

## **Determinants of Maternal Mortality in Yewa North Local Government Area of Ogun State Nigeria**

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### **Abstract**

An estimated global total of 10.7 million women have died in the 25 years between 1990 - 2015 due to maternal causes. However, the world has made steady progress in reducing maternal mortality. The global MMR has fallen by 44% from the 1990 to 21.6% in 2015. Worldwide, MMR has declined by an average of 3.0% per year between 2000 and 2015, which is more than doubling the estimated average annual decline and it is expected that the reduction will be applicable to Nigeria. This study assessed the determinants of maternal mortality in Yewa North Local Government area of Ogun State Nigeria. A descriptive research design was adopted for this study. The target populations are Pregnant women and Nursing mothers attending General Hospital, Ayetoro, Yewa North Local Government Area of Ogun State. Total population of 100 respondents were used. The instrument used for this study is self-developed semi-structured questionnaire with a coefficient reliability score of 0.78. Data was analysed using statistical computations expressed in form of tables, percentages and correlation. Result of this study revealed that majority of the respondents were between 21 to 25 years old (40.6%) and 31 to 35 years old (21.9%). Further findings showed majority of respondents are married, Muslims with few Christians and had primary education. Findings also revealed that delay in accessing healthcare services, poor coverage of health facilities with maternity beds and skilled attendants, poor knowledge, poverty of a pregnant woman, low public investment in health sector and availability of drugs in health sector are determinants of maternal mortality among pregnant women in Yewa north Local Government of Ogun state It is therefore recommended that Government should provide good road, easy means of transportation and qualified staff in order to reduce maternal death in Yewa North. Treatments should be done before prescriptions. The referral system should be improved upon and health services providers should be enlightened on having respect for people. More Skilled health attendant should be employed especially for night duties. Community Health Extension Workers should be employed skilled personnel should be employed to handle complicated deliveries. Health facilities should be subsidized.

**Keywords:** *Pregnant Women; Determinants of Mortality; Health Facility*

### **Introduction**

The growing concern on improving reproductive health at the global level has created a demand for research especially in the area of maternal health. Research histories show that since the late 1980s, improving maternal health and reducing maternal mortality have

been key preoccupations of several international summits and conferences including the Millennium Summit in 2000. According to World Health Organization [1], about 536,000 women die of pregnancy related causes every year and approximately 10 million women suffer complications related to pregnancy or child birth. Correspondingly, over the last three decades, Nigeria continues to have one of the highest maternal mortality ratios, with 496 - 560 deaths per 100,000 live births and Aguilera, *et al.* (2012) noted that many causes of these pregnancy-related deaths are preventable. Owing to prevailing challenges with information and data collation, there are uncertainties as to the extent of maternal mortality burden nevertheless, the obvious tragedies of maternal mortality in Nigeria especially in the rural areas cannot be denied. This has rendered many children motherless and deprived them of maternal care which has affected adversely both their physiological and psychological development.

WHO (2011) and Fadeyi (2009) defined maternal health as the physical well-being of a woman during pregnancy, childbirth, and postpartum period. Maternal health has been a major concern of several international summits and conferences since the late 1980s, which culminated to the Millennium Summit in 2000 [1]. Maternal mortality has been defined as the death of a woman while pregnant or within 42 days of a termination of a 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 and incidental causes (WHO 2007; Ogunjuyigbe and Liasu, 2007; Khama, 2016). It is within this conceptual framework that the Millennium Development Goal Target 5A, calls for a reduction in maternal mortality ratio by three-quarters by 2015.

Nigeria constitutes only two percent of the world's population, but accounts for over 10% of the world maternal deaths, and ranks second globally only to India (Okonofua, 2007; Abdul Aziz, 2008). The status of maternal health is poor in Nigeria with maternal mortality of 59,000 per annum due to pregnancy-related causes. Herfon (2006), noted that the cause of maternal mortality is an outcome of nexus interaction of a variety of factors namely: the distant factors (socio-economic, cultural) which include; occupation, income level and illiteracy act through the proximate or intermediate factors (health and reproductive behavior, access to health services) and in turn influence outcome (pregnancy complication mortality). Idris (2010) identified other factors responsible for maternal mortality as socio-cultural factors which include: traditional practices, norms, beliefs, education and religion.

Several attempts have been made by the Federal and State governments of Nigeria in the past to reduce maternal mortality, such attempts, have not proved very successful in achieving the desired results. In Ogun State, the state Government approved a bill in 2011 of adopted Conditioner Cash Transfer (CCT). In 2014 the State launched a programme called Community Based Health Insurance Scheme (CBHIS) "Araya" guaranteeing free maternal health services to pregnant women, children under five and the aged in which the State Governor (Governor Ibikunle Amosun) played a central role in its development and adoption. The introduction of the "Safe Motherhood" programme in 1995, Midwife Service Scheme (MSS) in (2011) and subsidy reinvestment program (SURE-P). They introduced a range of interventions in 2012 which include the antenatal, labour, delivery and postnatal care, family planning, prevention and management of unsafe abortions and health education yet, MMR has not been encouraging over the years and improvements are very slow. The former state commissioner of health in Ogun state and some senior obstetrician and gynaecologist, played central roles in creating positive environment for maternal health. Hence, pregnant women have assessed to free medical services in their respective Local Government, as part of measures put in place by the state government to reduce maternal mortality rate in the state (Media Global, 2010). It is this trend of maternal mortality growing concern that makes this study to examine the determinants of maternal mortality rate in Yewa North LGA, Ogun State.

### Problem statement

The increase in number of women dying during pregnancy and child birth in Yewa North Local Government of Ogun State motivated the writer into finding out the causes and solution to reduce or eradicate maternal mortality in the area. Consequently, the chance of a Nigerian woman dying from reproductive health disorders and complications was put at 1 in 18 in 2015, and 1 in 23 in 2009, placing the Nigerian woman at far greater risk than her counterpart in the developed world, where the risk is estimated to be 1 in 17,800 and 1

in 10000 in countries such as the Republic of Ireland and Singapore respectively (World Bank, 2011; UNICEF, 2010; Media Global, 2010; UNICEF, 2009; UNFPA, 2015). Some of the implications of these estimates are the depletion of the country's workforce and the overall stalling of rapid development. This study was based on the writer's observation and experience while on clinical posting on the high mortality rate of pregnant women during childbirth as a result of post-partum hemorrhage and eclampsia. This study focuses on determinants of maternal mortality in General hospital, Ayetoro, Ogun State.

### Specific Objectives

1. To identify if delay in accessing healthcare services will be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
2. To determine if poor coverage of health facilities with maternity beds and skilled attendants will be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
3. To assess if lack of knowledge will be a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state.
4. To identify if the level poverty will be a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state.
5. To assess if low public investment in health sector, will be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
6. To determine if availability of drugs in health sector, will be a determinant of maternal mortality in Yewa north Local Government of Ogun state.

### Research questions

1. Will delay in accessing healthcare services be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
2. Will poor coverage of health facilities with maternity beds and skilled attendants be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
3. Will lack of knowledge be a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state.
4. Will level poverty be a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state.
5. Will low public investment in health sector be a determinant of maternal mortality in Yewa north Local Government of Ogun state.
6. Will availability of drugs in health sector be a determinant of maternal mortality in Yewa north Local Government of Ogun state.

### Significance of the study

In Yewa North, most women were admitted into medical facilities in a critical state due to excess bleeding, having delivered several hours prior at home. Excessive bleeding or postpartum hemorrhage may be confounded by the beliefs that excess bleeding is necessary for the cleansing process and these beliefs contribute to the late recognition of dangerous pregnancies which could lead to morbidity or mortality. Postpartum hemorrhage/bleeding, the leading medical cause of maternal mortality, is caused by one or more of the following; trauma to the genital tract, retention of placenta or placental fragments, past history of postpartum hemorrhage, uterine fibroid and cesarean section (Ujah and Egeh 2009). Therefore, the significance of the study is to make pregnant women aware of the causes of maternal mortality, prevention and solution to the cause. The findings of this study will help health workers to identify factors responsible for maternal mortality; this will guide them on adopting more effective measures to ensure that women experience uneventful pregnancy, labor and puerperium. It will help women of child bearing age in the prevention of maternal mortality even in future pregnancies by obtaining adequate prenatal care. Similarly, the study will also be of value to government both state and federal, policy makers as well as researchers for further research.

**Limitation**

The major limitation encountered during this study was the attitude of health record official in providing relevant information for the researcher. Also some retrieval of information was very cumbersome due to the manual nature of keeping information.

**Research Methodology**

**Research design**

Descriptive design was adopted for this study.

**Study area**

Yewa North (formerly Egbado North) is a Local Government Area in the west of Ogun State, Nigeria bordering the Republic of Benin. Its headquarters are in the town of Aiyetoro (or Ayetoro) at 7°14'00"N 3°02'00"E in the north-east of the Area. It has an area of 2,087 km<sup>2</sup> and a population of 181,826 at the 2006 census. The postal code of the area is 111. Aiyetoro, established around 1813, is one of the founding cites that formed Ogun State in the mid-1970s. It hosts one of the best secondary school in the old Western Region - Comprehensive High School, Aiyetoro. Which currently falls within Yewa North. The town also has a higher education institution, Olabisi Onabanjo University (Aiyetoro), which will due to be upgraded to a full University of Agriculture. The area is noted for its agricultural products as most citizens are farmers. Notable Settlements in the area include Ayetoro Yewa, Oja-Odan Yewa, Ohunbe Yewa, Ikotun Yewa, Mosan Yewa, Ebute-Igbooro Yewa, Igua Yewa, Ibese Yewa, Iboro, Sawonjo, Joga-Orile, Igan-okoto, Igan Alade, Imasai, Igbogila, Idofa, Imeko. Obelle Yewa Notable Rivers are Yewa river which flows through Yewa South and Ado-Odo to Atlantic Ocean.

It has many Communities such as Ohunbe Yewa, Obelle Yewa, Mosan Yewa and Ijoun Yewa which serve as boundary between Nigeria and Republic of Benin, though all these communities have been asking Federal Government of Nigeria to consider there developments more important. These communities have been clamoring for provision of good roads, drinkable water supply, health Centre as many of the inhabitants usually travel far to neighbouring Republic Benin community such as Ipobe to seek medical attention this has however necessitate the provision of some health centres across the local Government. Yewa North has up of 10 major wards and share boundaries with Yewa North, Ado-Odo Ota, and Ipokia Local Governments. Lack of basic amenities in some community like Mosan Yewa becomes serious social problem as inhabitants find it difficult to have access to good living.

**Population of the study**

The target audience are fifty Pregnant women and 50 Nursing mothers attending General Hospital, Ayetoro, Yewa North Local Government Area of Ogun State.

General Hospital, Ayetoro, Yewa North	Number of respondents
Pregnant women	50
Nursing mothers	50
Total	100

*Table 1: Population of study.*

**Sampling technique and sample size**

Whole population was used.

**Research instrument**

The study has adopted the use of the questionnaire. The questionnaire is divided into two sections. Section A which demographic is having eight (8) questions. Section B elicits questions on determinants of maternal mortality in Yewa Local Government of Ogun State.

**Validity of the instrument**

To ensure the validity of the instrument, the questionnaire was subjected to scrutiny by experts, who read and made necessary corrections in determining its appropriateness. The relevant suggestions were affected accordingly before the questionnaire was administered.

**Reliability**

Piloting testing was done using Cronbach Alfa with a coefficient reliability score of 0.78.

**Method of data collection**

Questionnaires were administered to the group of pregnant women and the nursing mother at general hospital Ayetoro. Adequate time, specifically one week, was given for the copies of the questionnaire to be completed, after which they were retrieved from the respondents personally by the researcher.

**Data analysis**

The analysis of data collected was done using simple descriptive statistical analysis of frequency counts and percentages.

**Results**

Respondents	Number Distributed	Number Returned
Pregnant women	100	96
Total	100	96

*Table 2: Distribution of questionnaire administration and return rate.*

A total of 100 copies of the questionnaire were distributed to the respondents. However, 96 were returned and used for analysis giving response rate of 96%.

	Items	Frequency	Percentage	
A	Age	16 - 20	17	17.7
		21 - 25	39	40.6
		26 - 30	14	14.6
		31 - 35	21	21.9
		36 - 45	4	4.2
		46 and above	1	1.0
		Total	44	100.0
B	Religion	Christianity	28	29.2
		Islam	59	61.5
		Traditional	9	9.4
		Others	0	0
		Total	96	100
C	Marital Status	Single	55	57.3
		Married	31	32.3
		Separated	10	10.4
		Total	96	100.0

D	Educational Status	Primary	49	51.0
		Secondary	21	21.9
		Tertiary	10	10.4
		None	16	16.7
		Total	96	100.0
E	Occupation	Civil Servant	2	2.1
		Trading	28	29.2
		Farming	64	66.7
		Student	2	2.1
		Total	96	100.0
F	Tribe	Yoruba	50	52.1
		Igbo	28	29.2
		Hausa	18	18.8
		Total	96	100.0

**Table 3:** Demographic characteristics of the respondents.

Table 3a reveals that majority of the respondents were between 21 to 25 years old (40.6%) and 31 to 35 years old (21.9%), 17.7% were between 16 and 20 years old, others were 26 - 30 years old (14.6%), 36 - 40 years old (4.2%) respectively. Only 1.0% was found to be between age 46 and above. This implies that the respondents were matured enough to be mothers. Table 3b revealed that most of the respondents, (61.5%) practiced Islam while 29.2% practiced Christianity. 9.4% practiced Traditional Religion. This implies that maternal health care services were not monopolised by a single religion. Table 3c indicates that a very high percentage of the respondents (57.3%) were single while 32.3% were married. 10.4% of the respondents were separated. Table 3d reveals that 51.0% of the respondents attended primary school, 21.9% had Secondary education, 10.4% graduated from tertiary institutions while 16.7% had no formal education. The implication of this is that highly educated people were not really among the pregnant women and nursing mothers in Yewa North Local Government Area of Ogun State. Table 3e reveals that 66.7% of the respondents were farmers, 29.2% were traders, 2.1% were civil servants and students respectively. This shows that the predominant occupation of women in Yewa north is farming. Table 3f reveals that 52.1% of the respondents were Yoruba, 29.2% were Igbo, and 18.8% were Hausa. The result reveals that there is mixed culture in Yewa North Local Government.

Table 4 shows that 56.3% expressed that their houses are far from the hospital thus making accessing healthcare services difficult. 34.4% respondents have their houses closer to the hospital thereby strongly disagreed on far distance of hospital to houses. 37.5% strongly agreed that the roads from their houses to the hospital are bad, while 38.5% agreed and 15.6% disagreed. 40.0% strongly agreed that there is no easy transport from their houses to the hospital 33.3% agreed while 24.0% disagreed. Yewa north Local Government health facilities are not part of facilities in the country where staff are not adequate as 55.2% and 19.8% agreed that there are staffs in the hospital. List of things to buy were always given before treatments as 64.6% strongly agreed and 64.6% also agreed, only 3.1% strongly disagreed. 56.3% expressed their dissatisfaction about the referral system, 25.0% also agreed that there is poor referral system very few people (13.5% and 5.2%) disagreed that the referral system is poor. High cost of hospital services also contributes to maternal mortality rate. 73.7% cannot afford the cost of hospital services, only 3.2% can afford the high cost of hospital services. Majority of the respondents (47.9% and 45.8%) also showed that the health services providers have no respect for people Lastly, the table shows that the turnout of the patient during raining season is too low as 47.9% and 45.8% said they cannot go to the health facility when it is raining. This study concluded that delay in accessing healthcare services is a determinant to maternal mortality in Yewa north Local Government of Ogun state.

Items	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
My house is far from the hospital	6 (6.3)	54 (56.3)	3 (3.1)	33 (34.4)
The road from my house to the hospital is bad	36 (37.5)	37 (38.5)	15 (15.6)	8 (8.3)
There is no easy transport from my house to the hospital	39 (40.0)	32 (33.3)	23 (24.0)	2 (2.1)
There are no staff in the hospital	19 (19.8)	5 (5.2)	53 (55.2)	19 (19.8)
When you go to the hospital, they will give your family list of things they will buy from the chemist before treating you	62 (64.6)	20 (20.8)	11 (11.5)	3 (3.1)
The referral system is poor	54 (56.3)	24 (25.0)	13 (13.5)	5 (5.2)
I cannot afford the cost of hospital services	70 (73.7)	19 (20.0)	3 (3.2)	3 (3.2)
The health services providers have no respect for people	46 (47.9)	44 (45.8)	2 (2.1)	4 (4.2)
I cannot go to the health facility when it is raining	46 (47.9)	44 (45.8)	2 (2.1)	4 (4.2)
	44%	32%		

**Table 4:** Accessing health facilities.

Table 5 shows that Lack of enough skilled health attendant contributes to maternal death in Yewa North local government as revealed by table 4.8 where 64.6% respondents strongly disagreed that there enough skilled health attendant at the facilities. This conformed with item 4 on table 7.8 where more than average respondents expressed that there are no staff in the hospital. 53.0% and 18.8% agreed that there are no skilled attendants at night while 5.2% and 20.8% disagreed. 68.8% also disagreed that each facility has doctor available at all times. Public health nurses too were not always available at facilities according to responses recorded on table 4.8 where 55.2% and 16.7% disagreed that each facility has Public health Nurses, only 14.6% strongly agreed and 13.5% agreed. At each facility, 49.0% and 35.4% agreed that there are nurses and midwives. 43.8% and 51.0% disagreed that each facility has community midwives, only 2.1% strongly agreed. 59.4% and 40.6% agreed that each facility has Community Health Extension Worker, none of the respondents opposed this. The research also revealed that facilities in Yewa North are short of maternity beds.74.0% strongly agreed while 20.8% agreed and very few respondents (2.1%, 3.1%) disagreed. 68.8% strongly agreed that facilities in Yewa North do not have skilled personnel to handle Complicated deliveries, 31.3% also agreed while non Of the respondents disagreed. The result of this study revealed that poor coverage of health facilities with maternity beds and skilled attendants is a determinant of maternal mortality in Yelwa north Local Government of Ogun state.

Items	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
There is enough skilled health attendant in Yewa North local government	11 (11.5)	16 (16.7)	7 (7.3)	62 (64.6)
No skilled attendants at night.	53 (53.0)	18 (18.8)	5 (5.2)	20 (20.8)
Each facility has doctor available at all times	5 (5.2)	0 (0.0)	25 (26.0)	66 (68.8)
Each facility has Public health Nurses	14 (14.6)	13 (13.5)	16 (16.7)	53 (55.2)
Each facility has Nurse/midwives	47 (49.0)	34 (35.4)	7 (7.3)	8 (8.3)
Each facility has community midwives	2 (2.1)	3 (3.1)	42 (43.8)	49 (51.0)
Each facility has Community Health Extension Worker	57 (59.4)	39 (40.6)	0 (0.0)	0 (0.0)
Facilities in Yewa North are short of maternity beds	71 (74.0)	20 (20.8)	2 (2.1)	3 (3.1)
Facilities in Yewa North do not have skilled personnel to handle Complicated deliveries.	66 (68.8)	30 (31.3)	0 0.0	0 0.0
	37.5%	20%		

**Table 5:** Coverage of health facilities with maternity beds and skilled attendants.

Table 6 reveals that Mothers Knowledge on dangers of pregnancy can be a determinant of maternal mortality in Yewa north Local Government of Ogun state as 68.8% of the respondents and 31.3% disagreed that Vaginal bleeding is normal during Pregnancy. 45.8% and 54.2% also acknowledge that severe headache is a danger sign, 0.0% strongly disagreed. Attending Hospital when having difficulty in breathing was also acknowledged by the respondents as 43.8% and 55.2% disagreed that they don't need to go to Hospital when having difficulty in breathing. 62.5% and 36% agreed that severe abdominal pain is not good during Pregnancy. Above average of the respondents also expressed that Convulsion/Fits is the work of family witches and wizard. This study observed that knowledge is a determinant of maternal mortality in Yewa north Local Government of Ogun state.

Statement	SA Freq (%)	A Freq (%)	D Freq (%)	SDFreq (%)
Vaginal bleeding is normal during Pregnancy	0 (0.0)	0 (0.0)	30 (31.3)	66 (68.8)
Severe headache is a danger sign.	44 (45.8)	52 (54.2)	0 (0.0)	0 0.0
I don't need to go to Hospital when having difficulty in breathing.	0 (0.0)	1 (1.0)	42 (43.8)	53 (55.2)
Severe abdominal pain is not good during Pregnancy.	60 (62.5)	36 (37.5)	0	0
Convulsion/Fits is the work of family witches and wizard	38 (39.6)	36 (37.5)	4 (4.2)	18 (18.8)
	30%	26		

Table 6: Mothers knowledge on dangers signs of pregnancy.

Table 7 indicates that poverty level of the mothers determined maternal mortality as 66.7% Strongly agreed and 16.7% also agreed that pregnant women die because they have no money to access health facilities only 4.2% strongly disagreed and 12.5% disagreed. 33.3% and 43.8% also stated that their neighbours borrowed them money to buy the prescribed drugs. 10.4% and 12.5% were the few that were capable of buying drugs without borrowing money. Nearly all respondents (75.0% strongly agreed and 14.6% agreed) believed their attendance will be regular if the services are made free, just 5.2 disagreed. The table also revealed that average respondents (50.0%) strongly agreed that they cannot afford to buy prescribed routine drugs, 24.0% agreed while 9.4% strongly disagreed and 16.7% disagreed. 44.8% and 38.5% also agreed that they have no money for transportation. More than average respondents (30.2% and 34.4%) usually depend on their husband for money to pay for bills. This study reported that level of poverty of a pregnant woman is a determinant of maternal mortality.

Items	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
Pregnant women die because they have no money to access health facilities	64 (66.7)	16 (16.7)	4 (4.2)	12 (12.5)
My neighbour lent me money to buy the prescribed drugs.	32 (33.3)	42 (43.8)	10 (10.4)	12 (12.5)
My attendance will be regular if the services are made free	72 (75.0)	14 (14.6)	5 (5.2)	5 (5.2)
I cannot afford to buy prescribed routine drugs	48 (50.0)	23 (24.0)	9 (9.4)	16 (16.7)
No money for transportation	43 (44.8)	37 (38.5)	4 (4.2)	12 (12.5)
I usually depend on my husband for money to pay for my bills	29 (30.2)	33 (34.4)	17 (17.7)	17 (17.7)
	43%	27%		

Table 7: The level poverty.

Table 8 showed that 61.5% of respondents strongly agreed that our culture does not eat Snails, Okra and Plantain during Pregnancy while 38.5% agreed and no respondent disagreed or strongly disagreed. 72.9% of respondents strongly agreed that taking herbs is

preferred to going to health facilities while 22.9% agreed, 2.1% disagreed and 2.1% strongly disagreed. 31.3% of respondents strongly agreed that their mother gave them gourd to swallow for easy delivery while 31.3% agreed, 20.8% disagreed and 16.7% strongly disagreed. 43.8% of respondents strongly agreed that blood transfusion is forbidden during, while 12.5% agreed, 18% disagreed and 25% strongly disagreed. 54.2% of respondents strongly agreed that our culture preferred Traditional Birth to Hospital delivery, while 45.8% agreed, 0% disagreed and 0% strongly disagreed. 62.5% of respondents strongly agreed that going out at night is forbidden in their culture even when in labour, while 37.5% agreed, 0% disagreed and 0% strongly disagreed. 35.4% of respondents strongly agreed that It is a taboo to exposed myself to Male Health Worker, while 2.1% agreed, 15.6% disagreed and 46.9% strongly disagreed. This study concluded that cultural practice is a determinant to maternal mortality among pregnant women in Yewa north Local Government of Ogun state.

Statement	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
Our Culture does not eat Snails, Okra and Plantain during Pregnancy.	59 (61.5)	37 (38.5)	0	0
Taking herbs is preferred to going to health facilities.	70 (72.9)	22 (22.9)	2 (2.1)	2 (2.1)
My Mother gave me gourd to swallow for easy delivery.	30 (31.3)	30 (31.3)	20 (20.8)	16 (16.7)
Our Culture does not take injection during Pregnancy.	42 (43.8)	12 (12.5)	18 (18.0)	24 (25.0)
Blood transfusion is forbidden during Pregnancy.	28 (29.2)	27 (28.1)	16 (16.7)	25 (26.0)
Our culture preferred Traditional Birth to Hospital delivery.	52 (54.2)	44 (45.8)	0	0
Going out at night is forbidden in our Culture even when in labour.	60 (62.5)	36 (37.5)	0	0
It is a taboo to exposed myself to Male Health Worker	34 (35.4)	2 (2.1)	15 (15.6)	45 (46.9)
	49%	27%		

Table 8: Cultural practices.

Table 9 showed that 43.8% of respondents strongly agreed that equipment are not always available in the hospital, while 12.5% agreed, 18% and 25% disagreed. 44.8% strongly agreed and 38.5% agreed that equipment available is outdated and no modern ones for replacement in the Hospital, while 38.5% agreed, 4.2% disagreed and 12.5% strongly disagreed. 53.1% of respondents strongly agreed there is no standby transport to where to buy drugs, while 46.9% agreed, 0% and 0% disagreed. The research also revealed that 29.2% strongly agreed Government does not supply drugs, while 38.7% agreed, 4.2% disagreed and 12.5% strongly disagreed. 60.4% of respondents strongly agreed that to be attended to by health workers is always difficult, while 24% agreed, 10.4% disagreed and 5.2% strongly disagreed. 39.6% strongly agreed and 38.5% agreed that laboratory reagents are few, we are often referred to do some tests outside the Hospital, while 37.5% agreed, 4.2% and 18.8% disagreed. 53.1% strongly agreed and 38.5% agreed that no electricity supply at the facility, while 41.7% agreed, 5.2% and 0% disagreed. This study implies that low public investment in health sector is a determinant to maternal mortality among pregnant women in Yewa north Local Government of Ogun state.

Table 10 showed that 39.6% of the respondents strongly agreed that drugs are not always available in the hospital while 38.5% agreed, 9.4% strongly disagreed and 12.5% disagreed. 60.4% of the respondents strongly agreed that the place to buy the drug is far from the hospital while 38.5% agreed, 11% strongly disagreed and 0% disagreed. Research also revealed the 53.1% of the respondents strongly agreed that there is no standby transport to where to buy drugs. while 46.9.5% agreed, 0% strongly disagreed and 0% disagreed. 29.2% of the respondents strongly agreed that Government does not supply drugs while 41.7% agreed, 12.5% strongly disagreed and 16.7% disagreed. 60.4% of the respondents strongly agreed that they cannot get the prescribed drugs outside except I wait for Government to supply the hospital. while 24% agreed, 10.4% strongly disagreed and 5.2% disagreed. 53.1% of the respondents strongly agreed that there is no essential equipment at the facility while 41.7% agreed, 5.2% strongly disagreed and 0% disagreed. This study observed that availability of drugs in the health sector is a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state.

SN	Statement	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
1	Essential equipment are not always available in the Hospital.	42 (43.8)	12 (12.5)	18 (18.0)	24 (25.0)
2	Equipment available is outdated and no modern ones for replacement in the Hospital.	43 (44.8)	37 (38.5)	4 (4.2)	12 (12.5)
3	There is no standby transport to where to buy drugs.	51 (53.1)	45 (46.9)	0	0
4	Government does not supply drugs	28 (29.2)	40 (41.7)	12 (12.5)	16 (16.7)
5	To be attended to by health workers is always difficulty.	58 (60.4)	23 (24.0)	10 (10.4)	5 (5.2)
6	Laboratory reagents are few, we are often referred to do some tests outside the Hospital.	38 (39.6)	36 (37.5)	4 (4.2)	18 (18.8)
7	No electricity supply at the facility	51 (53.1)	40 (41.7)	5 (5.2)	0
		46.3	37.8%	7.8%	11.1

Table 9: North local government level of public investment in health sector.

SN	Items	SA Freq (%)	A Freq (%)	D Freq (%)	SD Freq (%)
1	Drugs are not always available in the Hospital	38 (39.6)	37 (38.5)	9 (9.4)	12 (12.5)
2	The place to buy the drug is far from the Hospital	58 (60.4)	37 (38.5)	1 (1.0)	0
3	There is no standby transport to where to buy drugs	51 (53.1)	45 (46.9)	0	0
4	Government does not supply drugs	28 (29.2)	40 (41.7)	12 (12.5)	16 (16.7)
5	To get the prescribed drugs is always difficulty	58 (60.4)	23 (24.0)	10 (10.4)	5 (5.2)
6	I cannot get the prescribed drugs outside except I wait for Government to supply the Hospital	3 (3.1)	3 (3.1)	18 (18.8)	72 (75.0)
7	No essential equipment at the facility	51 (53.1)	40 (41.7)	5 (5.2)	0
		43%	33%		

Table 10: Availability of drugs in the hospital.

### Discussions of Findings

This study examined the determinants of maternal mortality in Yewa North Area of Ogun State. Majority of the respondents were between 21 to 25 years old (40.6%) and 31 to 35 years old (21.9%). This implies that the respondents were matured enough to be mothers. Most of the respondents. This study observed that majority of the respondents (61.5%) practiced Islam while 29.2% practiced Christianity. This study shows that majority of the respondents (57.3%) were single while only 32.3% were married. Majority respondents attended primary school and their major occupation are farmers and traders.

This study revealed that accessing healthcare services is a determinant of maternal mortality among pregnant women in Yewa north Local Government of Ogun state. This study agreed with Ibekwe (2010) who observed that in most rural communities, roads are inaccessible and transportation systems are chaotic. Thus, when a person takes a decision to seek medical attention, it may take days to reach healthcare facility. This is clearly the situation in rural Nigeria; where access to maternal healthcare services means to travel a long distance from the rural place to urban area through bad roads. Nigerian Population Commission (1999), in the demographic and health sur-

veys (DHS) explained that 64 percent of Nigerian women received some form of prenatal care or health care services during pregnancy; although, access is much lower in rural areas relative to the more urbanized cities in the country. Thaddeaus and Maine (2014) identified several socioeconomic and environmental challenges such as cost and distance from hospitals, influences use of available maternal care services.

The result of this study revealed that poor coverage of health facilities with maternity beds and skilled attendants is a determinant of maternal mortality in Yewa north Local Government of Ogun state. This is inline Ndep (2014) who observed that in the past years Nigeria has invested in the training and re-training of doctors, nurses and midwives to meet the needs of the population. Despite this positive trend, the doctor population ratio is still one to 6000; a far cry from the WHO recommended one doctor to 650 people. The doctor population ratio is even worse in 24 of the 44 nations in sub-Saharan African where there is an estimated 10 doctors for 100,000 people. Even though each facility has Community Health Extension Worker in Yewa north, yet the research shows an agreement with Weeks observation cited in Ndep (2014) that there are not enough skilled health attendants at the facilities. There are no skilled attendants at night; little facility has doctor available at all times. Public health nurses too were not always available at facilities, not all facilities have Public health Nurses although there are nurses and midwives but each facility lack community midwives. Thaddeaus and Maine (2014) revealed that some may still experience service delay due to the problem of access to healthcare services especially in the rural areas. Hodges (2001) stated that due to shortage of staff, drugs and supplies, arriving at the healthcare facility may not necessarily lead to immediate commencement of treatment.

This study observed that lack of knowledge is a determinant of maternal mortality in Yewa north Local Government of Ogun state. The level of education of the respondents is also low because majority of them had only primary school certificate. This study is supported by NPC (2006) who reported that there is a strong negative correlation between level of education and access to financial resources or the wealth quintile. Because the lowest wealth quintile for women was 68.7 percent and the highest was 5.8 percent unless these disadvantaged populations are targeted as high-risk populations, progress in safe delivery effort will be compromised.

This study reported that the level of poverty of a woman is a determinant of maternal mortality. This in line with a research carried out by Graham., *et al.* (2004) who reported that poverty has a grave impact on maternal deaths and the decisions women make in utilizing health care services. Poor pregnant women die more disproportionately than those who are more financially stable due to two main issues. This study is also in consistency with Prata., *et al.* (2009) who reported that Firstly, poorer people are less likely to get medical care or go to a healthcare facility and Secondly, poor people spend a very large portion of their yearly income on healthcare, regardless of the quality of service being administered to them. Filipi., *et al.* (2006) posited that the factors underlying the direct causes of maternal deaths are the low social status of women in developing countries which limits their access to economic resources, basic education and inability to make decisions related to their health and nutrition.

This study showed that cultural practice is a determinant to maternal mortality among pregnant women in Yewa north Local Government of Ogun state. This is supported by Wall (1998) who observed that in some Communities, the church is also seen as a favoured place of childbirth as it is believed that the holy environment of the church would protect both mother and child from evil spirits and witchcraft. Also, certain religions do not believe in blood transfusions and most times this leads to the death of mothers after childbirth. Also, Chukuezi (2010) reported that the cultural and religious practices that discriminate against the female gender significantly contribute to maternal mortality and morbidity in Nigeria.

### Low public investment in health sector

This study revealed that low public investment in health sector is a determinant to maternal mortality among pregnant women in Yewa north Local Government of Ogun state. In many of our government hospitals majority of the equipment are obsolete and maintenance culture is not observed.

This study observed that availability of drugs in health sector is a determinant to maternal mortality among pregnant women in Yewa north Local Government of Ogun state. Most of our hospitals including teaching hospitals are not adequately equipped with drugs. Patients are always referred to pharmacies outside the hospital to purchase their drugs [2-12].

### Summary of the Findings

Childbirth, or the risky period immediately after childbirth when many maternal deaths occur. It also provides education on proper maternal nutrition, treatment for infections (e.g. malaria, syphilis, and tetanus), and testing for HIV/AIDS. This study examined the determinants of maternal mortality in Yewa North Area of Ogun State and the findings of our study showed that delay in accessing healthcare services, poor coverage of health facilities with maternity beds and skilled attendants, poor knowledge poverty of a pregnant woman, low public investment in health sector and availability of drugs in health sector are determinants of maternal mortality among pregnant women in Yewa north Local Government of Ogun state

### Conclusion

*International Journal of Humanities and Social Science* Vol. 2 No. 20 expressed that maternal mortality is one of the strongest predictors of the health of a nation and reflects the disparity between wealthy and poor nations more than any other measure of health. The Nigerian health system as a whole has been plagued by problems of service quality, including unfriendly staff attitudes to patients, inadequate skill workers, lack of mothers Education, poverty, Lack/depletion of skilled personnel and low public investment in health sector decaying infrastructures, and chronic shortages of essential drugs.

### Recommendations

Based on this study, it is therefore recommended that:

- Government should provide good road, easy means of transportation and qualified staff in order to reduce maternal death in Yewa North.
- The referral system should be improved upon and health services providers should be enlightened on having respect for people.
- More Skilled health attendant should be employed especially for night duties.
- Services should be made free prescribed routine drugs should be subsidized.
- Importance of Hospital delivery should made known to the pregnant women Drugs should always be made available in the Hospital.
- Government should get involved the more in supply of drugs and essential drugs should be made available at the facilities.

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