



# Socio-Cultural Factors and Utilization of Healthcare Facilities: Implications for Maternal Mortality in Urban Areas of Ekiti State, Nigeria

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## Abstract

In Nigeria, maternal mortality remains a social health problem as more than 140 women die daily from pregnancy - related complications. Studies have adduced a number of factors such as lack of skilled birth attendants, household income, education and distance from facilities without considering the socio-cultural factors. This study therefore investigated socio-cultural factors that may influence utilization of healthcare facilities in urban centers of Ekiti State, Nigeria. The study utilized Andersen's Health-seeking behavioural model. Survey design was adopted to achieve the objectives of the study. Quantitative data were generated through the use of structured questionnaire administered to 1600 women respondents. Frequency distribution was used to present the pattern of socio-cultural and behavioural characteristics of the respondents while multiple regression analysis was used to establish the relationship between the socio-cultural factors and respondents' utilization of healthcare facilities at 0.05 level of significance.

The main findings of the study are that socio-cultural factors influence healthcare facilities utilization among pregnant women, the results shows religious belief ( $R^2=0.628$ ); cost of service ( $R^2=0.821$ ); efficacy of the service ( $R^2=0.726$ ); women's working conditions ( $R^2=0.182$ ); stereotypes ( $R^2=0.845$ ) and family customs ( $R^2=0.814$ ) while marital status exhibit an inverse relationship ( $R^2=-0.120$ ). The study concluded that socio-cultural and other factors have significant influence on utilization of healthcare facilities among pregnant women in the study area with their negative consequence on maternal mortality. The study therefore recommended that; women should be educated especially on harmful cultural practices that may affect them, while there should be public enlightenment by government, religious institutions and prominent members of the community.

**Keywords:** Implication; Socio-cultural; Utilization; Healthcare; Mortality; Nigeria

**Abbreviations:** MMR: Maternal Mortality Ratio; NDHS: Nigeria Demographic Health Survey; TBA: Traditional Birth Attendants

## Introduction

Healthcare facilities are organized facilities provided to cater for the health needs of women during pregnancy,

labour, delivery, and puerperal periods so as to reduce morbidity and death [1]. Maternal health facilities utilization is important for early detection of women, who are at risk of illness and mortality during pregnancy and by extension, 42 days after delivery [2]. The use of maternal health services is an effective means for reducing the risk of maternal morbidity and mortality, especially in places where the general health status of women is poor [3].

In Nigeria, more than 140 women die daily from pregnancy-related complications. This amounts to 59,000 women who die annually from preventable pregnancy-related or obstetric complications [4]. Currently, Maternal Mortality Ratio (MMR) in Nigeria is 545 per 100,000 live births [5] and it is one of the highest in the world. The World Health Organization (2016) revised estimates indicated a figure twice as high as that reported in the Nigeria Demographic Health Survey (NDHS, 2013). The high maternal mortality figures reported in Nigeria has been attributed to a significant lack in availability and socio-economic inequality in utilization of functional healthcare services particularly in resource-poor settings (Ugabi and Awah, 2010; Routledge. Mulder, Robles de Madina, Huizink, Van den Bergh, Buitelar & Visser, 2010).

Motherhood is often a positive and fulfilling experience, for so many women in sub-Saharan Africa, it is associated with suffering, ill-health and even death due to socio-cultural factors embedded in their societies. More pathetic is the fact that, pregnancy-related complications are avoidable if appropriate measures are taken and adequate care is available [6,7]. It is against this background that this study intend to examine the implications of socio-cultural factors on the utilization of healthcare facilities among women in urban center of Ekiti State, other objective are to examine the level of utilization of healthcare facilities among pregnant women and to investigate the influence of the socio-economic characteristics of the respondents on utilization of health care facilities.

## Literature Review

### Utilization of healthcare facilities

Utilization of maternal health facility is the proportion of women using healthcare facilities available to them. This includes the use of government hospital resources. Good utilization of health services serves to improve the health status of the population. Studies have shown that the presence of health facilities alone is not enough to guarantee their use as other socio-economic factors could influence access and thus utilization. Low level of health facility utilization is often a reflection of socio-cultural

factors, poor quality of services and poor attitude of health staff reviewed 28 qualified studies on healthcare utilization in developing countries [8]. Their study found seven groups of factors affecting the usage of maternal and infant healthcare services. They were: Socio-demographic factors, availability, accessibility, affordability, health service characteristics, position of women in the household and the society, and women's knowledge, attitudes, beliefs, and the prevailing culture in their domain. Among these factors, some had stronger impacts than others.

Lawrence (2015) used the NDHS 2013 to acknowledge the importance of having professional attendants during delivery. He compared the utilization of skilled birth attendants between public and private sectors. The use of delivery care increased in the NDHS 2013 when compared with the previous one in 2003. The majority of births between 2008 and 2013 were attended by skilled providers. Most of the women gave birth in public hospital/health facilities. The author explained that many rural areas do not have private hospital/health facilities, or, if there is one, the quality is unable to compete with public sector services. Education, household wealth, and belonging to a certain ethnic group were the significant determinants of whether they chose skilled birth attendants. Among these three factors, education was the most significant. This finding was consistent with other findings about women education and their autonomy and ability to make a decision related to health issues. Both education and household wealth were determinants of having a professional birth attendant from the private hospital/health facility.

However, it is still true that if the women are poor and less educated, they still chose the private sector. Private factor chosen by poor and less educated women is explained by the fact that the public health sector is unavailable in the area. Another finding is that the more children the women had, the more likely it was that they had low skilled attendants. The higher the birth order is, the less likely they were attended by professional health workers. Women seem to be more cautious with the first birth and less cautious when they have more children. The findings from Lawrence's research are consistent with other research on utilization of delivery care in the world.

The maternal mortality rate was 17/1000, with 197 neonatal deaths. They concluded that a significant association between economy and neonatal survival existed in this province. Although education attainment and household wealth status are large factors, being a poor mother doubled the risk of neonatal death. When

adjusted for healthcare utilization during pregnancy and delivery, the risk of maternal mortality is five times higher for women of low economy. It is consistent with their previous study in Adavi, Kogi State. Women of low economic background groups there were more reluctant to utilize maternal health care. They were less likely to deliver at a health facility. They sought help from traditional attendants instead of having check-ups and delivery at a communal or higher level health facility. A low level of education attainment was found to significantly correlate with being poor economic status. When these two factors combined, they predicted the maternal mortality.

### **Socio-cultural factors and healthcare facility utilization**

Socio-cultural factors are factors associated with the traditions, norms and values of people that affect the way and manner in which they seek medical help on health related problems. The community beliefs and norms are reflected in an individual health decisions; behavior is influenced by how a person thinks the community views his or her actions. (Rutenberg and Watkins, 1997) For example, traditional beliefs about childbirth, coupled with misconceptions and fears of medical institutions, have led many women to maintain reliance on home births in India (Basu, 1990). Results from a study in Benin found that women giving birth unassisted were silently admired, (Sargent, 1990) and in West Africa childbirth is considered a woman's battle (Diallo, 1991).

Culture incorporates belief-system that underlies the perception and interpretation of diseases and illness in societies. Erinosho (1998), argued that, unlike in the western societies where the concept of disease is largely based on the germ theory, hence patients perceive disease in terms of organic malfunction, which can be effectively, diagnosed using scientific and clinical techniques and the acceptance of a scientific notion of disease therefore oblige patients to use modern orthodox or western-style healthcare service. In Africa and most developing countries that is not the case.

The role of traditional and religious beliefs as well as the perception of women with regards to comparative efficacy of the medical versus traditional birth attendants may also be contributory to failure to have skilled attendants at birth. As Addai (2000) pointed out, modern (medical) and indigenous healthcare services coexist in most African communities, particularly in rural areas, and women may have to choose between the two options. Some previous studies had reported that many Nigerian women, particularly those in rural areas, rate the services of the traditional birth attendants (TBAs) as being of

higher quality than that of medical healthcare practitioners, particularly with regards to interpersonal communications and relationships (Fatusi and Ijadunola, 2003).

### **Socio-economic characteristics components**

Socio-economic status of women no doubt may have great influence on the utilization of health care facilities. A large number of studies have shown that a woman's position in the household largely determines her range of acceptable reproductive options (Orubuloye and Ajakaiye, 2002; Das Gupta, 1997; Falkingham, 2003; Ogujuyigbe and Liasu, 2007). A Women's status is a broad concept that encompasses multiple facets of women's lives. It has been defined as the degree of women's access to (and control over) material resources (including food, income, land and other forms of wealth) and to social resources (including knowledge, power and prestige) within the family, in the community and in society at large (Dixon, 1975).

It is well known that increased income has a positive effect on the utilization of modern healthcare services (Elo, 2012; Fosu, 1994). Husband's occupation can be considered a proxy of family income, as well as social status. Differences in attitudes to modern healthcare services by occupational groups depict occupation as a predisposing factor. Alternatively, viewing occupation as proxy to income, which enables acquisition of more and better health care, depicts it as an enabling factor (Fiedler, 1981). Cost has often been shown to be a barrier to service use (Bloom et al., 1999) and also influences the source from which care is sought. Evidence from elsewhere have shown that access to services and cost are serious barriers to service utilization among the poor (Onah et al 2006,; Amooti-Kaguna and Nuwaha, 2000). As Fotso et al.(2008) surmised, it is not enough to increase the availability of services, making such services affordable to the poor is a necessity.

Opportunity cost and financial problems related to the situation of being far from home (extra money for food, shelter and clothes) are the main causes of the maternal health (Kowalewski, et.al. 2000). Given the limitations on women's earnings in both formal and informal employment, and their complete exclusion from the cash economy in some cases, the extent to which poor women, particularly those who head households, can afford expenditures (associated with health care) such as taking enough rest, and eating balanced diet is questionable. Because of their economic status women overwork themselves to support the family, and this has adverse effect on their health. Azim and Lotfi (2011) found that, association between SES and health stems, in part, from

experiencing greater stress, either perceiving that demands exceed abilities to cope, or by exposure to life events that require adaptation.

According to the United Nations (1991), women who become pregnant in developing regions face a risk of death due to pregnancy. Among the reasons is the fact that malnutrition is endemic among pregnant women. Poverty is a major cause of maternal mortality, as it prevents many women from just not seeking antenatal care, but also taking time to rest and eating balanced diet which are essential to safe pregnancy are absent (Lanre-Abass, 2008). Also, in a research by Joseph et al. (2007) it was reported that lower family income is associated with increased rates of gestational diabetes, and post-neonatal death despite healthcare services being widely available at no expense. On the whole, in order to ascertain the influence of women's socio-economic status and cultural factors on the utilization of healthcare facilities in study setting, hypotheses need to be tested.

## Statement of hypotheses

Generally, in line with the objectives two study hypotheses were drawn, which include:

- a. There is a significant relationship between the women's socio-demographic characteristics and utilization of healthcare facilities in the study setting.
- b. Socio-cultural beliefs and practices during pregnancy and delivery significantly influence delivery complication.

## Theoretical orientation

Theoretically, the Andersen Behavioral Model of Health Services Use is a conceptual model aimed at demonstrating the factors that lead to the provision and use of health services. According to the model, usage of health services (including maternal care, inpatient care, physician visits, etc.) is determined by three dynamics: predisposing factors, enabling factors, and need. Predisposing factors can be characteristics such as race, age, and health beliefs. For instance, an individual who believes health services are an effective treatment for an

ailment is more likely to seek care. Examples of enabling factors could be family support, access to health insurance, one's community etc. Need represents both perceived and actual need for healthcare services? The original model was developed by Ronald M. Andersen, a health services professor at UCLA, in 1968. The original model was expanded through numerous iterations and its most recent form models past the use of services to end at health outcomes and includes feedback loops [9].

According to Anderson and Newman (2005), utilization of health services can be regarded as a type of individual behaviour. In line with this, several frameworks for analyzing health services utilization were found in the literature. These include Rosenstock's health belief model, Young's choice-making model and Anderson's health behavioural model [10]. Of all these models, only the latter analyses differences in health services utilization from a socio-demographic perspective. This tallies with the objectives of this study; hence, the study is conducted based on Anderson's model

## Methodology

This aspect deals with the generation of data, sampling procedure and techniques, data collection and the statistical techniques that were used to analyze the data collected. The study adopts survey method as the research design and utilized structured questionnaire for primary data collection. The study made use of two important variables namely: the independent variables of the study, which are the socio-cultural factors while healthcare facilities utilization is the dependent variables. The study was conducted in all the sixteen Local Government Areas Headquarters of Ekiti State. Ekiti State is an inland state in the south-western Nigeria. There are many health facilities in the State (Primary, and Secondary Health Care, and private Health facilities) out of which many are not functioning (Ministry of Health, Ado Ekiti, 2015) and those that function are not affordable. The table below shows the number of available facilities per local government area in Ekiti State, Nigeria (Table 1).

S/N	Name of LGA	No of PHC	No of Secondary	No Tertiary	No of Private	Total
1	Ado	32	1	1	42	75
2	Efon	12	1	0	10	23
3	Ekiti East	14	1	0	11	26
4	Ekiti South West	21	1	0	4	26
5	Ekiti West	25	2	0	3	30
6	Emure	12	1	0	15	28
7	Gbonyin	17	2	0	6	25
8	Ido/Osi	17	1	1	8	27
9	Ijero	29	1	0	5	35

10	Ikere	17	1	0	9	27
11	Ikole	22	2	0	4	28
12	Ilejemeje	10	1	0	2	13
13	Irepodun/Ifelodun	18	1	0	11	30
14	Ise/orun	14	1	0	4	19
15	Moba	15	1	0	4	20
16	Oye	18	3	0	5	26
	<b>Grand Total</b>	<b>293</b>	<b>21</b>	<b>2</b>	<b>143</b>	<b>459</b>

Table 1: List of all Health facilities in Ekiti State.

Source: Ekiti State Ministry of Health, Ado Ekiti (2016).

The study population comprised women aged 15-49 years and the account for 128,470 of the total population. Eligible participants included all women that have given birth in the last one year, (in your analysis you mention women with children below 5 years, you have to reconcile) pregnant and/or would be pregnant and resident in Ekiti State. The respondents were married, single, divorced, separated or widowed. The target population of this study consisted of all users and non-users of healthcare facilities in Ekiti State, Nigeria. The sampled population was drawn from households and the maternity section of existing hospitals and health centers in each LGA. The sample size was 1600 pregnant women. The study adopted a multi-stage sampling technique, to select a representative sample from the study population. The Sampling Techniques was done in such a way to give every respondent an opportunity to participate in the study. A list of health centers in the study area was prepared and the pregnant women that come for antenatal were identified and the instrument administered unto them. The respondents were selected by simple random sampling for administration of instrument. With a multi-stage procedure, 100 respondents were sampled from each headquarters of the sixteen Local Government Areas in Ekiti State; totaling 1,600 respondent's.

The instrument for data collection was the researcher - designed questionnaire on socio-cultural factors and utilization of healthcare facilities: implications for maternal mortality in urban areas of Ekiti State, Nigeria. The questionnaire was divided into two sections, Section A consisted of items demanding the bio-data (age, marital status, religion, level of education, occupation and income) of the respondents. Section B comprised of multiple choice questions for testing the socio-cultural factors and utilization of healthcare facilities, Nigeria. The

collected data was organized, tabulated and analyzed by using descriptive statistics; using percentage distribution, while Multivariate logistic regression analysis was used to establish the relative influence of the socio-cultural factors on respondents' utilization of healthcare facilities. Lastly, Ethical principle of research was strictly followed, there was voluntary participation by respondents and they were all assured of their anonymity and confidentiality.

### Discussion of Findings

The data used in this presentation and analysis were drawn from the 1580 retrieved questionnaires from the 1600 copies of questionnaire, which were administered to the sampled respondents in the research setting. Findings were presented in line with the study objectives. Necessary inferences were drawn from some of the findings in light of theoretical framework of the study, while observed similarities and differences between the present study and extant literature were reconciled using appropriate sociological explanation.

### Demographic and socio-economic characteristics of the research respondents

In the first part of presentation of data, the research seeks to know frequency distributions of the respondents used in this study in terms of the following socio-economic characteristics; age, educational status, marital status, ethnic group, religion, occupation and income.

Table 2 shows the socio-economic and demographic characteristics of 1580 women and mothers with children below year old, who were utilizing maternal healthcare facilities in the urbanized areas of Ekiti-State, Nigeria.

Age	frequency	percentage %
Less than 20	71	4.5
20-24	77	4.9
25-29	333	21.1
30-34	455	28.8

35-39	389	24.6
40-44	144	9.1
45-49	111	7
Total	1580	100
<b>Educational Level</b>		
No formal Education	36	2.3
Some primary	51	3.2
Completed primary	153	9.7
Completed secondary	239	15.1
OND/NCE/Grade II	379	24
HND/BSC/Postgraduate	337	21.3
Technical and Vocational Schools	385	24.4
Total	1580	100
<b>Marital Status</b>		
Single and Never Married	210	13.3
Married	1019	64.5
Separated	113	7.2
Divorced	108	6.8
Widowed	79	5
Co-habiting	51	3.2
Total	1580	100
<b>Religion</b>		
Christianity	1010	63.9
Islam	524	33.2
Traditional belief	43	2.7
Others	3	0.2
Total	1580	100
<b>Occupation</b>		
Full-Housewife	143	9.1
Employer	66	4.2
Small Private Business	462	29.2
Public servants	631	39.9
Artisan	166	10.5
Unemployed	112	7.1
Total	1580	100
<b>Monthly Income</b>		
Less N10,000	186	11.8
N10,000 - N30,000	326	20.6
N31,000 - N50,000	419	26.5
N51,000 - N80,000	370	23.4
N80,000 and above	279	17.7
Total	1580	100

Table 2: Socio-Economic and Demographic Characteristics of the Respondents.  
Source: Fieldwork: (2017).

The age distribution of the respondents from the data collected shows the respondents age range between 14-50 years which is in line with reproductive age for women. While the majority of pregnant women and mothers between ages 30-34 years and 35-39 years 28.8% and 24.6% constitute the highest, meaning that in the urban area, older women are indifferent to family

planning. Those below 30 years constitute less than one tenth of the total respondents. This is an indication that early marriage is uncommon among Ekiti women, which might be as a result of their love for education that consumes many years. Furthermore, those between 40-44 and 45-49 age range constitute less than ten percent (9.1% and 7.0%) respectively. In the main, the findings

showcased that women still give birth at age 45 years and above, which may culminate in complication during delivery.

Data on educational attainment of the respondents revealed that the population consists mostly of respondents with formal education. Respondents with no education constitute 2.3% while 9.7% and 15.1% had primary and secondary education respectively. Respondents with tertiary education constitute the highest percentage with 45.3%, while 24.4% of the respondents went to technical and vocational schools. The finding is expected all because Ekiti people are known for acquiring formal education. In the main, most of the old women in Ekiti did enjoy free education in the old Western Region.

The marital distribution of the respondents shows that married women constitute more than half of the respondents (64.5 %.) This signifies that there are more married women among the respondents and with the support of their husbands and relatives are more likely to utilize maternal health care facilities as compared to the separated/divorced mothers 14.0% and widowed 5.0%, who lack the resource to support themselves not to talk of utilizing health services during pregnancy through delivery period. The religion affiliation of the respondent shows that majority of them are Christians 63.9% followed by Muslim 33.2% and 2.7% of the respondents claimed to be Traditional worshippers. 0.2% of the respondents were affiliated with other religious practices. This finding was connected to the fact that Ekiti people are mainly Christians. Majority of the Muslims are those from other ethnic groups or states.

On the respondents' occupational status, the table indicates that about 4 out 10 of the respondents were civil servants with 39.9%, 29.2% of them were Small Private Business owners, 10.5% were Artisans, 7.1% were unemployed, 4.2% were employers and 9.1% were Full-Housewife. On the whole, this finding indicates that most of the women that had tertiary and secondary education worked in the ministry and local government secretariat. An examination of the monthly income reveals that the population consists of low income earners. The figure shows that majority of the respondents earned between the average income of N31,000 - N50,000 were 26.5%, those with income below N10,000 were 11.8%. Pregnant women and mothers with income between N10,000 - N30,000 and N51,000 - N80,000 constitute 20.6% and 23.4% respectively while income earner between N80,000 and above were 17.7%. This shows that the pregnant women and nursing mother may not have enough financial capability to attend modern health center. The pregnant women and nursing mothers with low income, that had little or no support from their husbands would surely prefer TBAs health facilities to health centers due to the low cost.

### Regression Analysis on Socio-Economic and Demographic Characteristics and Utilization of Healthcare facilities

In order to affirm statistically as to whether or not socio-economic and demographic characteristics influence utilization of healthcare facilities, an attempt was made to examine the association between independent variables and the dependent variable with application of regression analysis (Table 3).

Selected Variables	B	S.E.	Wald	df	Sig.	Exp(B)
<b>Age</b>						
15-19	RC	-	-	-	-	
20-24	-0.461	0.242	3.637	1	0.057	0.631
25-29	-0.476	0.234	4.155	1	0.042	0.621
30-34	-0.28	0.261	1.15	1	0.284	0.756
35-39	0.054	0.725	0.006	1	0.941	1.056
40-49	0.388	0.147	0	1	0.999	0
<b>Educational Qualification</b>						
No formal Education	RC	-	-	-	-	
Primary Education	0.507	0.293	3	1	0.083	0.602
Secondary Education	0.167	0.247	0.46	1	0.498	0.846
Tertiary Education	0.027	0.186	0.02	1	0.886	0.974
<b>Occupation</b>						
Full-Housewife	1.839	1.043	3.112	1	0.078	6.29
Employer	-0.306	0.162	3.577	1	0.059	0.736
Small Private Business	-0.823	0.227	13.139	1	0	0.439

Public servants	-0.655	0.264	6.172	1	0.013	0.519
Artisan	-0.718	0.184	15.153	1	0	0.488
<b>Income per Month</b>						
<₦10,000	RC	-	-	1	-	-
₦ N10,000 - N30,000	0.317	0.187	2.858		0.091	1.373
₦ N31,000 - N50,000	-0.023	0.185	0.015	1	0.903	0.978
₦51,000-N80,000	0.186	0.229	0.66	1	0.417	1.204
₦80,001 and Above	0.104	0.272	0.146	1	0.702	1.11
	-0.276	0.272	1.026	1	0.311	0.759
<b>Religion</b>						
Christian	RC	-	-	-	-	
Islamic	0.509	0.134	14.444	1	0	1.664
Traditional	1.79	1.049	2.911	1	0.088	5.992
Free thinker	0.409	0.683	0.357	1	0.55	1.505
<b>Marital Status</b>						
Married	RC	-	-	-	-	
Single	0.151	0.379	0.158	1	0.691	0.86
Widowed	0.49	0.504	0.944	1	0.331	0.613
Divorced	1.827	0.622	8.642	1	0.003	0.161
Cohabiting	0.587	0.602	0.951	1	0.329	1.799
	1.765	0.506	12.147	1	0	5.84

Table 3: Regression Analysis of the Effect of Age, Educational Status, Religion and Income on Utilization of Healthcare facilities.

Source: Fieldwork, (2017).

### Dependent variable: Utilization of Maternal Health Services

The interrelationship between some selected socio-demographic variables and utilization of healthcare facilities were computed in this model to identify socio-demographic correlates of healthcare facilities utilization. In terms of measurement, the dependent variable in this model (healthcare facilities utilization) were measured by means of a checklist containing healthcare facilities utilised, some of which include Health clinic, Traditional Birth Attendants, Spiritual home, Chemist/medicine store, Home /self-medication and Both Health clinic and TBA/Spiritual Home. Respondents were classified according to whether (at the time of the survey) they had ever utilised at least one of these facilities. All variables were dichotomized into 0 and 1. Where 0 means the absence of healthcare facilities utilization and 1 denotes utilization of one or more of healthcare facilities. This makes the dependent variable to satisfy the condition for logistic regression. In this model, the predictors are age of the respondents, educational attainment, occupation, income, religion, marital status.

The Beta values are equivalent to the B values obtained in a multiple regression analysis, which is used to calculate the probability of a case falling into a specific category. The contributions of various factors to maternal health are presented here. Age groups 20-24, 25-29, and 30-34

below 34 years are negatively associated with utilization of healthcare facilities, indicating that those who are below 34 years are 0.631, 0.621 and 0.756 less likely to have utilised healthcare facilities before, during and after pregnancy compared to those in age group 15-19 (i.e. the reference category) in the study area. This result conformed to other findings, specifically, those within these age groups had been found to carry the lowest risk of dying during pregnancy and child birth (Olusanya, 2008).

Meanwhile, those in age group 35-49 are positively related to utilization of healthcare facilities indicating increase in the likelihood of utilization of healthcare facilities as age increases. However, the proportion of the unit change in the utilization of healthcare facilities is explained by Exp (B) value 1.056. The findings imply an increased level of healthcare facilities utilization among older women. Same observations go for the result for educational attainment, where primary school qualification, secondary school qualification and tertiary qualification show positive association with the predicted variable and are 0.631, 0.621 and 0.756 more likely to utilise healthcare facilities compare to RC. This implies that the higher the level of education, the more likely the utilization of healthcare facilities in the study area.

Furthermore, the same observation goes for income which shows a weak association with utilization of



healthcare facilities as indicated by the Wald values. The implication of this finding is that other factors rather than just education and income might be significantly militating against utilization of healthcare facilities that need to be considered in order to ensure utilization of healthcare facilities and prevent mortality. These findings on education and income had been raised in Olusanya (2008), which stated that women's education and wealth status have no association with the likelihood of utilising healthcare facilities. However, all occupational categories are statistically significant to utilization of healthcare facilities. This could be as a result of the nature of working condition in the study setting. The problems associated with utilization of healthcare facilities are closely linked to inadequate working conditions (Olusanya, 2008). Specific result indicated that Full-Housewife in the study location is positively associated with utilization of healthcare facilities (Beta value 1.839). Pregnant women and nursing mothers in this group would be 6.290 times more likely to utilise healthcare facilities than the working class.

Furthermore, from the analysis, religion shows positive relation with utilization of healthcare facilities. The result

indicated that Christians are 1.664, which is the reference category times more likely to have utilised healthcare facilities compare to other category (Islam). While traditional religion believers and others are 5.992 and 1.505 times less likely to have utilization of healthcare facilities to the reference category. However, this study has demonstrated that, marital status also has an inverse relationship (-0.120) with the utilization of healthcare facilities. Divorced women had 0.003 level of significance, while cohabiting is 1.799 times more likely to less concern for utilization of healthcare facilities.

### Logistic regression estimating the influence of socio-cultural factors on the utilization of healthcare facilities

This model was computed to identify socio-cultural factors correlates of utilization of healthcare facilities. Socio-cultural factors included were; religious belief; cost of service; efficacy of the service; women's working conditions; stereotypes and family customs.

The classification table, Table 4 shows the accuracy of the model in predicting the influence of socio-cultural factors on healthcare facilities utilization.

Selected Variables	B	S.E.	Wald	df	Sig.	Exp(B)
<b>socio-cultural factors</b>	<b>RC</b>	-	-	-	-	
Religious Belief	.289	.536	.290	1	0.628	1.335
Cost of Service	.508	.637	.637	1	0.821	.602
Efficacy of the Service	.873	1.061	.678	1	0.726	.418
Women's Working Conditions	.552	1.065	.269	1	0.604	.576
Stereotype	.258	.492	.275	1	0.600	1.294
family customs	.088	.569	.024	1	0.878	.916
2 Log likelihood = 1743.612(a) Cox & Snell R Square = .062 Nagelkerke R Square = .074 Overall Percentage = 68.9						

Table 4: Logistic Regression Estimating the Influence of Socio-Cultural Factors on the Utilization of Healthcare Facilities. Source: Field Survey 2017 RC =Reference Category.

The model shows an accuracy level of 68.9%. The variables were dichotomized to satisfy the condition for logistic regression. However, in terms of socio-cultural factors, the result of the analysis shows that observance of religious belief is significantly associated with utilization of healthcare facilities at p-value of 0.628. Cost of service probably still prevents many pregnant and nursing mothers from utilizing healthcare facilities. Denial or avoidance of utilization of healthcare facilities as a result of cost of service can adversely affect the health of pregnant women.

The finding also shows a positive association with Efficacy of the Service (0.726) more likely to influence utilization of healthcare facilities in the study area. Women's Working Conditions is 0.182 statistically significant with ratio 0.552) more likely to affect utilization of healthcare facilities. This is not surprising, as it has been discovered by ILO (2015) that in Sub-Saharan Africa, where the highest rates of maternal mortality are reported, more than 80 percent of pregnant women, who are working in private organizations usually find it difficult to utilize healthcare facilities during pregnancies. The same observation goes for the Stereotypes and family customs practiced in the study area, which pregnant women

usually observe are statistically significant at p-value = 0.845 and 0.814, this means that observance of stereotypes and family customs are likely to have great influence on the utilization of healthcare facilities among the pregnant women in urban areas of Ekiti State.

The implications of this study is that, if maternal health is to improve, operational intervention must be designed for education, economic situation and other socio-cultural circumstances of women. In this regard therefore, proper education, poverty reduction social infrastructural developments are germane to maternal health in Ekiti State and Nigeria at large.

### Conclusion and Recommendations

The study has been able to provide a strong relationship between socio-cultural factors and utilization of healthcare facilities. From clear and meaningful understanding of the subject matter, the synthesis of Political Economic Theory and Healthcare Utilization Model was employed in presenting the relationship between the dependent and independent variables. Socio-economic and cultural beliefs of women have been identified as the most important predictors in the utilization of healthcare facilities, which invariably dictate whether to attend anti-natal, number of times and place of delivery. The study shows that respondents of low socio-economic status patronized TBAs and faith based organizations more frequently than government hospital. This indicates that more funds should be allocated to the health sector by government in order to improve the facilities and services rendered.

This study has also revealed that socio-cultural factors of maternal health cluster together and are mutually reinforcing. Hence it has become problematic to attempt to develop a single description of the situation of women. It is imperative to also consider the two-way nature of many of the possible relations observed. For instance, despite the relatively massive emphasis and expansion of maternal health care services, maternal health challenges prevail. The complexity of the nature of maternal health means that solutions need to be equally complex. Maternal health complication does not just have one model of causes, so government's effort to reduce maternal mortality and morbidity must focus on the various dimensions of socio-cultural causes of maternal health complications. Understanding the influences is crucial to improving maternal health. While urban environments provide many economic opportunities, they are also complex and intimidating social and physical environments. Because of the disruptive social circumstances, current medical interventions are not

effective enough to reduce maternal mortality and morbidity. This is why the social, economic and cultural factors should be seen as an important source of complications requiring means/ways of intervention.

The study revealed the need for practical and sustainable development which could help push this country out of its plague of high maternal mortality rate as it is done in developed countries and the emerging middle-income countries around the globe. It was evident from the study that, the achievement of vision 20-20-20 would be a mirage if the current poor planning, poor infrastructure and basic amenities, growing poverty and deteriorating health outcomes are not forcefully and sustainably addressed. In this regard therefore, proper education, poverty reduction; social infrastructural developments are germane to maternal health. There should be adequate public enlightenment with the involvement of religious institution on the utilization of healthcare facilities by the pregnant women. It is believe that this awareness will have long lasting effects on the attitude of people as a result of socio-cultural factors towards utilization of healthcare facilities which invariably will reduce both maternal health morbidity and mortality.

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