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## MATERNAL HEALTHCARE SEEKING BEHAVIOUR IN RURAL COMMUNITIES OF IDO-OSI LGA, EKITI STATE, NIGERIA

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#### Abstract

This study assessed rural women's behaviour towards Antenatal and Postnatal Care in Ido-Osi Local Government Area of Ekiti State, Nigeria. It identified the type of health problems confronting them; examined their choice of healthcare; determined the factors influencing such choices and assessed factors associated with ANC and PNC service utilization. Primary data were generated through questionnaire administration among 399 respondents in three communities in a systematic way. Secondary data were obtained from Ido-osi LGA, textbooks and internet. Frequency-tables, percentages and ranking were employed to analyze the data. Findings revealed that 84% are married, 94% between 21 and 50years, 89.7% are gainfully employed and 81.4% earn less than N100,000/month. Vomiting is a common illness among pregnant women while dizziness is the sickness among those that gave birth in the last two years. Most of the sampled women consult female traditional birth attendance (92.2%), private health facility (89.7%) and government health facilities (83%). Reduced cost and proximity are the main determinants of caregiver. Socio-economic and Knowledge of pregnancy complications are the most significant factors that influence ANC and PNC service utilization respectively. The study recommends educating the rural women on the importance of modern health services before, during after child birth.

*Keywords:* child birth, child mortality, developing Countries, maternal mortality, pregnancy, rural areas and women.

### 1. Introduction

In most developing countries of the world, there is discrimination against women as a result of some sociocultural factors (Morrisson and

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Jutting, 2005). Meanwhile there is an adage that says "no woman, no nation", meaning, women are nation builders (James, 2023). The World Health Organisation (WHO) (2023) however reported that in 2020 about 800 women die on daily basis from avertible causes related to pregnancy and childbirth worldwide. Maternal death has been defined as the death of a woman during the period of pregnancy or within 42 days of termination of pregnancy regardless of the duration and site of the pregnancy from causes as a result of its management only (WHO, 2018). Oestergaard et. al (2009) reported that over 50% of neonatal deaths worldwide occurred in five countries to include Pakistan, India, Nigeria, China and Democratic Republic of Congo. Health seeking behavior is one of the most crucial predictor of women's health. Latunji and Akinyemi (2018:52) assert that healthcare seeking behavior is "any action or inaction undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy". Healthcare-seeking behaviour can be regarded as a person's plan of action to engaging (or not) with a particular health service.

Pregnancy is one of the most important events in the life of every woman and it is also a dynamic process in which a woman's risk status can change at any point in time (WHO, 2000). Hence, pregnant women can be said to be at risk of developing some health problems such as anemia, fever, malaria, excessive fatigue, diarrhea, reproductive tract infections, sexually transmitted infections, headache, backache and swelling cramps (Chamberlain, 2001). These problems may be as a result of either the pathological or physiological process or may also be as result of deficiencies in the normal body constituents. The health of women during pregnancy, childbirth and the postpartum period is what is known as maternal health while maternal health care services are antenatal care (ANC), delivery care and postnatal care (PNC) services.

To optimize the maternal health outcomes, the World Health Organisation recommends four antenatal care (ANC) visits, delivery in a health facility and three postnatal care (PNC) visits for women (WHO, 2014). In Nigeria, maternal mortality figure is high and varies from one geopolitical zone to another. The country alone accounts for almost 20 percent of global maternal mortality indicating one of the countries with the highest maternal deaths worldwide (Itodo *et al.*, 2021). In Northern

Nigeria, maternal mortality is high and a major health problem facing most communities in the region (Nigerian Tribune 08<sup>th</sup> March, 2020). For example, in rural Makwalla, Kaduna State, pregnant women need to cross a river before accessing the nearest health facility (Nigerian Tribune 08<sup>th</sup> March, 2020).

The World Health Organization (2019), reported that the MMR of Nigeria is 814 deaths (per 100,000 live births). In contrast to the lifetime risk in developed countries estimated at 1 in 4,900, the lifetime risk of a Nigerian woman dying during pregnancy, childbirth, postpartum or post-abortion is one in 22 (WHO, 2019). Despite the difficulties encountered in accessing health facilities, rural women in Nigeria still have at least one more child than the country's average of 5.7 children (NDHS, 2008). Healthcare-seeking behavior emerged as a way of tackling perceived ill health by taking corrective actions (Sreeramareddy *et al.*, 2006). Hence, a woman's decision in seeking healthcare is a combination of her personal needs, social forces, actions of healthcare providers, and the location of services (Ferdous *et al.*, 2013).

Unsuitable health seeking behavior has been linked to worse health outcomes, increased morbidity, mortality, and poorer health statistics in some rural areas of Nigeria (Atuyambe, 2008; Mwase, 2015). For instance, Onwujekwe *et al.*, (2011) in their study reported that about 71 percent of rural pregnant women in Nigeria indicated inappropriate health seeking behavior during their illness episode while only 53 percent of urban dwellers reported inappropriate health seeking behavior during their last illness episodes. On yearly basis, a lot of Nigerian rural women are faced with pregnancy related complications attributed to haemorrhage, high blood pressure, obstructed labour, puerperal sepsis and unsafe abortions (Olatunji and Sule-Odu, 2001). It is therefore imperative to find out what could be responsible for these complications in women living in rural areas of Nigeria in spite of the fact that many studies relating to this have been carried out in Nigeria.

This study therefore seeks to unravel the behavioral pattern of pregnant women and women who gave birth in the last two years when seeking healthcare services using rural areas of Ido-osi local government area of Ekiti State as example. The study specifically identifies the pregnant women and women who gave birth in the last two years; identifies the type of health problems confronting pregnant women/ those that gave birth in the last two years; examines their choice of place of healthcare; determines the factors influencing such choices and assess the factors associated with ANC and PNC services utilization.

### 2. Methods and Materials

### 2.1. Description to case study area

Ido-osi Local Government Area of Ekiti State, Nigeria is the study area for this research. The local government area is located in the northern part of the State between latitude 7°45 N and 7 °54" N of the equator and Longitude 5°0"5E and 5°15'E of the Greenwich Meridian (Figure 1). It is bounded in the North by Ilejemeje Local Government Area and Moba Local Government Area, in the East by Oye Local Government Area, in the West by Ijero Local Government and in the South by Irepodun/ Ifelodun Local Government Area (EkMI, 2017).

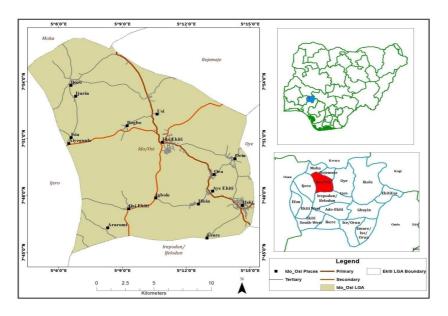


Figure 1. Ido-Osi LGA. Inserted maps show Ekiti State and Nigeria (Source: Ekiti State Ministry of Information)

There are two seasons of rainy and dry seasons and temperature ranges between 32°c and 35°c. The relative humidity is high of about 85%. According to National Population Commission (2006), the local government area has about 159,114 people (EkMI, 2017). The people of this area are predominantly farmers with few cottage industries and civil servants.

The study was conducted in the rural districts of Ido-osi local government area of Ekiti State. Ido-osi local government consists of three (3) districts namely: Ido-Ekiti (Aiyetoro Ekiti, Igole Ekiti, Ilogbo Ekiti, Osi Ekiti and Usi Ekiti), Orin-Ekiti (Aeye Ekiti, Ifisin Ekiti, Ilogun, Odo-ora, Oke-ora and Ora-Ekiti) and Ifaki Ekiti (Igbira camp, Ipole, Obaji, Odo Oba-Aladesusi, Okalawa, Oke-Ese, Osi and Temigbola) districts.

### 2.2. Methods

The population of Ido-osi L.G.A in 2006 was 159,114 (Females 78,540 and male 81,461) as the only officially recognized record of population. To determine sample size and select respondents therefore, Yamane's formula was employed to obtain the required and appropriate sample size with the use of female population. Yamane's formula as expressed by Glenn (1992) is denoted by

$$n = \frac{N}{1 + N(e) 2}$$

Where n= sample size N = population size (78,540 for females) e = error of sampling 0.05, Hence n is 399

A total of 399 women that are pregnant and who gave birth in the last 2 years were randomly selected for the study. Purposeful sampling technique was employed for the study since the study deals with rural women that are pregnant and those who gave birth in the last 2 years. The population of women in these villages could not be ascertained as there are no official records of it, copies of questionnaire were therefore distributed equally among respondents in the three villages. Since n is 399, therefore a total of 133 copies of questionnaire were administered on the target population per settlement.

A two-stage sampling procedure was employed as sampling technique. Firstly, the three districts were used as the sampling frame and a village was sampled from each district to make a total of three villages (Igole Ekiti, Ora Ekiti and Obaji) in all. Secondly, random sampling was employed to sample the target population. In this context, every household with a pregnant woman and who gave birth in the last 2 years were sampled until a total of 399 is reached. Descriptive statistics such as the frequencies, simple percentages, tables and ranking were employed to analyze the generated data.

### 3. Results and Discussion

# 3.1. Socio-Demographic and Socio-Economic Characteristics of Sampled Rural Women

Table 1 reveals the socio-demographic and socio-economic characteristics of sampled rural women. From the table, majority (94%) are within the age bracket of 21-50years.

 ${\it Table~1}$  Socio-demographic and socio-economic characteristics of respondents

Characteristics	Frequency (N = 399)	Percentage (%)	Cumulative Percentage (%)
a. Age (Years)			
10-20	24	6.0	6.0
21-30	113	28.3	34.3
31-40	239	59.9	94.2
41-50	23	5.8	100.0
b. Marital Status			
Single	16	4.0	4.0
Married	335	84.0	88.0
Separated	40	10.0	98.0
Widowed	08	2.0	100.0
c. Educational Status			
No Formal Education	11	2.8	2.8
Primary Education	31	7.8	10.5
Secondary Education	277	69.4	79.9

Tertiary Education	80	20.1	100.0
d. Primary Occupation			
Artisan	33	8.3	8.3
Civil Service	190	47.6	55.9
Farming	67	16.8	72.7
Trading	68	17.0	89.7
Unemployed	41	10.3	100.0
e. Income ( <del>N</del> )			
10,000-50,000	200	50.1	50.1
51,000-100,000	125	31.3	81.4
101,000-150,000	55	13.8	95.2
151,000-200,000	19	4.8	100.0

Source: Authors' Fieldwork, 2022

This is expected as it is the reproductive age of women. Also, 84% are married, 97.3% had formal education. This is similar to the study of Guihao, *et al.*, (2019) where they made the assertion that pregnant women who seek healthcare services in China are in their reproductive active ages, married and have good knowledge of healthcare services. Furthermore, 89.7% are gainfully employed, 81.4% earned less than N100,000/month, 97.2% has household size of less than 10 people. This is in tandem with Delwar (2020), when he confirmed that in Bangladesh, occupation and income capacity are significant factors to consider when pregnant women are seeking healthcare. For educational status of husband, 97.2% had formal education.

# 3.2. Health problems confronting pregnant women/those that gave birth in the last two years

Table 2 depicts types of health problems confronting pregnant rural women and those that gave birth in the last two years although they are not limited to these. From the table, 83.2% indicated vomiting as the major health problems confronting them. Confirming this, The Johns Hopkins Medicine (2022) highlighted morning sickness with vomiting and other discomforts during pregnancy as the health problems confronting pregnant rural women. Only those who gave birth in the last 2 years (N = 200) were later considered and dizziness was revealed by all of them

(100%) as the major health problem confronting them. This is in tandem with Hossain (2020)'s findings that women experience a range of conflicting and contrasting emotions during the postpartum period, these range from dizziness, intense feelings of joy and love for their new baby, to acute feelings of loneliness, low mood and depression. According to the respondents, the most common health challenge facing their babies is jaundice. This confirms a study by WHO (2021) on new born health.

 ${\it Table~2}$  Health problems confronting pregnant women and those that gave birth in the last two years

Health Problems	Frequency (N = 399)	Percentage (%)
a. Health Problems experienced during pregnancy		
Fainting	179	44.9
High Blood Pressure	68	17.0
Malaise	196	49.1
Shortage of Blood	41	10.0
Headache	91	22.8
Malaria	199	49.9
Vomiting	332	83.2
Fever	135	33.8
Oodema	155	38.8
obstructed labour	41	10.0
Threatening Abortion	33	8.3
Haemorrhage	64	16.0
Puerperal sepsis	33	8.33
b. Health Problems being experienced after delivery	Frequency (N = 200)	Percentage
Breast Engorgement	64	32.0
Dizziness	200	100
Retained Placenta	124	62
Abdominal Pain	155	77.5
Bleeding after delivery	64	32
Virginal itching	41	20.5
Virginal discharge	41	20.5
High Blood Pressure	41	20.5

<sup>\*</sup> Multiple Responses

Source: Authors' fieldwork, 2022

### 3.3. Choice of place of healthcare

Table 3 presents the distribution of respondents based on choice of ANC giver and factors affecting the choice. From the table, there were multiple responses, indicating these women do not limit themselves to only one healthcare provider but rather sought care from different healthcare providers. However, the main ones consulted include: female traditional birth attendance (92.2%), private health facility (89.7%), government health facilities (83%), and faith home (64.9%). This finding is against Adewoye *et al.*, (2013) where they discovered high patronage of government health facilities for antenatal care than any other caregiver. There is none of the respondents that do not seek one caregiver or another.

When factors/reasons for choice of healthcare provider were considered, there were multiple responses too and all of the respondents indicated that reduced cost (100%) and proximity (100%) are the main factors/reasons for choice of caregiver. This supports the study by Seljeskog *et al.*, 2016 that economic reasons, quality of care, attitudes of caregiver were the main factors for choice of caregiver. Similarly, religious factor (81.5%), prolonged waiting time (66.2%), attitude and behavior of health workers (66.2%), and trust/experience (66.2%) were also considered before choosing their caregivers. The other reasons given for choices of health caregiver are husband/family decision (58.6%), type of services provided (55.9%), ease of payment (48.1%), affordability (47.6%), cultural practices (18%) and lack of information (7.8%).

As regards the frequency of antenatal care, 68.9% indicated more than three (3) times, 22.8% indicated 2-3times while 8.3% said they visited only once. For timing of the first ANC, 92.2% revealed first trimester. This contradicts Islam and Masud (2018)'findings that mothers received less than three (2.7 visits) ANC visits and only 6% receive the recommended eight or more ANC visits. About 22% of the mothers received all the prescribed basic items of ANC services. About one-fifth (21%) of the mothers never received ANC.

Table 3 Choice of ANC caregiver and factors affecting choice of caregiver

Variable	Frequency (N = 399)	Percentage (%)
a. Healthcare being sought during pregnancy		
Private Health Facility	358	89.7
Female traditional birth attendants	368	92.2
Faith Home	259	64.9
Government health facility	331	83.0
Islamic Cleric	132	33.1
Family	163	40.9
Herbalists	140	35.1
Pharmaceutical store	50	12.5
b. Factors/Reasons for choice of healthcare giver		
Reduced Cost	399	100.0
Proximity	399	100.0
Inadequate Human Resources in Health Facility	0	0.0
Poor Road Access	0	0.0
Lack of means of transport	0	0.0
Prolonged waiting time to see a doctor	264	66.2
Attitude and behavior of health workers	264	66.2
Lack of Information	31	7.8
Illiteracy	0	0.0
Cultural Practices	72	18.0
Husband Family Decision	234	58.6
Services Provided	223	55.9
Religious Factor	325	81.5
Ease of Payment	192	48.1
Trust/Experience	264	66.2
Affordability	190	47.6
Others	0	0.0

<sup>\*</sup> Multiple Responses

Source: Authors' Field work, 2022

## 3.4. Choice of place of delivery and PNC utilization by Women

When the place of delivery by respondents was asked (Table 4), Out of the 200 women who delivered in the last two years, 61% said they delivered their babies in private hospitals, followed by traditional birth

attendants (TBAs) (17.5%). Very few used government facilities (13%) such as hospitals, clinic, maternity homes and primary healthcare board. This was validated by Osubor *et al.*, 2006 who reported that private maternity center was the most preferred place for childbirth, followed by traditional birth attendants (TBAs) while government facility was preferred by only a few. Reasons for the low preference included irregularity of staff at work, poor quality of services, and high costs. As shown in Table 4, 3% indicated they deliver at faith home, 3% said at home and 2.5% indicated with herbalist. Table 4 further revealed where healthcare was sought after delivery by respondents. There were multiple responses as 100% said pharmaceutical shops, 79% indicated health facility, 65.5% said traditional birth attendants, 2.5% said Islamic cleric, 27.5% indicated family and 15.5% said herbalist.

Factors influencing choice of healthcare giver after delivery were sought. Table 4 revealed that reduced cost (100%), ease of payment (100%), trust/experience (100%) were the main factors considered by respondents. Similarly, 83% indicated distance from home, 79% said services provided, 74% said attitude and behavior of health workers, 58.5% and 53.5% said religious factor and waiting time to see a doctor respectively are the factors considered. Few (18%) respondents indicated cultural practices as the main factor considered before choice of caregiver after delivery. This is in line with the study by Aluko *et al.*, (2020) which discovered that barriers to healthcare facilities delivery among women of childbearing age were mostly associated with factors surrounding income, accessible healthcare centre to deliver and education.

 ${\it Table~4}$  Place of Delivery and utilization of PNC by Women

a. Place of delivery	Frequency	Percentage
Private Health Facility	122	61
Government facilities	26	13
Faith home	6	3
Traditional Birth attendants	35	17.5
Home	6	3
Herbalist	5	2.5
b. Where healthcare is sought after delivery		
Health Facility	158	79

Herbalist	31	15.5
Faith Home	0	0.0
Pharmaceutical Shops	200	100.0
Family	55	27.5
Islamic Cleric	5	2.5
Traditional Birth Attendants	131	65.5
Others	0	0.0
c. Factors influencing choice of PNC care giver		
Reduced cost	200	100.0
Distance from home	166	83
Inadequate Human Resources	0	0.0
Poor Road Access	0	0.0
Lack of means of transport	0	0.0
Waiting time to see a doctor	107	53.5
Attitude and Behavior of health worker	148	74
Lack of Information	0	0.0
Illiteracy	0	0.0
Cultural Practices	36	18
Services Provided	158	79
Religious Factor	117	58.5
Ease of payment	200	100.0
Trust /Experience	200	100.0
Others	0	0.0

<sup>\*</sup> Multiple Responses

Source: Authors' fieldwork, 2022

### 3.5. Factors associated with ANC service utilization

Factors associated with antenatal care service utilization were examined. Table 5 presents these factors, socioeconomic factor was ranked as the most important with a mean value of 11.8 and this was closely followed by cultural factors with a mean value of 11.1. religious and Birth order of the last birth was ranked 3<sup>rd</sup> with each mean value of 9.4. Corroborating the work of Kifle (2017) that educational status of the women, birth order and knowledge about pregnancy complications were the major factors associated with maternal health care service seeking behavior in rural area of Ethiopia.

 ${\it Table~5}$  Factors associated with antenatal care service utilization

Characteristics	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean ÿ	Rank
Educational Status	0 (0.0)	64 (16.0)	176 (44.1)	159 (39.8)	0 (0.0)	7.0	$4^{ m th}$
Occupation	0 (0.0)	31 (7.8)	176 (44.1)	192 (48.1)	0 (0.0)	6.4	5 <sup>th</sup>
Birth order of the last birth	135 (33.8)	31 (7.8)	74 (18.5)	159 (39.8)	0 (0.0)	9.4	$3^{\mathrm{rd}}$
Socioeconomic Factor	159 (39.8)	64 (16.0)	176 (44.1)	0 (0.0)	0 (0.0)	11.8	$1^{\mathrm{st}}$
Knowledge about pregnancy	0 (0.0)	64 (16.0)	176 (44.1)	159 (39.8)	0 (0.0)	7.0	$4^{ m th}$
Cultural factor	159 (39.8)	31 (7.8)	176 (44.1)	33 (8.3)	0 (0.0)	11.1	$2^{\rm nd}$
Physical factor	0 (0.0)	0 (0.0)	209 (52.4)	159 (39.8)	0 (0.0)	5.8	6 <sup>th</sup>
Religious factors	135 (33.8)	31 (7.8)	74 (18.5)	159 (39.8)	0 (0.0)	9.4	3 <sup>rd</sup>

Source: Authors' fieldwork, 2022

### 3.6. Factors associated with post-natal care utilization

On factors associated with post-natal care utilization (Table 6), larger proportion of the respondents are aware of pregnancy complications and so make use of health facilities more after delivery as this factor ranks first.

Table 6 Factors associated with post-natal care utilization

Characteristics	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean ÿ	Rank
Religion	0 (0.0)	15 (7.5)	105 (52.5)	80 (39.5)	0 (0.0)	2.45	6 <sup>th</sup>
Educational Status	0 (0.0)	16(7.5)	105(52.5)	79 (39.5)	0 (0.0)	3.08	$3^{\mathrm{rd}}$

Birth Order	16 (8)	15 (7.5)	90(45)	79 (39.5)	0 (0.0)	2.84	$4^{ m th}$
Knowledge of pregnancy complications	147 (73.5)	32(16)	21 (10.5)	0 (0.0)	0 (0.0)	4.63	$1^{ m st}$
Occupation	0 (0.0)	15(7.5)	104(52)	81 (40.5)	0 (0.0)	2.67	5 <sup>th</sup>
Husband literacy	0 (0.0)	15(7.5)	105 (52.5)	80 (39.5)	0 (0.0)	2.45	$6^{th}$
Women who gave birth in health facility	0 (0.0)	96(48)	104(52)	0 (0.0)	0 (0.0)	3.48	2 <sup>nd</sup>

Source: Authors' Fieldwork, 2022

This is in tandem with Igboanusi *et al.*, (2019), when they compared the factors affecting the utilization of post-natal care services in primary health care facilities in urban and rural settlement in Kaduna. In their investigation, pregnant women who are aware of the consequences of not seeking healthcare services in pregnancy attend post-natal clinic more both in urban and rural settlement of Kaduna State. The second most important factor respondents considered is the fact that large proportion of them gave birth in health facility (mean =3.48). This has given them prior knowledge of what post-natal care is all about. The third factor is the educational status with a mean value of 3.08.

### 4. Conclusion

From the foregoing, the study has critically assessed the mode at which pregnant women and women who gave birth in the last two years seek and respond to health care issues in Ido-Osi Local Government Area of Ekiti State, Nigeria. The study revealed the type of health problems challenging the pregnant women to include vomiting as the major health problems confronting them while dizziness is the major health problem confronting those that gave birth in the last two years. The most common health challenge facing their babies is jaundice. Reduced cost, ease of payment, and trust/experience were the main factors considered by respondents before seeking healthcare services.

The study further discovered that rural women do not limit themselves to only one health caregiver but rather sought care from different health caregivers. However, the main ones consulted include: female traditional birth attendance, private health facility, government health facilities, and faith home. Hence, pregnant rural women and those that have just given birth in the last two years should be encouraged and enlightened on the importance of using modern health facilities for antenatal, delivery and post-natal services. Government facilities should be subsidized for this group of people as women are very important in nation building.

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