

# Socio-Cultural Variables and Type of Birth Outcome of Women in Primary Health Care Facilities in Ikot Ekpene, Nigeria

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## Abstract

This study determined the influence of socio-cultural variables on type of birth outcome of women in Primary Health Care facilities in Ikot Ekpene, Nigeria. The ex-post-facto design was adopted for the study. Seven research questions were formulated and seven null hypothesis were tested at .05 level of significance. The population of the study comprised 1200 pregnant and nursing mothers in four primary health care facilities in Ikot Ekpene. A simple random sampling technique was used to select a sample of 280 women for the study. A 72-item researcher-designed questionnaire entitled, "Socio-Cultural Variables and Birth Outcome Questionnaire (SCVBOQ)" was the instrument for data collection. Validation was ascertained while reliability was done using Cronbach Alpha Internal Consistency Statistics. Reliability Coefficient of .75 was obtained. Research questions were answered using the Mean Statistics while t-test statistical analysis was used to test the null hypotheses. Results revealed that women's knowledge of health care services, attitude towards health care services, perception of the treatment methods, beliefs, residential locations and economic status had significant influence on type of birth outcome in Ikot Ekpene. It was recommended that frequent health campaigns should be carried out by health educators on the benefits of using Health Care facilities for delivery to prevent child birth complications and promote positive birth outcome in Ikot Ekpene.

**Keywords:** Socio-cultural Variables, Birth Outcome, Women in Primary Health Care Facilities.

## 1. Introduction

Globally, maternal mortality and morbidity remain a public health challenge. World Health Organisation (WHO, 2009) estimated that about 529,000 women die annually from maternal ill-health causes. Ninety nine percent of these deaths occur in the less developed countries. The situation is most dire for women in sub-Saharan Africa, where one in every 16 women would die for pregnancy related causes during her lifetime, compared with only 1 in 2,800 women in the developed countries.

Wax, Lucas and Lamont (2010), stated that maternal morbidity refers to disabilities or permanent injuries resulting from or made worse by pregnancy and delivery, such as severe anemia, puerperal sepsis, pre-eclampsia, vesico-vaginal fistula (VVF) among others. According to Wax (2010), about 20 million women suffer permanent injuries or disabilities from birth related causes each year in the developing countries including Nigeria. Zere, Oluwole and Kirigia (2011), observed that several researchers on utilisation of health care facilities globally indicate that there is clearly an urgent need to develop innovative strategies that will help upscale interventions especially for improvement in the use of these services by women. Moreover, a study by Yinger and Ranson (2010), revealed that utilisation of maternal health services and intensity of use of antenatal health service are influenced by age of mothers, type of birth, education of mothers, ethnicity, economic status, geographic location, residence and religious affiliation. Obviously, this suggests that more than medical factors are responsibility for the differences in the use of maternal health services by women. The aforementioned factors also affect their decisions on the number of antenatal clinic visits undertaken to prevent or detect and treat complications before child birth. In view of the afore-mentioned, the research is focused towards investigating what would influence women's utilisation of health care facilities to achieve a better birth outcome in primary health care centres in Ikot Ekpene.

## 2. Review of Literature

- A study by Odetola (2015) on health care utilisation among rural women of child-bearing age: a Nigerian experience, was carried out in Ibadan using descriptive non-experimental study design. Three (3) categories of health institutions were used namely; Tertiary, Secondary and Primary. The findings showed that despite the availability of primary health care services in virtually every community and village in Nigeria, clients travel long distances to reach secondary and tertiary health care institutions for health services that are available in the primary health care centres. Some of the factors which influenced their behaviour include level of education, proximity to place of residence, affordability and quality of services rendered, spousal and significant others' influences. These were found to be active determinants of choice for health institutions while seek care among pregnant women in Nigeria. According to the Nigerian Red Cross Report (2015), maternal health in Nigeria is a worrisome situation.

According to the report, Nigeria has the tenth highest Maternal Mortality Rate (MMR) in the world. Ronsmans and Graham (2008) attested that skilled antenatal care and birth attendance have been advocated globally as the most crucial intervention to reduce maternal mortality. Poor knowledge and usage of skilled antenatal care and maternal primary health care services result in high levels of maternal mortality and birth complications in developing countries.

Knowledge of available health care facilities and benefits of utilisation of health care facilities can also influence birth outcomes. A research conducted by Kenya Demographic Health Survey (2010) on awareness and benefits of utilisation of maternal health services among young women in Kenya, revealed that there is a challenge of reducing maternal mortality. According to the research, maternal mortality is estimated at 444 per 100,000 live births, and 1,000 per 100,000 live births, representing a 1 in 25 life time risk of dying from a maternal-related cause in Kenya.

A study by Ansari and Berhinger (2015) brought to notice the level of attendance and barriers to utilisation of health care services in South Asia and sub-Saharan Africa example, Bangladesh, India, Pakistan, Kenya, Nigeria and Tanzania. According to these researchers, the high maternal and neonatal mortality rates in these countries can be attributed to the lack of access and utilisation of health services for child delivery.

Data from the demographic and health surveys conducted in the above mentioned countries showed that more than half of the births in these countries were delivered outside a health facility. Institutional delivery was associated with educational level, family wealth, place of residence, and women's media exposure status, but it was not influenced by women's work status and their roles in decision making (with the exception of Nigeria). Higher parity and younger women were less likely to use a health facility for delivery. Within each country, the poorer, less educated and rural women had higher unmet needs for maternal care services.

Another study was conducted on perception and utilisation of traditional birth attendants by pregnant women attending primary health care clinics in the rural local government areas in Ogun State, Nigeria by Olufunke and Akintujoye (2010). A quantitative design was used to obtain information using a structured questionnaire from 250 pregnant women attending four randomly selected primary health care clinics there.

The findings revealed that there was a positive perception and use of TBA services by the respondents. This underlines the necessity for TBA's knowledge and skills to be improved within permissible standards through sustained partnership between TBAs and health systems. According to the authors, such partnership would foster a healthy collaboration between providers of orthodox and traditional maternity services that will translate into improved maternal and neonatal health outcomes in relevant settings.

According to a research by the UK Department for International Development (DFID) (2015), tackling barriers to health facility attendance in Northern Nigeria is very crucial. According to the report, understanding why women and their children do not attend health facilities is crucial in order to prevent adverse birth outcomes, improve programmes that tackle under nutrition, and maternal mortality, and ultimately broaden their reach.

Various studies have been done around the world to identify factors that influence attitude and choice of childbearing women's health care attendance. One of the studies was carried out by Caw-Binns, Lagrenade and Ashley (2009). The authors stated that some of the identified factors include cost of services, socio-demographic and educational level of clients, women's level of autonomy in making health care decisions, physical accessibility to health care services and the type of health care services rendered, disease pattern, and health care workers' attitude.

According to Gabrysch and Campbell (2009) access means that women can reach maternal health care easily and not be deterred by cost or poor treatment by health staff. He further stated that women have been seen to travel long distances to access quality health care despite readily available primary health care facilities around where they live, work and school.

However, Gaba (2009) studied the attitude of women towards health facilities child birth in Zambia. It was revealed that lack of transport makes it difficult for pregnant women or women in labour to reach help quickly. Also, fees charged for health care often put women off having babies in hospitals (health care facilities) or even seeking help when complications arise.

Moreover, Omodu and Enyioko (2012) carried out a study on attitude and utilisation of health care facilities in some selected facilities in Rivers State. They sampled 400 respondents from 10 Local Government Areas of Rivers State. However, 366 copies of questionnaire representing (91.5% response rate) were used for the data analysis. The study revealed that socio-economic factors determine the attitude of women towards the patronage of modern health facilities in rural areas.

According to WHO (2010) quality of care is an important determinant of health outcome. Quality of care has been associated in three general domains; structure, process and outcome. Maternal and Neonatal Health Programme (2009) noted that outcome assessment concerns the result of care on the health status of clients, including changes in client's knowledge, perception and behaviour, satisfaction with health care, biological changes in disease, complications of treatments, morbidity and mortality.

Jadad and Ogrady (2008) confirmed that community defined dimensions of quality of maternal health

care which the women need include: access to a maternal facility in the community, treatment that is delivered in a respectful and timely fashion, respect for traditional practices and use of indigenous language, a clean and well-equipped facility, transportation and free services. However, some studies have revealed that few women were satisfied with the method of treatment by health workers while several studies showed dissatisfaction by women with the care rendered to them.

The result showed that client's perception of quality of services by the HCF workers or treatment was low. There was a high cost of treatment; no local language used, coupled with attitude of health staff. In developing countries, most child births occur at home and are not assisted by skilled attendants. These situations increase the risk of death for both mother and child and have severe maternal and neonatal health complications. The study findings revealed that despite Malawi governments' policy to support women to deliver in health facilities with the assistance of skilled attendants, some women do not access this care due to their cultural beliefs about labour and delivery which according to them has some cultural and spiritual inclinations of which only the TBAs can handle. They were only to be taken to the HCFs in dire emergencies as serious bleeding, eclampsia, retained placenta to mention just a few.

Beck, Buffington, and Demott (2013) also stated that socio-cultural beliefs are not the only reason hindering pregnant women from accessing skilled birth attendant, that women encounter various factors like: perceived benefits, economic accessibility and physical accessibility as barriers to accessing skilled birth attendants at HCF during delivery for positive birth outcome.

Another study was conducted in Accra, Ghana by Eagly ad Chiaken (2011), on the influence of socio-cultural interpretations of pregnancy threats on health-seeking behaviour among pregnant women. The study concluded that socio-cultural interpretations (husbands approval, mothers in-law's decision, spiritual affiliation, poverty, illiteracy, poor or no support from spouse, home delivery syndrome, etc.) of threats to pregnancy mediate pregnant women's use of available healthcare services to prevent child birth complications.

Access in this study refers to availability of maternity services in close proximity to the women. Accessibility to healthcare includes distance and time to the facility. The period between onset of symptoms of labour pains or pregnancy problems and initiation of therapy was shorter for mothers living in urban areas than for those living in rural areas. Showing the differential access to health care (Fatusi and Chiwuzie, 2010). The authors had observed that location of health care facilities is a factor limiting access to care for women with pregnancy, labour and post natal conditions. Women, especially rural dwellers because of poverty and poor transportation system find it difficult to access health care facilities for their much needed safe maternity care.

Gaba (2009) noted that attendance at health care facilities for maternal services was positively associated with living within 10 kilometres of health care centres. Studies conducted in rural areas in the Gambia, Tanzania and Zambia to determine access to care and acceptance of orthodox treatment showed that distance from antenatal clinic and delivery ward account for longer delays in seeking maternal health care and this accounts for maternal complications which result in negative birth outcome before arrival at the health facilities.

Studies by Kathleen and Joan (2009) in Nepal, Malaysia and Swaziland indicated that cost of transport accounts for non-utilisation of maternity services in the health institutions especially when the women has normal pregnancy and has delivered normally at home before. In a Malaysian study, Gabrysch and Campbell (2009) observed that cost and time of traveling to the health facilities were major contributory factors associated with compliance with clinic schedules.

However, Odetola (2015) in his study submitted that distance and cost of traveling to the clinic were not significant factors affecting utilisation of health facilities. According to him, a significant proportion (63%) of women who did not comply with clinic schedule were staying within five kilometers to the health clinic and did not have to pay any money to travel there. This could mean that the distance and residential location may not be deterring factors for patients to obtain antenatal/postnatal care. Other factors such as health worker attitude, clinic opening time and waiting time at the clinic could influence utilisation.

In addition, in developing countries such as Nigeria, low economic status may put patients (women) in the position of having to choose between competing priorities. Such priorities include demand to direct limited resources available to meet the basic needs. It is observed that with a low economic status, one cannot afford the cost of healthcare since the income cannot cater for basic needs. He further described economic situation as another important determinant of utilisation of health facilities and compliance to routine clinic visits for health care.

In their study, Kinney, Kerber and Black (2010) found that financial difficulties were mentioned among pregnancy and nursing mothers as the main reason for defaulting from clinic visits for care. Income per month is positively associated with utilisation and compliance to routine visits for care. Kinney *et al.* (2010) further conducted a research among pregnant and nursing mothers in Warder district in India and found that the income level was the most important factor from the demographic and socio-economic factors that determine compliance.

### 3. Methodology

The ex-post facto design was adopted for the study. According to Sax (2011), this design is a descriptive investigation. It is descriptive in the sense that the researcher has no direct control of the experiment condition. The independent variable in this study had already occurred and they were studied retrospectively in order to establish their possible roles in the dependent variables. Ikot Ekpene Local Government Area in Southern Nigeria was the area of study. It is the political and cultural capital of Annang dialectical ethnic group. The population of the study consisted of pregnant women and nursing mothers, who attended the primary health care clinics in Ikot Ekpene, numbering 1, 200.

The participants in the study consisted of 280 women selected from four primary health care facilities. This number formed 23.3 percent of the target population of 1, 200 which is enough representation of the population for the study. Multi-stage random sampling technique was employed where in the first stage, four (4) primary health centres were randomly selected from the ten (10) primary health centres in Ikot Ekpene. In the second stage, seventy (70) respondents were selected using simple random sampling technique from each of the four centres. That provided a sample size of two hundred and eighty (280) respondents for the study.

The research instrument for this study was a researcher-designed questionnaire entitled, “Socio-cultural Variables and Birth Outcome Questionnaire (SCVBOQ)”. It consisted of eight sections which elicited information from dependent and independent variables. The seven dependent variables had eight items each while the only independent variable had 12 items. Knowledge of health care services has eight items, levels of attendance had eight items to determine women’s socio-cultural variables and their type of birth outcome in Ikot Ekpene Local Government Area, A-4-point Likert scale of optional responses of Strongly Agree (SA) -4-points, Agree (A)-3points, Disagree (D)-2-points and Strongly Disagree (SD) – 1point was provided to enable the women choose their responses. The Likert scale option was used to meet with the T-test statistics meant for the analysis. On the whole, 72 items were used in the questionnaire to elicit information from the respondents.

The validity of the instrument was established by giving copies of the instrument developed by the researcher to three experts in community health, and three experts in educational evaluation in the Faculty of Education, University of Uyo. The six experts were requested to read through the instrument, vet the items for clarity, relevance and suitability to the study. The inputs and corrections of these experts were used to modify the items in the instrument. This assessment gave the instrument both face and content validity.

In order to establish the reliability of the instrument, the questionnaire was pre-tested on randomly selected 30 nursing mothers and 30 pregnant women from the Primary Health Care Centre, Nto Edino in Obot Akara Local Government Area which was not involved in the main study. The collected data were split into two halves using the even-numbered and odd-numbered items. The responses of both halves were subjected to correlation by Cronbach Alpha Statistical analysis for test of internal consistency. A reliability coefficient of .75 was obtained. This instrument was thus considered suitable for the study.

The questionnaire was administered on the respondents from the randomly sampled four health care centres on-the-spot and on face-to-face bases. Four (4) research assistants who were duly trained were used in administering the questionnaire. The method was conducive and faster for the respondents; and all the 280 copies were administered, completed and collected from the women.

The data collected were collated accordingly and first analysed with the mean statistics and later the T-test statistical analysis was employed to test the hypothesis generated for the study. The level of significance (P) was set at .05.

### 4. Results

Results of this study are presented on the basis of set research questions.

**Research Question 1:** What is the influence of women’s knowledge of health care facility services on type of birth outcome in Ikot Ekpene Local Government Area?

**Table 1: Summary of Mean Statistical Analysis of Women’s Knowledge of Health Care Facility Services and Type of Birth Outcome**

Women’s Knowledge of Health Care Facility Services	N	Mean	Std. Dev.	Remark
Knowledgeable	171	3.16	0.41	Positive
Not knowledgeable	109	1.57	0.39	Negative

The result of data analysis in Table 1 shows that there is a difference between type of birth outcome of women who are knowledgeable of health care facility services and those who are not knowledgeable of such services in Ikot Ekpene Local Government Area. The mean score of those who were knowledgeable was 3.16 indicating positive birth outcomes while that of those who were not knowledgeable was 1.57 indicating negative birth outcomes. This implies that those who were knowledgeable of health care facility services had positive birth outcome while those who were not knowledgeable of such services had negative type of birth outcome.

**Research Question 2:** What is the influence of women’s level of attendance at health care facility on birth outcome in Ikot Ekpene Local Government Area?

**Table 2: Summary of Mean Statistical Analysis of Attendance and Type of Birth Outcome**

Level of Attendance	N	Mean	Std. Dev.	Remark
High Attendance	148	3.18	0.42	Positive
Low Attendance	132	1.83	0.67	Negative

The result of data analysis in Table 2 shows that there is a difference between birth outcome of women with high level of attendance at health care facility in comparison to those with low level of attendance in Ikot Ekpene Local Government Area. The mean score of those women with high level of attendance was 3.18 indicating positive birth outcome while those with low level of attendance was 1.83 indicating negative birth outcome. This implies that those with high level of attendance for health care facility services had positive birth outcome while those with low level of attendance for such services had negative birth outcome.

**Research Question 3:** What is the influence of women's level of attitude towards health care facility workers on birth outcome in Ikot Ekpene Local Government Area?

**Table 3: Summary of Mean Statistical Analysis of Women's Attitude Towards Health Care Facility Services Workers and Type of Birth Outcome**

Women's Attitude Toward Health Care Facility Services Workers	N	Mean	Std. Dev.	Remark
Positive Attitude	211	2.61	0.86	Positive
Negative Attitude	69	2.36	0.88	Negative

The result of data analysis in Table 3 shows that there is a difference between birth outcomes of women who had positive attitude toward health care facility workers in Ikot Ekpene Local Government Area in comparison to women who had negative attitudes toward health care facility workers. The mean score of those who had positive attitudes towards health care facility workers was 2.61 indicating positive birth outcome while that of those who had negative attitudes toward health care facility workers was 2.36 indicating negative birth outcome. This implies that those who had positive attitudes toward health care facility workers had positive birth outcome while those who had negative attitudes toward health care facility workers had negative birth outcome.

**Research Question 4:** What is the influence of women's perception of treatment method/ procedures in the health care facility on birth outcome in Ikot Ekpene Local Government Area?

**Table 4: Summary of Mean Statistical Analysis of Women's Perception of Treatment Methods/Procedures in the Health Care Facility Services and Type of Birth Outcome**

Women's Perception of Treatment Methods in Health Care Facility Services	N	Mean	Std. Dev.	Remark
Knowledgeable	173	2.93	0.67	Positive
Not knowledgeable	107	1.93	0.79	Negative

The result of data analysis in Table 4 shows that there is a difference between birth outcome of women with positive perception of treatment methods/procedures in healthcare facilities and birth outcome of women with negative perception of treatment method/procedures in health care facilities in Ikot Ekpene Local Government Area. The mean score of women with positive perception of treatment methods/procedures in health care facilities was 2.93 indicating positive birth outcome while that of women with negative perception of treatment methods/procedures in health care facility services was 1.93 indicating negative birth outcome. This implies that women with positive perception of treatment methods/procedures in health care facilities had positive birth outcome while women with negative perception of treatment methods/procedures in health care facilities had negative birth outcome.

**Research Question 5:** What is the influence of women's belief (religious/cultural) toward health care facility services on birth outcome in Ikot Ekpene Local Government Area?

**Table 5: Summary of Mean Statistical Analysis of Women's Belief (religious/cultural) Towards Health Care Faculty Services and Type of Birth Outcome**

Women Belief (religious/ cultural) Towards Health Care Faculty Services	N	Mean	Std. Dev.	Remark
Positive Belief	165	2.99	0.63	Positive
Negative Belief	115	1.91	0.77	Negative

The result of data analysis in Table 5 shows that there is a difference between birth outcome of women who had positive belief (religious/cultural) towards health care facility services in Ikot Ekpene Local Government Area in comparison to women who had negative belief (religious/cultural) towards health care facility services. The mean score of those who had positive belief (religious/cultural) towards health care facility services was 2.99 indicating positive birth outcome while that of those with negative belief (religious/cultural) towards health care facility services was 1.91 indicating negative birth outcome. This implies that those who had positive belief (religious/cultural) towards health care facility services had positive birth outcome while those who had negative belief (religious/cultural) towards health care facility services had negative birth outcome.

**Research Question 6:** What is the influence of women's residential location to health care facility on birth

outcome in Ikot Ekpene Local Government Area?

**Table 6: Summary of Mean Statistical Analysis of Women’s Location of Health Care Facility Services and Type of Birth Outcome**

Women’s Knowledge of Health Care Facility Services	N	Mean	Std. Dev.	Remark
Favourable Location	219	2.62	0.86	Positive
Unfavourable Location	61	2.29	0.87	Negative

The result of data analysis in Table 6 shows that there is a difference between birth outcome of women whose residential locations were favourable for health care facility services in Ikot Ekpene Local Government Area in comparison to birth outcome of women whose residential locations were not favourable for health care services. The mean score of birth outcome of women whose residential locations were favourable for health care facility services was 2.62 indicating positive birth outcome while that of those whose residential locations were not favourable for health care facility services was 2.29 indicating negative birth outcome. This implies that women whose residential locations were favourable for health care facility services had positive birth outcome while those women whose residential locations were not favourable for health care facility services had negative birth outcome.

**Research Question 7:** What is the influence of women economic status towards health care facility services on birth outcome in Ikot Ekpene Local Government Area?

**Table 7: Summary of Mean Statistical Analysis of Women’s Economic Status and Type of Birth Outcome**

Women’s Knowledge of Health Care Facility Services	N	Mean	Std. Dev.	Remark
High Economic Status	177	3.04	0.55	Positive
Low Economic Status	103	1.69	0.64	Negative

The result of data analysis in Table 1 shows that there is a difference between birth outcome of women in high economic status and those in low economic status in Ikot Ekpene Local Government Area. The mean score of those in high economic status was 3.04 indicating positive birth outcome while that of those in low economic status was 1.69 indicating negative birth outcome. This implies that those in high economic status had positive birth outcome while those in low economic status had negative birth outcome.

**Testing the Null Hypothesis**

**Hypothesis 1:** Women’s knowledge of Health Care Facility (HCF) services does not significantly influence birth outcome in Ikot Ekpene

**Table 8: Summary of Mean Statistical Analysis of Women’s Knowledge of Health Care Facility Services and Type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
Knowledgeable	171	3.16	0.41			
Not-knowledgeable	109	1.57	0.39	278	32.23*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 8 shows that the calculated t-value of 32.23 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significant influence of women’s knowledge of health care facility services on their birth outcome.

**Hypothesis 2:** Women’s level of attendance at Health Care Facility Services does not significantly influence birth outcome in Ikot Ekpene.

**Table 9: Summary of Mean Statistical Analysis of t-test Analysis of Influence of Women Level of Attendance on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
High Level of Attendance	148	3.18	0.42			
Low Level of Attendance	132	1.83	0.67	278	20.04*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 9 shows that the calculated t-value of 20.04 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is significant influence of women’s level of attendance on the birth outcome.

**Hypothesis 3:** Women’s attitude towards Health Care Facility Services does not significantly influence birth outcome in Ikot Ekpene.

**Table 10: Summary of Mean Statistical Analysis of t-test Analysis of Influence of Women's Attitude towards Health Care Facility Services on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
Positive Attitude	211	2.61	0.86			
Negative Attitude	69	2.36	0.88	278	2.10*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 10 shows that the calculated t-value of 2.10 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significant influence of women's attitude towards health care facility services workers on their birth outcome.

**Hypothesis 4:** Women's perception of treatment methods/procedures in Health Care Facility Services does not significantly influence birth outcome in Ikot Ekpene.

**Table 11: Summary of Mean Statistical Analysis of t-test Analysis of Influence of Women's Perception of Treatment Methods/Procedures in the Health Care Facility Services on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
Positive Perception	173	2.93	0.67			
Negative Perception	107	1.93	0.79	278	11.29*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 11 shows that the calculated t-value of 11.29 is greater than the critical value of 1.96 at .05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significant influence of women's perception of treatment methods/procedures in the health care facility services on their birth outcome.

**Hypothesis 5:** Women's beliefs (religious/cultural) towards Health Care Facility Services do not significantly influence birth outcome in Ikot Ekpene L.G.A.

**Table 12: Summary of Mean Statistical Analysis of t-test Analysis of Influence of Women Belief (Religious/Cultural) Towards Health Care Facility Services on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
Positive Belief	165	2.99	0.63			
Negative Belief	115	1.91	0.77	278	12.84*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 12 shows that the calculated t-value of 12.84 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significance influence of women's beliefs (religious/cultural) towards health care facility services on birth outcome.

**Hypothesis 6:** Women's knowledge of Health Care Facility (HCF) services does not significantly influence birth outcome in Ikot Ekpene

**Table 13: Summary of Mean Statistical Analysis of t-test Analysis of Influence of Women's Residential Location to Health Care Facility Services on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
Favourable Location	219	2.62	0.86			
Unfavourable Location	61	2.29	0.87	278	2.66*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 13 shows that the calculated t-value of 2.99 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significant influence of women's residential location to health care facility services on their birth outcome.

**Hypothesis 7:** Women's economic status towards Health Care Facility Services does not significantly influence birth outcome in Ikot Ekpene L.G.A.

**Table 15: Summary of Mean Statistical Analysis of t-test Analysis of Women's Economic Status on type of Birth Outcome**

Variables	N	$\bar{X}$	SD	df	t-cal	t-crit
High Economic Status	177	3.04	0.55			
Low Economic Status	103	1.69	0.64	278	18.55*	1.96

\* Significant at  $p < .05$  and 278 degree of freedom.

The result in Table 14 shows that the calculated t-value of 18.55 is greater than the critical value of 1.96 at 0.05 level of significance. This implies that the null hypothesis is rejected. Hence, there is a significant

influence of women's economic status on their birth outcome.

## 5. Discussion

The findings from data analysis in Table 1 indicate that women who have good knowledge of available health care services have more positive birth outcome than those who have poor knowledge of such services. This is confirmed by the mean from data analysis of those who were knowledgeable being 3.16 indicating positive birth outcome while that of those who were not knowledgeable was 1.57 indicating negative birth outcome. This means that women's knowledge of health care facility services influences birth outcome in Ikot Ekpene. The observed result could be because many women in Ikot Ekpene are culturally and religiously inclined in their health seeking behaviour. The services of Traditional Birth Attendants (TBAs) who are equally herbalists and prophetesses are paramount for their pregnancy and child care, hence they lack knowledge of safe health care services at HCFs and are only rushed there with birth complications. Odetola's (2015) findings are in agreement with this finding. He noted that despite the availability of primary health care services in virtually every community and village in Nigeria, clients travel long distances to reach secondary and tertiary health care institutions for services that are available in their primary health care centres.

The findings showed that most of the women experienced complications example bleeding before reaching and receiving the care centre, and this continues to influence birth outcomes negatively in our society. Ronsmans and Graham (2008) also supported that poor knowledge of and use of HCF services result in high levels of maternal and newborn mortality in developing countries. Nevertheless, Gwatkin (2009) found out something that contradicts with the study findings when he stated that over 60 percent of the women are faced with further challenges such as poverty, lack of access to education, no control over resources, poor nutrition, no decision-making power, and early marriage influence women's birth outcome despite good knowledge of health care services.

The findings from analysis in Table 2 reveal that women with high level of attendance for health care facility services have positive birth outcome, while those with low level of attendance for such services have negative birth outcome in Ikot Ekpene. The mean score of those with high levels of attendance was 3.18 indicating positive birth outcome while those with low level of attendance was 1.83 indicating negative birth outcome. Therefore, the null hypothesis that women's level of attendance at HCFs does not significantly influence birth outcome is hereby rejected.

In congruence with the study findings, a research by the UK Department for International Development (2015) revealed that understanding why women and their children are not attending the HCFs in Northern Nigeria is very crucial in order to prevent adverse birth outcomes, improve programmes that seek to tackle maternal mortality and ultimately broaden their reach. Informed Decision for Action (IDEAS) in Maternal and Newborn Health (2013) argued with the research when they put forward some questions to show that a high level of attendance at HCFs alone is not enough thus:

- Are health facilities ready for clear delivery care?
- Do all skilled birth attendants have all basic items ready when they attend birth?
- Do skilled attendants take life saving actions during birth?

According to them, positive answers to these questions could help reduce the already high maternal morbidity, disability and mortality from negative birth outcome and enhance regular attendance at HCFs by women.

The findings also reveal that women who have positive attitude towards health care workers have positive birth outcome while those who have negative attitudes towards health care workers have negative birth outcome. The result of data analysis in Table 3 gives meaning to these findings when the mean score of those who had positive attitude towards health care workers was 2.61 indicating positive birth outcome which those who have negative attitude was 2.36. A study by Ronsmans, Scott and Qomariyah (2009) is in line with the study findings when he stated that poor presentation of information about family planning services by health care workers cannot help reduce unwanted pregnancy and their adverse consequences. This brings about poor attitude of women towards health care workers. However, Gaba (2009) in his study on attitude of women towards health care workers in Zambia contradicts the study findings. His study revealed that lack of transport makes it difficult for them to reach help quickly in the health facility and that fees charged at the HCFs often put them off having babies in HCFs or even to seek help when complications arise which increases the maternal/infant morbidity and mortality.

Another finding of the study showed that women with positive perception of treatment methods/procedures in health care facility have positive birth outcome while women with negative perception of treatment methods/procedures in HCFs have negative birth outcome. This comes from the result analysis in Table 4 with the mean score of women with positive perception of treatment methods being 2.93 indicating positive birth outcome while that of women with negative perception was 1.93 indicating negative outcome. In relation to the study findings, WHO (2010) revealed that the quantity of care is an important determinant of



health outcome hence positive perception of quality treatment methods can influence positive birth outcome and vice versa. Also, in line with the study findings, Nnebu (2014) carried out a study on client's perception, knowledge and satisfaction of treatment (maternal and child care) in Nnewi. The results revealed that clients' perception of quality service was low which always pushed them to go for home delivery resulting in negative birth outcome. In agreement with the study findings, Zere, Oluwole and Kirigia (2011) carried out a study on the perception of women on treatment methods in the HCFs which revealed that a few women were treated respectfully with comprehensive, individualised care while most of the women experienced long waiting hours, rushed and harsh care, and these gestures do influence the utilisation of HCF and birth outcome of these women. The study also falls in line with the findings of Human Rights Watch (HRW) (2011) which revealed how women's childbirth experience are marred by instances of maltreatment, physical and verbal abuse, lack of supportive care, etc. which according to the White Ribbon Analysis (WRA, 2011) can all impact on a woman's health, the process of her childbirth, and birth outcome.

The result of the study also revealed that women who have positive beliefs (cultural/religious) toward health care facility services have positive birth outcome, while those who have negative beliefs towards health care facility services have negative birth outcome. Data analysis in Table 5 shows that there is a difference between birth outcome of women who have positive beliefs toward HCFs services in Ikot Ekpene. In the analysis, the mean score of birth outcome of women who had positive beliefs towards HCFs was 2.99 indicating positive birth outcome while that of those who have negative beliefs towards HCFs was 1.91 indicating negative birth outcome. In line with the study findings is the result of a study by Kumbami (2010) which showed that despite Malawian government's policy to support women to deliver in health facilities, some women do not access this care due to their unhealthy cultural beliefs about labour and delivery hence they prefer birthing with the TBAs who according to them can handle such issues. They would only be rushed to the HCFs when serious negative birth outcomes arise, example severe bleeding, retained placenta, twitching during birth, etc.

Beck, Buffington and Demott (2013) contradicted the study findings in their study results when they found out that it is not only socio-cultural beliefs of women that can influence birth outcome but perceived benefits, economic accessibility and physical accessibility; can influence the utilisation of HCFs for positive birth outcome. The result is in line with the study by Eagly and Chaiken (2011) which stated that evidence of perceived threats were often given religious/cultural interpretations. Increased women anxiety drives them to seek multiple sources of care including herbalists, TBAs, and spiritualists who disrupt them from accessing a skilled birth attendant for care during delivery period. Norman, Abraham and Corner (2010) in their study agree with the findings of this work. They stated that some religious denominations forbid their followers from going to the HCFs for any care but resort to fasting in prayer houses. Most of these groups of women are rushed into the HCFs at the stage of birth complications which sometimes cost life.

Women whose residential locations are favourable for health care facility services have positive birth outcome while those women whose residential locations are not favourable for health care facility services have negative birth outcome. Data analysis in Table 6 shows that there is a difference between birth outcome of women whose residential locations are favourable for health care facility services in Ikot Ekpene. in comparison to birth outcome of women whose residential locations are not favourable for such services. The mean score for women with favourable residential location was 2.62 indicating positive birth outcome while that of those women with unfavourable residential location was 2.29 indicating negative birth outcome. The hypothesis stating that women's residential location to HCFs does not significantly influence birth outcome is hereby rejected. In consonance with the study findings, Gaba (2009) observed that antenatal attendance at health care facilities for maternal services were positively associated with living within 10 kilometers of health care facilities. A study by Norman, Abraham and Corner (2010) is in agreement with the study finding. It revealed that distance from antenatal clinic and delivery ward, accounts for longer delays in seeking maternal health care.

This accounts for maternal complications which result in negative birth outcome even before the arrival at the health care facilities due to distance. WHO (2010) equally supports the study finding. It noted that distance to health care facilities greatly influenced compliance to care schedule and that this was one of the reasons urban dwellers complied with clinic schedules and enjoyed positive birth outcome than their rural counterparts.

Women who are in high economic status have positive birth outcome while those who are in low economic status have negative birth outcome in Ikot Ekpene. This finding is seen in the analysis of data in Table 7 which reveals that the mean score of those who were in high economic status was 3.04 indicating positive birth outcome while those with low economic status was 1.69 which is negative birth outcome. Therefore, the null hypothesis which states that women's economic status does not significantly influence birth outcome is hereby rejected. This means that women's economic status significantly influences birth outcome. In line with the study findings, WHO (2014) stated that socio-economic factors such as low income and low education were linked to the utilisation of health care facilities. It further stated that poverty is therefore a barrier to HCF attendance and that security of income is often found to be more important for maternal health among mothers with low income which subsequently influence their birth outcome. The findings from the UNFPA (2012) agrees with the study

findings by stating that a woman's chance of dying or becoming disabled during pregnancy and childbirth is closely connected to her socio-economic status. It added that the poorer and marginalised a mother is, the greater her risk of death. Another study by Kinney, Kerbe and Black (2010) is related to the study finding. It stated that financial difficulties were mentioned among pregnant and nursing mothers as the main reason for defaulting from clinic visits. In agreement with the study finding, UNFPA (2012) further stated that maternal mortality rates reflect disparities between wealthy and poor countries more than any other measure of health, and that a woman's life time risk of dying as a result of pregnancy or childbirth is 1 in 39 in sub-Saharan Africa as compared to 1 in 4700 in industrialised countries. Mmounam's (2011) findings however stated that in Akwa Ibom State, there is free treatment for pregnant women and children 0-5years, but other factors such as religious and cultural beliefs still hinder most of the women from accessing safe maternal and child health care in the HCF. This continues to promote negative birth outcome in our society.

### Conclusion

From the foregoing discussion, it is evident that women who are knowledgeable about health care facility services, women with high levels of attendance at health care services, women with positive attitudes toward health care facility workers' services, women with positive perception of treatment methods/procedures in health care facilities, women with positive beliefs toward health care facility services, women with favourable residential location to health care facilities and women with high economic status have positive birth outcomes while those women with negative variables as mentioned above have negative birth outcome.

### Recommendations

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

1. Frequent health campaigns should be carried out by health educators on the benefits of attending health facilities and the health services available in health facilities in Ikot Ekpene Local Government Area.
2. There should be an intensive community mobilisation in Ikot Ekpene L.G.A. on cultural modifications.
3. Government should sponsor workshops that teach communication techniques for health workers in order to present a working therapeutic relationship with their clients.
4. The TBAs should be trained to an acceptable standard on the management of normal labour and their limits, to avoid birth complications for their clients.
5. Benefits of health care delivery should be specified for clients at clinic visits to encourage institution delivery.
6. Government should employ more health workers to avoid long waiting period by patients due to low staff strength.
7. Government should provide incentives to mothers who have attended clinics for four times and those who completed their immunisation in order to encourage scheduled visits.
8. Government should provide enough and quality equipment to work with including drugs.
9. Primary health facilities should be renovated as at when due to provide for the aesthetic needs of the clients.
10. Drugs should be affordable by the general public through government subsidy.

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