

Determinants of Choice of Delivery Places and Outcomes of Pregnancy among Women of Child Bearing Age in Yenagoa Metropolis, Bayelsa State, Nigeria

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Abstract

The study investigated the determinant of choice of place of delivery and outcome of pregnancy among women of child bearing age in Yenagoa Metropolis. The study utilized a cross-sectional descriptive research design. The target population for this study was women of childbearing age {15-49 years} in Yenagoa Metropolis. The population of this study comprises of a total population of 1080 women of childbearing age. A purposive sample method was used to select the health facilities within Yenagoa metropolis then stratified random sample was used to select women of child bearing age within the various facilities. A structured questionnaire titled determinants of choice of delivery place and outcomes of pregnancy among women of childbearing age was used to elicit information from the sampled respondents. Copies of the questionnaire were given Senior Lecturer in Nursing in University of Port Harcourt to determine its face and content validity. The structured questionnaire was subjected to a test re-test reliability study that was conducted among 10% of respondents in the target population, which were selected from Niger Delta Teaching Hospital, Okolobiri. These respondents did not participate in the main study. The data collected was analyzed and the reliability coefficient was computed. A value of 0.07 to 1.00 was accepted as reliable. Variables were analyzed using descriptive statistics of mean and standard deviation, and inferential statistic. The null hypotheses were tested using t-test. The findings of the study showed that, most parturient attend antenatal clinic but not all the numbers returns to the hospital at time of delivery based on various reasons such as cost of medical bill not affordable, faith based clinic are more conducive, nurses/midwives are abusive, short distance to place of birth, fear of being operated upon where some of the reasons given among others although, Results gotten from the tested hypothesis revealed a statistical difference between respondent's demographic characteristics (age, educational status, and parity) and choice of place of delivery. The study concluded that, affordable medical bills, Female education, female empowerment, healthcare workers attitude, distance of health facilities from homes in most communities are the determinants to be addressed in curbing the Morbidity and Mortality rate and government should create policies that will bring these experienced unskilled attendants to received training to help improve services delivery in the society. It recommended that Ministry of health in collaboration with government should organized orientation programmed in Yenagoa metropolis to enlighten the Yenagoa people on the benefit of hospital delivery to the women in the community, provision should be made by government on free medical treatment of pregnant women from pregnancy to postpartum stage. These will encourage women to go hospital for child delivery, among others.

Keywords: Determinants, Choice of Place, Birth, Child Bearing, Pregnancy Outcome, Maternity.

Introduction

The choice of delivery place is a very important aspect for women of childbearing age because it determines greatly pregnancy outcomes (Nwokoro 2014). Ajiboye and Adebayo (2012), opined that pregnancy outcomes affect family stability, health and manpower needs of societies. Maternal and Neonatal Morbidity and death rates are intricately linked to their decision on where to deliver their babies. It was noted that about five hundred thousand (500,000) maternal deaths occur annually arising from pregnancy-related issues while stillborn neonates accounted for over three million (Lwelamira and Safari, 2012). The immediate medical causes of Maternal Mortalities are similar for women worldwide: obstetric haemorrhages, toxemia, obstructed labour, prolonged labour and septic abortions (Idris, Gwarzo, and Shehu 2016).

Maternal mortality arising from issues associated with pregnancy and delivery is of great public health concern that has attracted the international communities (Hogan, Forman, Naghavi, Stephanie, Mengnu and Chistopher, 2010). Africa contributes 99% of the global maternal mortality figures. Moving to the populated region of the world, it was stated that 385,000 women die annually from pregnancy-related complications and childbirth complications were responsible for some of the deaths recorded (WHO, 2018), the distribution of which is more in Sub-Sahara Africa and Asia continent.

In Nigeria, which is supposedly densely populated region in Africa, the maternal death rate was reported and ranked by WHO as being second highest number annually in 2010 and 14% of the total maternal death worldwide (Achem and Agboghoroma, 2016; WHO, 2016). This great burden is linked to pregnancy outcomes, however the values placed on it is small with low investments compare to other conditions with a lower burden (Lawn, kerber, Enueronu, and Masee, 2009). During delivery, Maternal mortalities are strongly linked to inadequate medical care. In countries that are under developed, many determinants have been pointed out as hindrances to skilled healthcare by women; these are poor quality of care, poor access to geographical locations, shortage of skilled personnel, lack of quality care (Idris, Gwarzo, and Shehu 2016).

Nigerian Demographic and Health Survey (NDHS, 2013) reported by Shehu, Ibrahim, Oche and Nwobodo (2016), 11.5% of women of the Northwest region of Nigeria gave births in the healthcare settings, and 19.5 and 45.7% of women of the Northeast and North-central regions, respectively gave birth in the healthcare settings. This was in sharp contrast to the 78.1% and 75.0% of Southeast and Southwest region women in Nigeria who delivered in the hospital. In another baseline survey by UNFPA of UNFPA Assisted States in Nigeria, Anambra (87.9%), recorded the highest number of pregnant women who delivered in the hospital, followed by Abia (82.8%), Osun (76.4%) and Ogun (74.2%) states, while in Sokoto (5.7%), Kebbi (8.2%) and 7.5% for Katsina State, the proportions of women that delivered in the hospital were very low (UNFPA, 2010). In Nigeria, with a population of over 160million people out of which about 31 million are women of child bearing age, only about

40% of the deliveries are taken in health institutions. (Idris, Gwarzo, and Shehu 2016). Refusal of pregnant women to make use of quality reproductive health services at their disposal, is among many others, one of the reasons for Maternal Morbidity and Mortality in developing countries (Olusola, Aduragbami, and Ameh, 2017).

The disparities between the developed and developing countries statistics of Maternal Mortality Rate is as a result of factor such as availability, ethnicity and religion, accessibility, education, women autonomy, economic accessibility and usage of health facilities in the individual's domain (Achem and Agboghoroma, 2016; WHO, 2016).

Furthermore, Gayawan (2012), maintained that a crucial factor in explaining the huge differences observed in Perinatal and Maternal Morbidity and Mortality between developing and the industrialized world is accessibility to quality healthcare during pregnancy and at childbirth. According to Nwokoro (2014), the history of success mitigating Maternal death and newborn Mortalities showed that a predictor of life or death for mothers and their neonates is skilled professional care as at antenatal and postnatal.

Buowari (2010) reported that, traditional birth attendant (TBA) homes recorded majority of child birth, while Ayede (2012) estimated that, in some communities, traditional birth attendant attended to about 60% of deliveries. According to Adebowale (2018), special report from premium times stated that in rural areas of Nigeria, women patronize homes of traditional birth attendant than health facilities. This attitude towards health facilities were due to distance from home to clinic, cost of hospital bills, and negative attitudes of workers in the health sector hence, preference for Community based TBA. Most pregnant women still prefer home delivery to hospital delivery in countries that are still developing (Envuladu, Agbo, Lassa, Kigbu and Zoakah, 2013).

The skilled professional, especially registered midwives and gynecologist work in the modern hospitals while care of parturient are being handled by unskilled personnel found in traditional homes. The place of delivery (Modern hospitals and traditional health facility) determines the method of care. Nwokoro (2014), affirmed that the choice of delivery place greatly the outcome of pregnancy making it a very important aspect for women of child bearing age and their families

Different people with different preferences for places of deliveries which arise from various factors and each has its implications which are the determinants of the choice among the people in the society. This study therefore intends to investigate Determinants of Choice of Place of Delivery and outcomes of pregnancy among women of child bearing age in the Yenagoa metropolis.

Statement of Problem

In Asia and sub-Saharan Africa, 95% of Maternal Mortality occurs, out of a total of approximately 536,000 annual Maternal Mortality (Nwokoro, 2014). A maternal mortality ratio of 1:100 ranks Nigeria highest in maternal mortality figure in Sub Sahara Africa. Nigeria with about 2% of the world's population contributes approximately 10% of the

world's maternal mortality with an estimate of 302,950 maternal deaths (WHO, 2018). If deliveries are carried out by skilled professionals and at the right place, most of the maternal deaths can be prevented.

Ajiboye and Adebayo (2012) opined that pregnancy outcomes affect family stability, health and manpower needs of societies. It was noted that about five hundred thousand (500,000) women die every year as a result of pregnancy related issues (Lwelamira and Safari, 2012). In Bayelsa state with a maternal death rate of 1,870 per 100,000 is among the poorest in south-south zones of Nigeria (Austin, 2017). In spite of all efforts, programs and interventions formulated by the Bayelsa State Government such as Bayelsa State health insurance scheme, safe motherhood initiative, Bayelsa State Tele-health initiatives, midwives service scheme (Walker, 2018) to encourage women to patronize, available healthcare facilities with a view to strengthen and improve safe delivery and to curb morbidity and mortality rate, many parturient still do not utilize the trained healthcare providers during delivery instead they patronized TBAs.

The researcher observed that parturient visit chose the place where they want to deliver irrespective of either negative (postpartum hemorrhage, infections, stillbirth and maternal death) or positive outcome of previous birth experiences by women.

What then determines a proper place of birth? Does where birth took place determine its outcome? Taking cognizance of the questions asked/the gap; the researcher seeks to identify determinant of choices of where delivery takes place and outcome of pregnancy. Answers to these questions will bring about a broad array of enlightenment to the best choice when it comes to delivery place in Yenagoa and Nigeria at large.

Objectives of the study

The study set to investigate the determinants of choice of delivery place and outcomes of pregnancy among women of childbearing age in Yenagoa metropolis.

The specific objectives were:

1. To determine factors for the choice of delivery place among women of childbearing age in Yenagoa metropolis
2. To determine the likely outcome of pregnancy among women of childbearing age in Yenagoa metropolis
3. To determine factors influencing choice of delivery place on outcome of pregnancy among women of childbearing age in Yenagoa metropolis.

Research Questions

The research questions were:

1. What are the determining factors for the choice of delivery place among women of childbearing age in Yenagoa Metropolis?
2. What are the likely outcomes of pregnancy among women of childbearing age in Yenagoa Metropolis?

3. What are the determining factors influences to choice of delivery place on outcome of pregnancy among women of childbearing age in Yenagoa Metropolis?

Research Hypothesis

Hypothesis one: There is no significant difference between respondent demographic characteristics (Age) and choice of place of delivery.

Hypothesis two: There is no significant difference between respondent demographic characteristics (Educational status) and choice of place of delivery.

Hypothesis three: There is no significant difference between respondent demographic characteristics (parity/number of children) and choice of place of delivery.

Literature Review

Maternal Death

Great grief of loss and depression is linked to maternal death. It greatly impacts on infant survival because the likely of newborn deaths is increased by 2-4 times (Juma, 2015). The family is not left out as a result of death of a woman due to the negative impact on the income and increase in socio-economic stress on the husband and the children. Indeed, women's economic contribution is essential to reducing poverty (UNFPA, 2010). About 536,000 women die during pregnancy and childbirth annually out of an estimated figure of 120 million pregnancies which occurs worldwide. (UN 2008).

By ensuring good quality maternal health services, most maternal deaths can be avoided (Juma, 2015). For high quality pregnancy outcomes, it is imperative that all women and babies need a professional touch during pregnancy, childbirth and after delivery. However, globally one third of births happen at homes without the help of a skilled birth attendant. To reduce the global burden of 536,000 maternal deaths, 3.7 million neonatal deaths and 3 million stillbirths annually, WHO recommends 'skilled professional care' at every birth. One of the indicators of progress towards millennium Development Goal 5, which is poised to improve maternal health, is the number of deliveries assisted by skilled attendant frequently and most countries around the globe measure this to score themselves (UN 2008).

The Trado-Medical Practitioner/Healer

This is defined as someone who is known by the community where he/she lives, to be qualified to provide healthcare through using vegetable, animal products and mineral substances and other means based on the social, cultural, and religious background as well as certain knowledge, attitude and practices with respect to physical, social and mental wellbeing and the reason for disease in the community. (Izugbara and Duru 2009).

Determinants of Choice of Birth Place

According to Fotso, Ezeh and Essendi (2009), the following are the factors that determine choice of delivery places:

(a) Maternal age: This is most times seen in the light of experiences gathered over time which could include health service use.

In terms of being confident and influential, older women are good at it especially in household's decision making compared to younger women and adolescents most especially. Because old age is a biological risk, older women may be advised to deliver in a facility by health workers. However, due to their affiliations to older traditional cohorts, older women are less likely to use modern facilities than young women.

(b) Marital Status: The rigidity on female autonomy and status may impact on choice of delivery place. Single or divorced women may enjoy great flexibility of autonomy than those that are married. Single mothers that are young may be cared for by their immediate family, which may increase the chances of the involvement of skilled attendant especially for the first birth.

(c) Economic Accessibility: This is the relationship between cost of a facility delivery plus transportation cost and the family financial strength.

The finance available will definitely determine if a woman will get to the hospital for delivery or not. The cost effectiveness of a facility delivery will tell if a choice for facility delivery will be made or not. Working class women can afford the cost of facility delivery. However, most women due to lack of funds, cannot control what they desire.

(d) Ethnicity and Religion: Ethnicity and Religion: these two plays a great role to influence belief systems, norms and values with regards to childbirth services rendered to women. Discrimination by staff may worsen the patronage of facility by some ethnic groups or religious circle. Cultural requirements of separation in the household may hinder women in some culture from making use facility delivery or due to certain criteria on how placenta is handled and disposed, delivery position. Another reason for delivery at home in some context may be as a result of seeing birth as a test of endurance and not care seeking since the latter is viewed as a sign of weakness.

(e) Distance and Transport: Health service exerts a double impact on its use by way of the location of health facility and cost of transportation involved in the process. It serves as a disincentive to seeking care and as an impediment to it.

The walking distances where there are no means of transportation, may involve many kilometers making most pregnant women in labor not trying to utilize health facility and this is even worse if labor start at night. The negative impact of distances, lack of transportation and bad roads are some the reasons why some pregnant women do not make use of health facilities.

(f) Mother's education: Various potential pathways that could explain why maternal education is constantly linked to all types behaviors in health which are: Minimize ignorance on merits of preventive healthcare and health services awareness, Williness to receive new

health information, socialization with formal services rendered outside the confines of their homes, getting use to modern medical culture, understanding how to get financial resources and health insurance, more prudent in financial management, improved communication skills with spouse, more decision making power, increased self worth and self confidence, better coping abilities and negotiating skills and also reduced power deferential towards providers of health care thus better communication and right to adequate services.

Outcome of Pregnancy

This refers to as results of conception and pregnancy or final result of fertilization event, such as sex ratio, birth weight, spontaneous abortion, induced abortion congenital malformations, lower birth weight, preterm delivery or stillbirth.

Childbirth in a health facility where there are trained health professionals will lower the rates of maternal and neonatal mortality than when compared to home birth. In resource limited settings, non-health facility deliveries are linked with higher rates of maternal morbidity and mortality and increased newborn morbidity and mortality.

In developed countries, some studies conducted in the United States of America between 1989-1996, revealed that, an increased Maternal and Neonatal risk was linked with planned home birth (Nwokoro, 2014). According to Titaley, Hunter, Dibley and Heywood (2010), stated that many deliveries still occur at home without the assistance in low and middle income countries.

This has created heavy concerns because life threatening complications during pregnancy and delivery which women go through warrants appropriate and accessible care. Skilled birth care services if implemented will help in bringing down infant mortality rate to 20–30%. Although, birth rate at home is falling, it is still higher when compared to other Western countries; say about 20 % (Bolten, De Jonge, Zwagerman, Zwagerman, Klomp, Zwart, & Geerts, 2016).

Birth attendants during delivery: Different types of healthcare providers are available to choose from during delivery. These include both professional health care providers and traditional healthcare providers.

Skilled birth attendant: According to (Nwokoro, 2014) a skilled attendant is a health professional that may be a midwife, nurse or medical doctor who has undergone training to masterly manage normal (uncomplicated) pregnancies, childbirth and immediate post-natal period and to identify, manage or know when referral is needed in women and their Newborns with complications.

Midwives: Midwives are trained to identify possible problems in pregnancy, and they work together with physicians when necessary for complicated pregnancies. Women give birth

with midwives in birth centers, at home and in hospitals. Under the types of midwives, there are registered midwife and registered nurse midwife (RM&RN/RM).

A registered midwife is one who has undergone midwifery training and is registered by the country's nursing and midwifery council to practice midwifery. Registered nurse/midwife: This is a registered nurse who has additional education and certification in midwifery. A registered nurse midwife is trained to provide pre-natal care, education and support; attend birth in a hospital or home and provide follow up care to mother and newborn after birth. According to WHO (2015), specification one nurse/midwife to a woman in labour patient

Family physicians: These focus on the healthcare need of the family, not all family physicians include maternity care in their practice.

Obstetricians: Obstetricians care for woman before, during and after their pregnancies. They are trained to diagnose and treat medical problems in pregnancy. They are trained in surgery and are able to do caesarean section. WHO specification state 100,000 patient to 1 obstetrician gynecologist. The skilled care approach is based on the premise that all women are entitled to good quality care during childbirth. It assumes that such care can prevent some complications (e.g through hygiene practices and active management of the third stage of labour), increase the likelihood of immediate, appropriate treatment when complications do develop; and encourage prompt, timely referral as necessary (Nwokoro, 2014).

According to WHO (2005) one of the methods of reducing maternal mortality is to ensure skilled attendance at delivery and strengthen health system to ensure 24hours emergency obstetric care. Since much of maternal healthcare depends on skilled attendance long term strategic resource planning cannot be over emphasized.

Theoretical Review

Theory of Planned Behaviour

Ajzen and Fishbein formulated the theory of reasoned action (TRA) in 1980. This result from attitude research from the Expectancy Value Models. Ajzen and Fishbein formulated the TRA after trying to estimate the discrepancy between attitude and behaviour.

This TRA was related to voluntary behaviour. Later on behaviour appeared not to be 100% voluntary and under control, this resulted in the addition of perceived behavioural control. With this addition the theory was called the theory of planned behaviour (TPB). The theory of planned behaviour is a theory which predicts deliberate behaviour, because behaviour can be deliberative and planned.

The theory of planned behaviour (TPB) was developed by Ajzen in 1988. The theory proposes a model which can measure how human actions are guided. It predicts the occurrence of a particular behaviour, provided that behaviour is intentional. The model is out lined in the figure below and represents the three variables which the theory suggests will predict the intention to perform behaviour. The intentions are the precursors of behavior.

Methodology

This study utilized a cross-sectional descriptive research design, which according to Shuttleworth (2008), is a scientific, non-experimental method which involves observing and describing the experience of subjects without influencing it in any way. This study was conducted in Yenagoa metropolis, Bayelsa State, Nigeria. Bayelsa State was created on October, 1, 1996 out of old Rivers State. Yenagoa is a Local Government Area in Bayelsa State, Nigeria. The target population for this study was women of childbearing age {15-49 years} in Yenagoa Metropolis. The population of this study comprises of a total population of 1080 women of childbearing age.

Sample Size

Using Taro Yamen's formula: $n = \frac{N}{1 + N(e)^2}$

n = sample size required(?)

N = number of women (15-49 years) in the population (1080)

e = allowable error (%) (0.05)

$n = \frac{1080}{1 + 1080(0.05)^2}$

$n = 243$

243 women of childbearing age was selected for this study. A purposive sample method was used to select the health facilities within Yenagoa metropolis then stratified random sample was used to select women of child bearing age within the various facilities.

Selected health facilities	Total number of women attending infant welfare clinic	Estimated number of women to be sampled
Federal Medical Centre Yenagoa	530	119
Primary health centre Igbogene	200	45
Comprehensive health centre Agudama	350	79
	1080	243

A structured questionnaire titled determinants of choice of delivery place and outcomes of pregnancy among women of childbearing age was used to elicit information from the sampled respondents. The questionnaire was designed from literature search on choice of delivery place among women. It contains 3 sections, sections A, B, and C, Section A contains eleven items used to elicit information on the biodata of the respondents, Section B contains seventeen items used to obtain information on determinants factor for choice of delivery place on a likert scale with "STRONGLY AGREE", "AGREE", "STRONGLY

DISAGREE" and "DISAGREE", Section C contains four items used to obtain information on the likely outcome of the choice birth place in which the respondents have to answer "YES" or "NO". The instrument contains a total of thirty-two items in all.

Validity refers to the degree to which an instrument accurately measures what it's to measure. Copies of the questionnaire were given to a Senior Lecturer in Nursing in University of Port Harcourt to determine its face and content validity. The structured questionnaire was subjected to a test-retest reliability study that was conducted among 10% of respondents in the target population, which were selected from Niger Delta Teaching Hospital Okolobiri. These respondents did not participate in the main study. The data collected was analyzed and the reliability coefficient was computed. A value of 0.07 to 1.00 was accepted as reliable.

Variables were analyzed using descriptive statistics of mean and standard deviation, and inferential statistics. The data were analyzed with the use of Statistical Package for Social Sciences (SPSS) version 20. Relationships between variables were tested using t-test. Results were presented in tables and figures. Statistical significance was set at $p\text{-value} \leq 0.05$, used as a criterion for either rejecting or retaining the null hypotheses.

Results

Demographic Data of Respondent

The age of respondents, majority were between the ages of 35-44 (43.6%). The result showed that Christianity 179 (73.7%), 7 (2.9%) which was in majority. For Marital Status majority were married 176 (72.4%). The occupation of respondents showed majority 114 (46.9%) of respondents are civil servants, while majority had tertiary education 107 (44.0%) on educational level. The level of income of respondents showed that majority earns above ₦100,000-83 (34.1%). The result showed that the number of children of respondents for those with 2 children 78 (32.1%), were in majority. (See Table 4.1).

Table 4.1: Demographic Data of Respondent

Items	Frequency	Percent
Age		
15-24	12	4.9
25-34	77	31.7
35-44	106	43.6
>44	48	19.8
Religion		
Christianity	179	73.7
Islam	56	23.0
Traditional	7	2.9
Others	1	.4
Marital Status		
Single	20	8.2
Married	176	72.4
Divorced	42	17.3
Widowed	3	1.2
Separated	2	.8
Occupation		
Trading	16	6.6
Housewife	33	13.6
Civil Servant	114	46.9
Teaching	40	16.5
Farming	4	1.6
Others	31	12.8
Private employee	5	2.1
Educational Level		
No formal education	8	3.3
Primary	41	16.9
Secondary	87	35.8
Tertiary	107	44.0
level of Income		
<20,000	39	16.0
20,000-40,000	43	17.7
41,000-60,000	46	18.9
61,000-80,000	32	13.2
81,000-100,000	-	-
>100,000	83	34.1
Number of Children		
1	29	11.9
2	78	32.1
3	72	29.6
4	29	11.9
>4	35	14.4

Demographic History

The places where respondents go for antenatal care in their last pregnancy as follows: Hospital/Health Centre 151(62.1%), TBAs place 70(28.8%), Church/spiritual Healing home 16(6.6%), Home 6(2.5%). The table also revealed those who decided where pregnant women went for ANC during your Last Pregnancy; the findings are as follows: Self 69(28.4%), Husband 116(47.7%), Mother 46(18.9%), Mother-in-law 7(2.9%), Pastor 5(2.1%). Where respondents delivered of their last baby showed that 143(58.8%) had it at the Hospital/Health Centre; 73(30.0%) went to Traditional Birth Attendants. home, 16(6.6%) had it at the church/spiritual Healing home; 11(4.5%) had a home birth.

Who had the final decision on where you delivered your Last Pregnancy: Self 64(26.3%), Husband 114(46.9%), Mother 53(21.8%), Mother-in-law 7(2.9%), Pastor 4(1.6%), Others 1(0.4%). (See table 4.2).

Table 4.2: Demographic History

	Items	Frequency	Percent
Where is the place of your antenatal care in your last pregnancy	Hospital/Health Centre	151	62.1
	TBAs place	70	28.8
	Church/spiritual Healing home	16	6.6
	Home	6	2.5
Who decided where you went for ANC during your Last Pregnancy	Self	69	28.4
	Husband	116	47.7
	Mother	46	18.9
	Mother-in-law	7	2.9
	Pastor	5	2.1
Where did you deliver your last baby	Hospital/Health Centre	143	58.8
	TBAs place	73	30.0
	Church/spiritual Healing home	16	6.6
	Home	11	4.5
Who had the final decision on where you delivered your Last Pregnancy	Self	64	26.3
	Husband	114	46.9
	Mother	53	21.8
	Mother-in-law	7	2.9
	Pastor	4	1.6
	Others	1	.4

Determinant of Choice of Place of Birth

The results presented in mean and standard deviation of the following items: Cost of medical bill is affordable (mean=3.26, S.D=0.983); Short distance in the place of birth (mean=2.69, S.D=1.137); Availability of transportation to the place of delivery (mean=3.05, S.D=0.865); Nurses are kind (mean=2.25, S.D=1.064); Fear of being operated upon (mean=2.02, S.D=1.158); Prompt attendance to the client in labour (mean=3.47, S.D=0.759); Competency (skill) of the health care workers (mean=2.81, S.D=1.210); Unexpected time of delivery (mean=1.90, S.D=1.078); Inability to book for antenatal care (mean=1.75, S.D=1.063); The facility's practice is in line with my culture and belief (mean=2.24, S.D=1.265); Nurses/Midwives were abusive (mean=1.47/0.950); Faith based clinic is more conducive (mean=2.46, S.D=1.404); Prayers said in faith clinics made my choice (mean=2.48, S.D=1.393); Attention is often in faith based clinic better than government facility (mean=2.49, S.D=1.391); Delivery things expected in the hospital are too many and costly (mean=1.77, S.D=0.964); Fear of episiotomy (mean=1.79, S.D=1.004) and the cost of medical bill not affordable (mean=1.40, S.D=0.890).

Table 4.3: Determinant of Choice of Place of Birth

Items	Strongly Agree	Disagree	Agree	Strongly Disagree	Mean/SD
Cost of medical bill is affordable	27(11.1%)	12(4.9%)	74(30.5%)	130(53.5%)	3.26/0.983
Short distance in the place of birth	63(25.9%)	14(5.8%)	99(40.7%)	67(27.6%)	2.69/1.137
Availability of transportation to the place of delivery	25(10.3%)	9(3.7%)	137(56.4%)	72(29.6%)	3.05/0.865
Nurses are kind	83(34.2%)	50(20.6%)	79(32.5%)	31(12.8%)	2.25/1.064
Fear of being operated upon (Surgery)	113(46.5%)	60(24.7%)	23(9.5%)	47(19.3%)	2.02/1.158
Prompt attendance to the client in labour	9(3.7%)	12(4.9%)	76(31.3%)	146(60.1%)	3.47/0.759
Competency (skill) of the health care workers	64(26.3%)	14(5.8%)	71(29.2%)	94(38.7%)	2.81/1.210
Unexpected time of delivery	132(54.3%)	23(9.5%)	67(27.6%)	21(8.6%)	1.90/1.078
Inability to book for antenatal care	151(62.1%)	24(9.9%)	45(18.5%)	23(9.5%)	1.75/1.063
The facility's practice is in line with my culture and belief	112(46.1%)	19(7.8%)	53(21.8%)	59(24.3%)	2.24/1.265
Nurses/Midwives were abusive	188(77.4%)	14(5.8%)	22(9.1%)	19(7.8%)	1.47/0.950
Faith based clinic is more conducive	107(44.0%)	17(7.0%)	21(8.6%)	98(40.3%)	2.46/1.404
Prayers said in faith clinics made my choice	107(44.0%)	14(5.8%)	24(9.9%)	98(40.3%)	2.48/1.393
Attention is often in faith based clinic better than government facility	104(42.8%)	20(8.2%)	19(7.8%)	100(41.2%)	2.49/1.391
Delivery things expected in the hospital are too many and costly	127(52.3%)	63(25.9%)	34(14.0%)	19(7.8%)	1.77/0.964
Fear of episiotomy	138(56.8%)	35(14.4%)	55(22.6%)	15(6.2%)	1.79/1.004
Cost of medical bill not affordable	195(80.2%)	17(7.0%)	14(5.8%)	17(7.0%)	1.40/0.890

Outcome of Delivery in Hospitals/Clinics

Outcome of respondents who delivered their baby at the hospital/clinic reported the following: out of 143 respondents had a successful delivery 135(94.4%) while 8(5.6%) did not, 13(9.1%) lost their baby while 130(90.9%) went home with their babies. Again, out of

143 respondents 120(83.9%) had laceration during delivery while 23(16.1%) did not, 45(31.5%) out of 143 had prolonged labour while 98(68.5%) did not, out of the 143, 44(30.8%) respondents had obstructed labour while 99(69.2%) did not, of the 143 respondents 43(30.1%) had labour that resulted to Caesarean Section while 100(69.9%) had a normal delivery, of the 143 respondents, 45(31.5%) reported that they lost plenty of blood while 98(68.5%) did not. (See Table 4.4)

Table 4.4: Outcome of Delivery in Hospitals/Clinics

Outcome (items)	N	No		Yes	
		Frequency	Percentages	Frequency	Percentages
I had a successful delivery	143	8	5.6	135	94.4
I lost my baby after birth	143	130	90.9	13	9.1
I had laceration	143	23	16.1	120	83.9
I had prolonged labour	143	98	68.5	45	31.5
I had obstructed labour	143	99	69.2	44	30.8
Labour result in Caesarean Section	143	100	69.9	43	30.1
I lost plenty of blood	143	98	68.5	45	31.3

Outcome of Delivery at TBAs place

Outcome of respondents who delivered their baby at the TBA reported the following: out of 73 respondents had a successful delivery 60(82.2%) while 13(17.8%) did not, 10(13.7%) lost their baby while 63(86.3%) went home with their babies. Again, out of 73 respondents 53(72.6%) had laceration during delivery while 20(27.4%) did not, 60(82.2%) out of 73 had prolonged labour while 13(17.8%) did not, out of the 73, 60(82.2%) respondents had obstructed labour while 13(17.8%) did not, of the 73 respondents 50(68.5%) had labour that resulted to Caesarean Section while 23(31.5%) had a normal delivery, of the 73 respondents, 42(57.5%) reported that they lost plenty of blood while 31(42.5%) did not.(see Table 4.5).

Table 4.5: Outcome of Delivery at TBAs place

Outcome (items)	N	No		Yes	
		Frequency	Percentages	Frequency	Percentages
I had a successful delivery	73	13	17.8	60	82.2
I lost my baby	73	63	86.3	10	13.7
I had laceration	73	20	27.4	53	72.6
I had prolonged labour	73	13	17.8	60	82.2
I had obstructed labour	73	13	17.8	60	82.2
Labour result in C/S	73	23	31.5	50	68.5
I lost plenty of blood	73	30	41.1	43	58.9

Outcome of Delivery at church

Outcome of respondents who delivered their baby at the Church reported the following: out of 16 respondents had a successful delivery 9(56.3%) while 7(43.7%) did not, 7(43.7%) lost their baby while 9(56.3%) went home with their babies. Again, out of 16 respondents 5(31.3%) had laceration during delivery while 11(68.7%) did not, 10(62.5%) out of 16 had prolonged labour while 6(37.5%) did not, out of the 16, 11(68.7%) respondents had obstructed labour while 5(31.3%) did not, of the 16 respondents 10(62.5%) had labour that resulted to Caesarean Section while 6(37.5%) had a normal delivery, of the 16 respondents, 8(50%) reported that they lost plenty of blood while 8(50%) did not. (see Table 4.6).

Table 4.6: Outcome of Delivery at church

Outcome (items)	N	No		Yes	
		Frequency	Percentages	Frequency	Percentages
I had a successful delivery	16	7	43.7	9	56.3
I lost my baby	16	9	56.3	7	43.7
I had laceration	16	11	68.7	5	31.3
I had prolonged labour	16	6	37.5	10	62.5
I had obstructed labour	16	5	31.3	11	68.7
Labour result in C/S	16	6	37.5	10	62.5
I lost plenty of blood	16	8	50.0	8	50.0

Outcome of Delivery at Home

Outcome of respondents who delivered their baby at the home reported the following: out of 11 respondents had a successful delivery 8(72.2%) while 3(27.1%) did not, 9(81.1%) lost their baby while 2(18.2%) went home with their babies. Again, out of 11 respondents 10(90.9%) had laceration during delivery while 1(9.1%) did not, 9(81.8%) out of 11 had

prolonged labour while 2(18.2%) did not, out of the 11, 8(72.2%) respondents had obstructed labour while 3(27.3%) did not, of the 11 respondents 9(81.8%) had labour that resulted to Caesarean Section while 2(18.2%) had a normal delivery, of the 11 respondents, 9(81.8%) reported that they lost plenty of blood while 2(18.2%) did not.(see Table 4.7).

Table 4.7: Outcome of Delivery at Home

Outcome (items)	No			Yes	
	N	Frequency	Percentages	Frequency	Percentages
I had a successful delivery	11	3	27.3	8	72.2
I lost my baby	11	2	18.2	9	81.8
I had laceration	11	1	9.1	10	90.9
I had prolonged labour	11	2	18.2	9	81.8
I had obstructed labour	11	3	27.3	8	72.2
Labour result in C/S	11	2	18.2	9	81.2
I lost plenty of blood	11	1	9.1	10	90.9

Hypothesis one: There is a significant difference between respondent's demographic characteristics(age) and choice of place of delivery

The result shows that there is a significant statistical difference between respondent's demographic characteristics (age) and choice of place of delivery (p.000). This supports the alternate hypothesis, thus the null hypothesis is rejected. The association between the age and choice of place of delivery was observed to be strong (t= 16.691, df = 227).

Hypothesis two: There is a significant difference between respondents demographic characteristics (educational status) and choice of place of delivery

The result shows that there is a significant statistical difference between respondent's demographic characteristics (educational status) and choice of place of delivery (p.000). This supports the alternate hypothesis, thus the null hypothesis is rejected. The association between the educational status and choice of place of delivery was observed to be strong (t= 22308, df = 233).

Hypothesis three: There is a significant difference between respondents demographic characteristics (parity) and choice of place of delivery

The result shows that there is a significant statistical difference between respondent's demographic characteristics (parity) and choice of place of delivery (p.000). This supports the alternate hypothesis, thus the null hypothesis is rejected. The association between the parity and choice of place of delivery was observed to be strong (t= 13806, df = 231).

Findings of the Study

Findings revealed that, most parturient attend antenatal clinic but not all the numbers returns to the hospital at time of delivery based on various reasons such as cost of medical

bill not affordable, faith based clinic are more conducive, nurses/midwives are abusive, short distance to place of birth, fear of being operated upon where some of the reasons given among others although, Results gotten from the tested hypothesis revealed a statistical difference between respondent's demographic characteristics (age, educational status, and parity) and choice of place of delivery. With regards to the findings above, Affordable medical bills, Female education, female empowerment, healthcare workers attitude, distance of health facilities from homes in most communities are the determinants to be addressed in curbing the Morbidity and Mortality rate and government should create policies that will bring these experienced unskilled attendants to received training to help improve services delivery in the society.

Discussion of Findings

Determinant/Factors for the choice of delivery place

In line with the findings of this study; increasing the proportion of institutional births has been seen as an important intervention to reduce the maternal mortality ratio (Chhabra, Saini, Singh, Honnakamble & Sharma, 2017); however, to a large extent there are different reasons that determines why pregnant women choice a particular place for delivery. Reported by Ngowi, Kamazima, Kibusi, Gesase and Bali (2017); more than three quarters of the respondents 629 (78.6%) reported to have delivered at the health facilities (dispensaries, health centres and hospitals), while 171 (21.4%) delivered at home/on the way to health facility. Their result showed that majority of women 617(77.1%) were assisted by skilled health care providers during delivery, 135(16.9) by traditional birth attendants, 26(3.2) by relatives and 22(2.8) had no assistance. Some women 12(1.5%) delivered at the health facilities but ended-up with a TBA's assistance.

This study found out determinants/factors for choosing a particular place of birth (mostly outside the clinical environment) includes: Fear of being operated upon (Surgery); Unexpected time of delivery; Inability to book for antenatal care; The facility's practice is in line with my culture and belief; Nurses/Midwives were abusive; Faith based clinic is more conducive; Prayers said in faith clinics made my choice; Attention is often in faith based clinic better than government facility; Delivery things expected in the hospital are too many and costly; Fear of episiotomy; and Cost of medical bill not affordable. In line with the findings of this study Gebrehiwot, (2014), noted that, regardless of women's reason for their choice of place of child birth; most frequently reason giving for choice of health institution delivery were that the health facilities were safe and clean, for better service, fear of complication and having information about health institution delivery (Ngowi, Kamazima, Kibusi, Gesase& Bali, 2017).

What are the likely outcomes of pregnancy among women of childbearing age in Yenagoa Metropolis?

In the current study, majority of respondent who delivered in hospital had a successful outcome this is to say that more parturient are becoming aware on the important of institutional delivery irrespective of the outcome of pregnancy. Only those that have a strong perceptions about cesarean section and death that still patronized TBAs, churches and delivered at home. Although in contrast to the finding of the current study, another study showed no increased rates of severe maternal morbidity among planned home births (De Jonge et. al., 2015) Women who planned home birth more often had spontaneous birth, less often episiotomy and use of oxytocin in the third stage compared to women who planned hospital birth (Bolten et. al.2016).

What are the factors influencing the choice of delivery place on outcome of pregnancy among women of childbearing age in Yenagoa metropolis?

Studies have shown that registering for antenatal care services at a particular hospital/clinic do not guarantee delivery/birth at the facility during the time of birth (Eliphas &Muiruri, 2016). In this study, majority registered for antenatal service at Hospital/Health Centre; the figure dropped when it was time for delivery at the hospital/health centers. These reports are influenced by a number of factors such as who decides where pregnant women go for antenatal and where they deliver. The findings of this study revealed that husbands decisions on where parturient go for antenatal and where they deliver their babies were in majority. Though, the outcome of pregnancy is measured by a successful birth (i.e., mother and babe are well); yet it is influenced by a number of factors such as; personal, cultural, religious, physical, physiological, heredity, medical history, economic background, birth preparedness etc (Eliphas & Muiruri, 2016; Kimani, Farquhar, Wanzala & Ng'ang'a, 2015); and to a greater extend mostly, is the person taking the delivery that influences its outcome. This study revealed that majority of respondents' delivery of their last baby was taking by skilled attendants.

Conclusion

The study investigated the determinant of choice of place of delivery and outcome of pregnancy among women of child bearing age in Yenagoa Metropolis. Findings revealed that, most parturient attend antenatal clinic but not all the numbers returns to the hospital at time of delivery based on various reasons such as cost of medical bill not affordable, faith based clinic are more conducive, nurses/midwives are abusive, short distance to place of birth, fear of being operated upon where some of the reasons given among others although, Results gotten from the tested hypothesis revealed a statistical difference between respondent's demographic characteristics (age, educational status, and parity) and choice of place of delivery. With regards to the findings above, Affordable medical bills, Female education, female empowerment, healthcare workers attitude, distance of health facilities

from homes in most communities are the determinants to be addressed in curbing the morbidity and mortality rate and government should create policies that will bring these experienced unskilled attendants to received training to help improve services delivery in the society.

Recommendations

Based on the findings of the study, the following recommendations were made;

1. Ministry of health in collaboration with government should organized orientation programmed in Yenagoa metropolis to enlighten the Yenagoa people on the benefit of hospital delivery to the women in the community.
2. Provision should be made by government on free medical treatment of pregnant women from pregnancy to postpartum stage. These will encourage women to go hospital for child delivery.
3. Midwife service scheme policy in Nigeria should be revaluated to accommodate traditional birth attendants, to create an effective guideline for training, practice and monitoring of traditional birth attendants in Nigeria.

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