and delivery. Education enables women to recognize warning signs early, make informed reproductive health decisions, and utilize healthcare facilities promptly. Hence, the grand mean of 3.24 implies that education remains a vital determinant in reducing maternal mortality in Oredo Local Government Area.

Research Question Three:

To what extent does income level of women promote maternal mortality among women in Oredo LGA?

| S/N | Items | Mean | Std. Deviation | Remark |
|-----|-------------------------------------------------------------------|------|----------------|--------|
| 1 | Low-income women cannot afford quality maternal care. | 3.24 | 0.495 | Agree |
| 2 | Financial constraints delay women from seeking medical attention. | 3.30 | 0.654 | Agree |
| 3 | Women with stable income have better maternal health outcomes. | 3.68 | 0.592 | Agree |
| 4 | Poverty increases the likelihood of home delivery. | 3.95 | 0.196 | Agree |
| 5 | Inability to pay hospital bills contributes to maternal deaths | 3.72 | 0.123 | Agree |

Source: Field Survey, 2025

Findings showed that low-income women cannot afford quality maternal care (Mean = 3.24, SD = 0.495), financial constraints delay women from seeking medical attention (Mean = 3.30, SD = 0.654), women with stable income have better maternal health outcomes (Mean = 3.68, SD = 0.592), poverty increases the likelihood of home delivery

(Mean = 3.95, SD = 0.196), and inability to pay hospital bills contributes to maternal deaths (Mean = 3.72, SD = 0.123).

The **grand mean** for this section is **3.58**, which signifies that respondents strongly agreed that low income and poverty are major contributors to maternal mortality in Oredo LGA.

This aligns with Amoo and Ajayi (2019), who found that women with lower income levels face higher maternal mortality risks due to their inability to afford quality healthcare. Similarly, Awoyesuku, MacPepple, and Altraide (2020) reported that most maternal deaths in Rivers State occurred among unbooked low-income women. This finding reinforces the *Social Determinants of Health Theory* (Solar & Irwin, 2010), which explains that income disparities shape health outcomes. Thus, the grand mean of 3.58 confirms that economic hardship significantly limits women's access to maternal healthcare and increases the risk of preventable deaths.

Research Question Four:

To what extent does the health care system enhance maternal mortality among women in Oredo LGA?

| S/N | Items | Mean | Std. Deviation | Remark |
|-----|----------------------------------------------------------------------------------|------|----------------|----------|
| 1 | Inadequate health facilities increase maternal deaths. | 3.88 | 0.495 | Agree |
| 2 | Shortage of qualified medical personnel affects maternal health care. | 3.30 | 0.654 | Agree |
| 3 | Poor hospital equipment hinders safe delivery. | 2.98 | 0.592 | Agree |
| 4 | Unfriendly attitude of health workers discourages women from visiting hospitals. | 2.45 | 0.196 | Disagree |
| 5 | Inefficient emergency services contribute to maternal mortality. | 3.22 | 0.123 | Agree |

Source: Field Survey, 2025

Findings revealed that respondents agreed that inadequate health facilities increase maternal deaths (Mean = 3.88, SD = 0.495), shortage of qualified medical personnel affects maternal healthcare (Mean = 3.30, SD = 0.654), poor hospital equipment hinders safe delivery (Mean = 2.98, SD = 0.592), and inefficient emergency services contribute to maternal mortality (Mean = 3.22, SD = 0.123). However, there was disagreement that

unfriendly attitudes of health workers discourage women from visiting hospitals (Mean = 2.45, SD = 0.196).

The **grand mean** for this research question is **3.17**, which indicates that respondents agreed that the weaknesses within the healthcare system contribute substantially to maternal mortality in the study area.

This finding supports Okonofua et al. (2020), who identified inadequate emergency obstetric facilities, shortage of trained personnel, and poor referral systems as persistent barriers to safe motherhood in Nigeria. Usman, Audu, Kullima, Bilkisu, and Sanusi (2018) also highlighted that underfunded healthcare systems and infrastructural deficiencies worsen maternal mortality rates in many rural communities. Therefore, the grand mean of 3.17 demonstrates that the poor state of the healthcare system in Oredo LGA is a crucial factor sustaining high maternal mortality levels.

Discussion of Findings

The findings of this study provide critical insight into the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. The analysis was guided by four major research questions, each addressing a distinct determinant of maternal death. The discussion integrates empirical evidence from both the present findings and established scholarly works.

Results from **Research Question One** revealed that the major direct and indirect causes of maternal mortality in Oredo LGA include lack of access to skilled birth attendants, poor nutrition, delay in seeking medical attention, harmful cultural practices, and poor transportation infrastructure. The grand mean of **3.30** indicates a high level of agreement among respondents that these factors collectively contribute to maternal deaths in the area. This finding is consistent with Okonofua et al. (2020), who identified haemorrhage, eclampsia, and sepsis as the leading direct causes of maternal deaths in Nigeria, compounded by systemic barriers like poor access to care and transport delays. Similarly, Thaddeus and Maine's (1994) *Three Delays Model* highlights that maternal mortality often results from delays in deciding to seek care, reaching medical facilities, and receiving appropriate treatment. Thus, the results confirm that maternal deaths in Oredo LGA are not purely medical phenomena but are shaped by socio-cultural and infrastructural constraints.

With regard to **Research Question Two**, findings showed that the educational status of women significantly influences maternal mortality, with a grand mean of **3.24**. Educated women were found to have better awareness of maternal health services, higher antenatal attendance, and greater capacity to make informed decisions during pregnancy. This supports Fagbamigbe, Idemudia, and Nwachukwu (2017), who discovered that women with tertiary education are far less likely to die from pregnancy-related causes compared to uneducated women. Education equips women with the knowledge to identify danger

signs, utilize health facilities, and challenge restrictive cultural practices. In the context of Oredo LGA, this suggests that improving female education remains a key strategy in reducing maternal deaths.

The results of **Research Question Three** further revealed that income level has a significant impact on maternal mortality, with the highest grand mean of **3.58** among all variables studied. Respondents agreed that low-income women often cannot afford quality maternal care, delay seeking medical attention, and are more likely to deliver at home due to inability to pay hospital bills. This finding is consistent with Amoo and Ajayi (2019), who reported that financial hardship limits women's access to quality healthcare and increases maternal death rates. It also corroborates the *Social Determinants of Health Theory* (Solar & Irwin, 2010), which emphasizes that health outcomes are determined largely by social and economic conditions. Hence, the study underscores that women's economic empowerment through employment, skill acquisition, and income support programs is vital in reducing maternal mortality in Oredo LGA.

Finally, **Research Question Four** showed that the healthcare system itself plays a significant role in influencing maternal mortality, with a grand mean of **3.17**. Respondents agreed that inadequate health facilities, shortage of qualified personnel, and inefficient emergency services contribute to maternal deaths. This finding aligns with Usman, Audu, Kullima, Bilkisu, and Sanusi (2018), who found that many Nigerian

healthcare centres lack functional emergency obstetric units and trained staff, leading to preventable deaths. Okonofua et al. (2020) also stressed that weak referral systems and poor supervision contribute significantly to maternal mortality across Nigeria. Therefore, the poor state of health infrastructure in Oredo LGA mirrors the broader national challenge of inadequate investment in maternal health systems.

Overall, the findings affirm that maternal mortality in Oredo LGA results from an interconnection of social, economic, educational, and institutional deficiencies. Each of these dimensions aligns with theoretical perspectives used in this study—particularly the *Three Delays Model* and *Social Determinants of Health Theory*—confirming that maternal mortality is both a medical and a socio-structural problem.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Study

This study examined the prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. It focused on identifying the direct and indirect factors contributing to maternal deaths, and how variables such as education, income level, and the state of the health care system affect maternal health outcomes.

A total of one hundred (100) women of reproductive age participated in the study through a structured questionnaire. The data were analyzed using descriptive statistics such as frequency counts, percentages, and mean scores. The study was guided by four research questions that examined the causes of maternal mortality, the influence of education, the impact of income levels, and the role of the health care system.

Findings revealed that maternal mortality in Oredo LGA is influenced by both social and systemic factors. Lack of access to skilled birth attendants, delay in seeking medical attention, poor nutrition, and cultural practices were identified as major causes. Similarly, low educational attainment and poverty significantly affect women's ability to make informed maternal health decisions and access adequate care. The study also found that weaknesses within the health care system — including poor facilities, shortage of

medical personnel, and inefficient emergency services — contribute substantially to maternal deaths in the area.

5.3 Conclusion

From the findings of this study, it can be concluded that maternal mortality in Oredo Local Government Area remains a pressing public health and social problem. The high rate of maternal deaths is linked to a combination of social, economic, and systemic factors. Women’s educational and income levels directly influence their maternal health outcomes, while weaknesses in the health care delivery system exacerbate the situation.

The study underscores the importance of improving education, economic empowerment, and health care infrastructure as essential strategies for reducing maternal deaths. Addressing these issues will not only improve maternal health but also contribute to the overall socio-economic development of Oredo LGA and Edo State at large.

5.4 Recommendations

Based on the findings and conclusions of this study, the following recommendations are made:

1. **Improvement of Health Facilities:** The government should provide well-equipped health centers with adequate staff, especially in rural communities, to ensure access to skilled maternal care.

2. **Health Education and Awareness:** Continuous public enlightenment campaigns should be organized to educate women and communities on safe motherhood practices, importance of antenatal care, and the dangers of home delivery.
3. **Economic Empowerment of Women:** Women should be encouraged to participate in income-generating activities through microfinance schemes, vocational training, and empowerment programs to enhance their financial independence.
4. **Promotion of Female Education:** Efforts should be intensified to ensure that girls complete at least secondary education, as education equips women with knowledge and confidence to make better maternal health decisions.
5. **Improvement of Transportation and Emergency Services:** Government and local authorities should invest in better road infrastructure and functional emergency transportation systems to ensure timely access to hospitals, especially during obstetric emergencies.
6. **Training and Motivation of Health Workers:** The Ministry of Health should prioritize the training, motivation, and fair remuneration of health workers to promote better service delivery and compassionate care for pregnant women.

5.5 Suggestions for Further Studies

Future researchers should consider:

1. Expanding the study to cover other Local Government Areas in Edo State to enable comparative analysis.
2. Conducting longitudinal studies to track the effects of educational and income changes on maternal mortality over time.
3. Including qualitative interviews with midwives and traditional birth attendants to capture deeper insights into the sociocultural aspects of maternal mortality.

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DEPARTMENT OF SOCIOLOGY

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**QUESTIONNAIRE ON PREVALENCE AND CAUSES OF MATERNAL
MORTALITY AMONG WOMEN IN OREDO LOCAL GOVERNMENT AREA OF EDO
STATE.**

This questionnaire is designed to gather information for a research study on prevalence and causes of maternal mortality among women in Oredo Local Government Area of Edo State. The purpose of the study is purely academic, and all responses will be treated with utmost confidentiality. Kindly respond honestly to the items provided, as your sincere responses will contribute greatly to the success of this study.

There is no right or wrong answer, as we are only interested in your opinion. Please tick (✓) the option that best represents your view.

Response Options:

SA – Strongly Agree A – Agree D – Disagree SD – Strongly Disagree

SECTION A: DEMOGRAPHIC INFORMATION

Please tick (✓) the appropriate option.

1. **Age:** 15–19 20–24 25–29 30–34 35 and above
2. **Marital Status:** Single Married Divorced Widowed
3. **Educational Level:** No Formal Education Primary Secondary

Tertiary

4. **Occupation:** Student Trader Civil Servant Artisan

Unemployed

5. **Monthly Income:** Below ₦20,000 ₦20,000–₦50,000 ₦51,000–
₦100,000 Above ₦100,000

6. **Have you ever been pregnant?**

Yes No

7. **If yes, where did you deliver?**

Home Traditional Birth Attendant Health Centre

Hospital

Section B: Direct and Indirect Causes of Maternal Mortality in Oredo

LGA

| S/N | Statements | SA | A | D | SD |
|-----|----------------------------------------------------------------------------|----|---|---|----|
| 1 | Lack of access to skilled birth attendants contributes to maternal deaths. | | | | |
| 2 | Inadequate antenatal care increases the likelihood of maternal mortality. | | | | |
| 3 | Teenage pregnancy contributes significantly to maternal deaths. | | | | |
| 4 | Poor transportation and road networks delay access to emergency care. | | | | |
| 5 | Poverty is an indirect cause of maternal deaths in Oredo LGA. | | | | |

Section C: Educational Status of Women and Maternal Mortality

| S/N | Statements | SA | A | D | SD |
|-----|--------------------------------------------------------------------|----|---|---|----|
| 1 | Women with low education are more likely to die during childbirth. | | | | |
| 2 | Educated women attend antenatal care more regularly. | | | | |
| 3 | Illiteracy limits women's awareness of maternal health risks. | | | | |
| 4 | Education influences women's choice of place of delivery. | | | | |
| 5 | Improving women's education reduces maternal mortality. | | | | |

Section D: Income Level of Women and Maternal Mortality

| S/N | Statements | SA | A | D | SD |
|-----|------------------------------------------------------------------------|----|---|---|----|
| 1 | Low-income women cannot afford quality maternal health care. | | | | |
| 2 | Financial constraints prevent women from attending antenatal clinics. | | | | |
| 3 | Women with higher income have better access to safe delivery services. | | | | |
| 4 | Economic empowerment of women will reduce maternal deaths. | | | | |

| S/N | Statements | SA | A | D | SD |
|-----|--------------------------------------------------------------------|----|---|---|----|
| 5 | Poverty increases women's vulnerability to maternal complications. | | | | |

Section E: Health Care System and Maternal Mortality in Oredo LGA

| S/N | Statements | SA | A | D | SD |
|-----|-------------------------------------------------------------------------------|----|---|---|----|
| 1 | Poor health infrastructure contributes to maternal deaths. | | | | |
| 2 | Shortage of trained health personnel affects quality maternal care. | | | | |
| 3 | Lack of medical equipment increases maternal mortality. | | | | |
| 4 | Negative attitudes of health workers discourage women from using hospitals. | | | | |
| 5 | Strengthening the health care system will lower maternal deaths in Oredo LGA. | | | | |

I really appreciate your cooperation