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ASSESSMENT OF THE UTILISATION OF PRIMARY HEALTH CARE SERVICES AMONG WOMEN OF CHILD BEARING AGE 15-45YEARS IN EGOR LOCAL GOVERNMENT AREA, EDO STATE

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ABSTRACT
Primary health care is a whole-of-society approach to effectively organize and strengthen national health systems to bring services for health and wellbeing closer to communities. This descriptive cross-sectional study assessed utilization of PHC (Primary Health Care) services among women of child bearing age 15-45years in Egor LGA, Edo State. A total of 161 questionnaires were distributed and 150 were retrieved, giving a response rate of 93.2%. The objectives of the study are to evaluate level of utilization of PHC services, ascertain level of satisfaction in utilization of PHC services, and identify factors that influence utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State. The instrument for data collection was structured questionnaire with reliability of 0.788. SPSS version 22 was used to analyze the data. The result shows that the mean ± SD age of the respondent is (32.48 ± 6.928years). Only 72(48.0%) had utilized PHC services and the common reasons for utilizing the services include monitoring the health status of child/children 25(34.7%) and immunization 22(30.6%) while only 14(9.3%) indicated interest to utilize the PHC when next they need healthcare services. Level of satisfaction regarding PHC service utilization was 48(66.7%). Service utilization was not associated with economic status (P = 0.109). Identified factors influencing service utilization include timely service delivery 14(100.0%) and accessibility of service with ease 12(85.7%) while barriers to utilization include unavailability of Doctors/Nurses 127(93.4%), poor quality service 125(91.9%), unavailability of essential drugs 114(83.8%) and attitude of staff 87(64.0%). Conclusion: The study demonstrated poor PHC service utilization but high level of satisfaction among the few users. Therefore, efforts devoted to addressing the identified barriers using creative and innovative approaches should be implemented.

KEYWORDS: *Assessment, Primary Health Care, Women, Child Bearing Age, Utilization, Healthcare Services*

INTRODUCTION

Access to information about maternal services should be available in the community to help women make choices about who to see and where to go, as well as decide the type of care they require. Information about family planning services can help reduce unwanted pregnancies and their adverse consequences (Macarayan *et al.,* 2018). Access to health care particularly at the critical time of birth, can help ensure that childbirth is a joyful event. Skilled antenatal care and birth attendance has been advocated globally as the most crucial intervention to reduce maternal mortality. Poor usage of skilled attendance and maternal primary health care services results in high levels of maternal mortality in the developing countries (Okonofua *et al*., 2018).

Primary Health Care (PHC) was designed to provide accessible health care for all. Access means that women can reach maternal health care easily and not be deterred by cost or poor treatment by staff. The goal of PHC was to provide accessible health for all by the year 2000 and beyond. Consequently, to achieve this goal, the National Health Policy brought a comprehensive health care system based on primary health care. The main objective is to promote, protect, prevent, restore and rehabilitate all citizens within the context of available resources. As a result, individuals and communities are assured of productivity, social well-being and enjoyment of living (Otovwe and Elizabeth, 2017)

In Nigeria, successive national health policies recognize PHC as a core underlying principle, serving as the basic philosophy and strategy for national health development (Federal Ministry of Health, Nigeria (FMOH), 2016). Since the adoption of PHC as the cornerstone of the health system in Nigeria, it has undergone series of evolution with various steps taken to reposition and revitalize it towards improving access to and utilization of basic health services. The implementation of PHC in Nigeria is through services offered at various primary health care facilities and health posts across the country. These services include health education concerning prevailing health problems and their prevention and control, maternal and child health services including family planning, immunization against the major infectious diseases as well as treatment of minor ailments. Despite repeated attempts by the Nigerian government to reposition and revitalize PHC, various constraints have hampered its implementation and thus threaten the achievement of UHC, with poor or low utilization of PHC services being a major factor (World Health Organization (WHO), United Nations Children´s Fund (UNICEF), 2018). The preference of unorthodox treatment sites such as patent medicine vendors and traditional healers, as well as private and government-owned secondary and tertiary health facilities other than the designated primary health care facilities by majority of populations in parts of Nigeria has been documented (Otovwe and Elizabeth, 2017).

Nigeria has one of the leading maternal mortality ratio estimated at 512 maternal deaths per 100,000 live births in 2018 and only (43%) of deliveries were overseen by skilled professional, 20% were conducted by TBAs, relatives of pregnant women assist in 22% of deliveries while 11% of births received no assistance (National Population Commission (NPC) [Nigeria] & International Coach Federation (ICF),

2019). This pattern of health seeking behaviour resulted to 556 pregnancy-related maternal mortality (NPC & ICF, 2019). It has been estimated that the ratio of health facility delivery to home delivery in south-south Nigeria is 50.1% vs 49.9% (WHO/United Nations Children Emergency Fund (UNICEF), 2018). Dissatisfaction with PHC services has been reported by several authors (Okonofua *et al*., 2018; Oyekale, 2017; Peoples *et al*., 2021). However, much has not been done to ascertain utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State. Hence, this study aims to assess and understand the current state of primary healthcare utilization and identify areas for improvement to enhance the health of women of child bearing age 15-49 years in Egor local government area, Edo state. The objectives of this study are, to assess the level of utilization of PHC services among women of child bearing age 15-49 years in Egor local government area, Edo state, to determine the level of satisfaction in the utilization of PHC services, and to identify the factors that influences utilization of PHC services among women of child bearing age 15-49 years in Egor local government area, Edo state.

MATERIALS AND METHODS

Research Design

Descriptive cross-sectional study design was used for the study. This design is for describing relationships among phenomena at fixed point in time.

Study Area

The study was carried out at Uselu market in Egor LGA, Edo State. The Uselu market is one of the major markets in the Egor local government area suited along Benin-Lagos express way, in Uselu quarter of the Egor LGA, Benin City. The exact year it was found cannot be ascertained and it is estimated to occupy a land mass of about 200ft. The market opens every day with large number of traders estimated to be around 1500-2000 traders per market day. Different items are sold in the market ranging farm produce, food items, perishable items etc. The traders in the Uselu market speak Bini and English language as their means of communication, although the non-indigenes have their own different language. The religious practices of the people include Christian religion, African traditional religions and Islam.

Target Population of the Study

The study involved women of child bearing age 15-45years attending the Uselu market. The market has an estimated population of 1500-2000 traders per market day (The actual figure could not be ascertained being an open market with no official documented register)

Sample Size

Since the actual population is not known, the sample size required for study was determined using the Cochran formula for sample size calculation for a descriptive study (Otovwe and Elizabeth, 2017).

The Cochran formula is given as:

$$n = \frac{z^2pq}{d^2}$$

Where

n = minimum desired sample size

z = standard normal deviation usually set at 1.96 at 95% confidence interval

d = degree of accuracy or precision desired usually set at 5% level of significant = 0.05

p = proportion of the family members of diabetic patients

In the cross-sectional descriptive study to assess the utilization of primary

health care services in Jaba Local Government Area of Kaduna State Nigeria by Otovwe and Elizabeth (2017), the proportion of the respondents who utilized PHC were 89.40%.

Therefore, P = 89.4% = 0.894

q = 1-p = 1-0.894 = 0.106

$$\text{Hence, } n = \frac{z^2pq}{d^2} = \frac{(1.96)^2\,(0.894)\,(0.106)}{(0.05)^2} = \frac{3.8416\,(0.894)\,(0.106)}{0.0025} = 146$$

An addition of 10% was added to make room for attrition or non-responses rate. Hence, the sample size for the study = 161 respondents.

Sampling Technique

For the purpose of this study, convenience (accidental) sampling approach was used to recruit the participants. Convenience sampling is a type of non-probability sampling, which does not involve random selection of subject, object or items. In other words, this sampling method involves getting participants that were readily available.

Selection Criteria

Inclusion Criteria

- Women of reproductive age (15-45) years residing in the Egor LGA
- Was present during the period of data collection

Exclusion Criteria

- Women that participated in a similar study

Instrument for Data Collection

Data for this study was collected using structured questionnaire. A questionnaire was preferred as it maintains participants' anonymity and also allows access to a large group. The questionnaire consisted of four sections A-D.

Section A: It contained 6 questions of both closed and open-ended questions which dealt with socio-demographic characteristics of the respondents.

Section B: measured utilization of PHC. It contained 6 questions

Section C: This section assessed satisfaction with PHC services. It contained 10 questions

Section D: This section assessed factors that influence the utilization of PHCs. It contained 2 questions with 10 subsets

Validity of the Instrument

This referred to the ability of the test instrument to measure exactly what it tends to measure. For this study, a face (content) validity was ensured. The face and content validity of the research instrument (structured questionnaire) was evaluated by the project supervisor, a statistician and an expert in research. Their observation and corrections were effected before the instrument was administered to the participants

Reliability of the Instrument

The research instrument was pretested using test, retest and the data obtained (10% of the study sample size) were computed in SSPSS version 22 to estimate the reliability of the test instruments using Cronbach alpha reliability. A coefficient reliability of 0.788 was obtained (Appendix II) which was considered as significant for the study to be carried out.

Method of Data Collection

The questionnaires were administered by the researcher along with two research assistants that were trained for such purpose. Data were collected Monday to Friday for two weeks until the desired sample size was obtained. The questionnaires retrieved were reviewed for completeness.

Method of Data Analysis

The raw data retrieved were coded and analysed using Statistical Package for Social Science (SPSS) version 22.0 using descriptive and inferential statistics. Descriptive data were expressed as percentages, frequency counts, and mean ± standard deviation. Data were presented in words and frequency distribution tables. Hypothesis was tested using Pearson chi-square at 5% level of significance. $P < 0.05$ was considered the level of significance for all measured variables.

Ethical Consideration

An ethical clearance was obtained from the Egor LGA (Appendix III). Also, the participants were made to sign consent before they were enlisted to participate in the study. Throughout the course of this research study, the ethical principles guiding the use of human participants in research as stipulated by the Belmont report was strictly adhered to.

RESULTS

Table 1 shows the distribution of women of child bearing age (15-49 years) in Egor local government area, Edo state, according to their socio-demographic characteristics, including their age, level of education, marital status, religion, occupation and income.

Table 1: Showing social-demographic characteristics of the respondents (n = 150)

Variables		Frequency	Percentage
Age	15-22	12	8.0
	23-30	69	46.0
	31-38	42	28.0
	39-45	27	18.0
	Mean ± SD = 32.48 ± 6.928		
Level of education	Primary	30	20.0
	Secondary	72	48.0
	Tertiary	33	22.0
	No formal education	15	10.0
Marital Status	Single	48	32.0
	Married	98	65.3
	Widowed	4	2.7
Religion	Christianity	131	87.3
	Islam	15	10.0
	ATR	4	2.7
Occupation	Self employed	75	50.0
	Employed	42	28.0
	Student	27	18.0
	Unemployed	6	4.0
Estimated monthly income	<#30,000	42	28.0
	#30,000-#50,000	75	50.0
	> #50,000	33	22.0

Table 1 shows that 69(46.0%) of the respondents were within 23-30 years, 42(28.0%) were within 31-38 years, 27(18.0%) were within 39-45 years while only 12(8.0%) were within 15-22 years. The mean age was (32.48 ± 6.928 years). Respondents with secondary educational qualification were more 72(48.0%) followed by those with tertiary qualifications 33(22.0%), and those with

primary qualification 30(20.0%) while only 15(10.0%) of them did not have any form of formal education. With respect to marital status, 98(65.3%) were married, 48(32.0%) were single while 4(2.7%) were widowed. Christianity was predominant 131(87.3%) while Islam and African Traditional religion were 15(10.0%) and 4(2.7%) respectively. Those who self-employed were more 75(50.0%) followed by employed 42(28.0%), student 27(18.0%) and unemployed 6(4.0%). With respect to estimated monthly income, half 75(50.0%) of the respondent have an estimated monthly income within #30,000-#50,000, 42(28.0%) have less than #30,000 while 33(22.0%) have above #50,000

Research Questions 1: What is the level of utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State?

Table 2: Showing utilization of PHC services among the respondents (n = 150)

S/N	Statement	Frequency	Percentage
	Have you ever used Primary Health Care Centre (PHC) before?		
	Yes	72	48.0
	No	78	52.0
	If Yes, what was your reason for first time visit to the PHCs (n = 72):		
	To monitor my health	8	11.1
	To monitor the health status of my child/children	25	34.7
	Antenatal care	12	16.7
	Family planning	5	6.9
	Immunization	22	30.6
	Which health facility do you go to first when you are ill?		
	PHC	7	4.7
	General hospital	40	26.7
	Teaching hospital	89	59.3
	Private hospital	14	9.3
	Have you ever been referred to the hospital from a PHC? (n = 72)		
	Yes	12	16.7
\	No	60	83.3
	When was the last time you visited the PHC? (n = 72)		
	Less than a month	2	2.8
	1–6 months	21	29.2
	More than 6 months	49	68.0
	When next your need healthcare services would you prefer the PHC?		
	Yes	14	9.3
	No	136	90.7

Table 2 shows that only 72(48.0%) had utilized PHC services and the common reasons for utilizing the services include to monitor the health status of child/children 25(34.7%) and immunization 22(30.6%). Only 5(6.9%) utilized family planning service while 12(16.7) utilized antenatal care services. When ill, the first point of call for 89(59.3%) is tertiary healthcare facility,

for 40(26.7%) it is secondary healthcare facility while 14(9.3%) would go to a private healthcare facility. Only 7(4.7%) would go the PHC. Of 72 respondents who had utilized PHC services, only 12(16.7%) were referred and only 2(2.8%) visited the PHC in less than a month. Only 14(9.3%) of the respondents indicated interest to utilize the PHC when next they need healthcare services.

Research Questions 2: What is the level of satisfaction in utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State?

Table 3: Showing satisfaction in utilization of PHC services among the respondents (n = 72)

S/N	Statement	Responses	
		Yes (%)	No (%)
1.	Where you satisfied with the amount charged for services	45(62.5)	27(37.5)
2.	How would you grade the reception at the PHC:		
	• Poor	32(44.4)	40(55.6)
	• Satisfactory	40(55.6)	32(44.4)
3.	How would you grade the attitude of the staff:		
	• Poor	32(44.4)	40(55.6)
	• Satisfactory	40(55.6)	32(44.4)
4.	How would you grade the quality of the supplied of drugs:		
	• Poor	52(72.2)	20(27.8)
	• Satisfactory	20(27.8)	52(72.2)
5.	How would you grade the general quality of services:		
	• Poor	27(37.5)	45(62.5)
	• Satisfactory	45(62.5)	27(37.5)
6.	How would you grade the dissemination of information on disease & care:		
	• Poor	24(33.3)	48(66.7)
	• Satisfactory	48(66.7)	24(33.3)
7.	How would you grade health education services:		
	• Poor	24(33.3)	48(66.7)
	• Satisfactory	48(66.7)	24(33.3)
8.	How would you grade referral services		
	• Poor	70(97.2)	2(2.7))
	• Satisfactory	2(2.7)	70(97.2
9.	How far is the Primary health center from your home?		
	• Within 30 minutes' walk from my home	51(70.8)	21(29.2)
	• More than 30 minutes' walk from my home	21(29.2)	51(70.8)
10.	Are there enough medical personnel at the primary health care centre?	14(19.4)	63(80.6)

Table 3 shows that of the 72 respondent who have utilized PHC services, only 45(62.5%) were satisfied with the cost of treatment, 40(55.6%) were satisfied with the reception at the PHC and the attitude of the staff respectively. Only 20(27.8%) were satisfied with the quality of the supplied of drugs. 45(62.5%) were satisfied general quality of services while 48(66.7%) were satisfied with dissemination of information on disease & care and health education services respectively. Only 2(2.7%) were satisfied with referral services. 51(70.8%) lives

within 30 minutes' trekkable distance from the PHC premises. Only 14(19.4%) agreed that there are enough medical personnel at the primary health care centre. In all, only 48(66.7%) demonstrated satisfaction in all the measured domains.

Research Questions 3: What are the factors that influence utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State?

Table 4: Showing factors that influence utilization of PHC services among the respondents

S/N	Statement	Responses	
		Yes (%)	No (%)
1.	Reasons to want to utilize PHC in future **(n = 14)****		
	• Timely service delivery	14(100.0)	-
	• Accessibility of service with ease	12(85.7)	2(14.2)
2.	Reasons not to utilize PHC in future **(n = 136)****		
	• Poor quality service	125(91.9)	11(8.1)
	• Unavailability of doctors/Nurses	127(93.4)	9(6.7)
	• Unavailability of essential drugs	114(83.8)	22(16.2)
	• Attitude of staff	87(64.0)	49(36.0)

**Multiple Responses

Table 4 shows that the reason for which 14(100.0%) of the respondents indicated interest to utilize the PHC when next they need healthcare services was timely service delivery while 12(85.7%) indicated accessibility of service with ease. On the other hand, those 136(90.7%) who doesn't want to utilize the PHC when next they need healthcare services give their reasons as follows unavailability of Doctors/Nurses 127(93.4%), poor quality service 125(91.9%), unavailability of essential drugs 114(83.8%) and attitude of staff 87(64.0%)

Test of Hypothesis

Ho: There is no significant relationship between income status and utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State

Table 5: Showing the relationship between economic status and utilization of PHC services using Pearson chi-square at 0.05 level of significance

	Tenets	Utilization of PHC		Total	df	χ^2	P	Decision
		Yes (%)	No (%)					
Economic status	<#30,000	17(40.5)	25(59.5)	42(100)	2	4.399	.109	Don't reject Ho
	#30,000-#50,000	34(45.3)	41(54.7)	75(100)				
	> #50,000	21(63.6)	12(36.4)	33(100)				
Total	Total	72	78	150				

Since the computed chi-square value $\chi^2 = 4.399$ at degree of freedom (df) 2 is less than the critical value of 5.991 at 0.05 level of significance, there is no statistically significant evidence to reject the null hypothesis (Ho). This means there is no statistically significant relationship (P = 0.109) between income status and utilization of PHC services among women

of child bearing age 15-45 years in Egor LGA, Edo State.

DISCUSSION

There are currently 33,000 Primary Health Centres (PHCs) located in 774 Local Government Areas (LGAs) with a minimum of ten wards per LGA in Nigeria. Each ward has a population of between 5000 to 10,000 persons, with each expected to have a PHC that provides immediate point of entry to the health care system for pregnant women seeking skilled pregnancy care. Thereafter, women with complications are referred for Comprehensive Emergency Obstetrics Care (CEOC) provided in Secondary and Tertiary care facilities (Okonofua *et al*., 2018). Despite this organized system, available evidence suggests considerable under-utilization of available PHC facilities for care by women seeking antenatal and intra-partum care. This study assessed the level of utilization of PHC services among women of child bearing age 15-45years in Egor LGA, Edo State.

Socio-demographic Characteristics of the Respondents

The age distribution in the present study is similar to that in Calabar by Ibebuike*, et al*. (2017) in which more than have of the population were aged ≥ 30years. However, the mean age (32.48 ± 6.928year) is higher compare to 30(SD 6.9) reported by (Okonofua *et al*., 2018). Averages of the participants were within middle class based on the estimated income classification in the present study which is consistent with the findings of Alfaqeeh *et al*., (2017) reported from Riyadh Providence, Kingdom of Saudi Arabia. The academic distribution in the present study is similar that reported by Nwokoro *et al.* (2022) with predominance of secondary education. However, both studies differ in employment pattern in the sense that the above study recorded more employed participants while the present study recorded more of self-employed participants.

Utilization of PHC Services among the Respondents

In the present study, only less than two-third (48.0%) of the participants had utilized PHC services and the common reasons for utilizing the services include to monitor the health status of child/children and immunization. This finding is comparable to (46.2%) reported by Nwokoro *et al.* (2022). The PHC services utilization found in this study is however much higher than the 7.5% and 18.9% utilization reported by studies in Northwest (Muhammed *et al*., 2013) and Southeast (Nwankwo *et al*., 2017) Nigeria respectively, but lower than the 76.8%, 89.4% and 89.5% utilization reported by studies in South-South (Adam and Awunor, 2014), North-Central (Otovwe and Elizabeth, 2017) and Southwest (Adebayo and Asuzu, 2015) Nigeria respectively. The low utilization of primary health care services observed in this study may be an indicator of the low confidence that the people have in the services offered at the primary health care level in the study setting, thus making them seek primary care at higher level hospitals or other places. The findings also revealed that service utilization was not associated with economic status (P = 0.109) which is consistent with Saudi Arabia's study by Alsubaie *et al*. (2016) but at variance with the findings of Archibong *et al*. (2020) from Cross River State, Nigeria.

Satisfaction in Utilization of PHC Services among the Respondents

Patient satisfaction is an important and commonly used indicator for measuring the quality of health care. The present study revealed that only (66.7%) of those who had utilized PHC services were satisfied the all aspect of the services received. This level of satisfaction is higher than (57.1%) reported from Ghana by Yaya *et al.* (2017) bur consistent with the finding of Gao *et al*., (2022) reported from rural China. The present study also revealed that almost two-third (62.5%) of those who utilized the PHC services were satisfied with the cost of treatment. This is in line with the finding of Okeke *et al.* (2019) reported from Calabar, Nigeria. However, only (27.8%) were satisfied with the quality of the supplied of drugs compare to (73.8%) reported in the above Calabar study.

Factors that Influence Utilization of PHC Services among the Respondents

In the present study, identified influencing factors for the utilization of PHC include timely service delivery and accessibility of service with ease while barriers include unavailability of doctors/Nurses, poor quality service, unavailability of essential drugs and attitude of staff. These findings are consistent with previous findings reported from Enugu, Nigeria and Haiti by Nwokoro *et al*. (2022) and Gage *et al.* (2019) respectively.

CONCLUSION

The study revealed the level of PHC service utilization and level of satisfaction among the few users. The poor utilization is attributed to unavailability of doctors/Nurses, poor quality service, unavailability of essential drugs and attitude of staff.

RECOMMENDATIONS

- Nurse leaders to ensure nurses are given the needed opportunity for career development especially in the area of quality nursing services at the primary level of healthcare.
- Efforts devoted to addressing the limiting factors (unavailability of doctors/Nurses, poor quality service, unavailability of essential drugs and attitude of staff) using creative and innovative approaches should be implemented.
- There is need for the promotion of individual and community knowledge of their health needs through community education and enlightenment campaigns.

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