# International Journal of Medicine, Nursing & Health Sciences (IJMNHS) ® (IJMNHS.COM)

# Factors Influencing Utilization of Primary Health Care Services Among Women of Child Bearing Age in Odeda Local Government Area, Ogun State

**Author(s),** RICHARD, Adenike Olufunmilayo (RN, RM, RNE, BNSc, PGDE)

AND

PROF. KIO, Janet Omolara (RN, PhD)

**Abstract:**

Most women of childbearing age do not utilize the healthcare services even when these services are available in their communities. In this study, an attempt has been made to determine the factors that influence the utilization of the primary health care services among the women of childbearing age in Odeda Local Government Area, Ogun State. The study adopted a quantitative design using descriptive cross section study. A sample size of 367 women of child bearing age was drawn for the study using Slovin's formula while a multi-stage sampling procedure was employed to select respondents for the study. A structured questionnaire which was validated was used for data collection. The result shows that the respondents has above average level of utilization of primary health care services with overall utilization mean score of 0.781 and percentage of 78.1% for primary health care services, the respondents has high knowledge of PHC services (t-value = 5.808, $f_{(1,365)}$ = 6.356, p-value = 0.000), majority of the respondents has bad perception of the PHC services (t-value = 4.505, $f_{(1,365)}$ = 6.326, p-value = 0.000), and educational

level (beta value of .211 and t-value of 5.276, p<0.05), marital status (a beta value of .303 and t-value of 3.098, p<0.05), family size (beta value of .290 and t-value of 5.441, p<0.05), and age (beta value of .200 and t-value of 2.432, p<0.05) were found to be potent factor influencing the utilization of primary health care services by women of childbearing age. In conclusion, the study found that the level of utilization of primary health care services among women of childbearing age was good as majority of them received almost all the primary health care services. It was recommended among others that promotion of female education and empowerment are required to improved utilization of primary health care services.


**Keywords:** Factors, Primary Health Care, Utilization, Women of Child Bearing Age,

About Author

## Author(s):

**RICHARD, Adenike Olufunmilayo (RN, RM, RNE, BNSc, PGDE)**
Department of Public Health Nursing,
Babcock University, Ilisan-Remo,
Ogun State, Nigeria.

And

**PROF. KIO, Janet Omolara (RN, PhD)**
Department of Public Health Nursing,
Babcock University, Ilisan-Remo,
Ogun State, Nigeria.

**3**

**International Journal of Medicine, Nursing & Health Sciences (IJMNHS) ®
(IJMNHS.COM)**
**Email: editor.ijmnhs@gmail.com    editor@ijmnhs.com   Website: ijmnhs.com**

*Published By*

## Introduction

Primary health care is the first level of contact of individuals, the family, and the community with the national health system, bringing health care, as close as possible, to where people live and work and constitutes the first element of continuing health care process. It covers a wide range of health services, which includes immunization, mother and child care services, antenatal and postnatal care including family planning, sexually transmitted disease care, treatment of minor ailments and curative services, mental health, school health, treatment of chronic disease (e.g. hypertension and diabetes), treatment of communicable diseases (e.g. tuberculosis and HIV/AIDS), oral health, rehabilitative services also and the provision of essential drugs usually provided in a community by general practitioners, nurses, pharmacists or other health professionals working within a health facility. It is believed that an integrated package of essential PHC services should be made available to the entire population and should also provide a solid foundation for a single unified health system.

According to Hampton and Nagy (2016), primary health care service utilisation refers to how often people utilize the primary health-care facilities available in their neighbourhood or community. But, in developing nations, the utilization of these primary health care services is still very limited or low, resulting in a variety of negative consequences. Globally, approximately 287,000 women die every year and 830 every day due to complications related to pregnancy and childbirth. (WHO, 2016) Ninety-nine per cent of maternal deaths occur in developing countries, more than half occurring in sub-Saharan Africa and more frequently in women living in rural areas and among poorer communities (WHO, 2016). The risk of a woman in a developing country dying from a maternal-related cause during her lifetime is about 33 times higher compared to a woman living in a developed country (WHO, 2016). The WHO associated the high prevalence of maternal death in Nigeria to inequalities in access to health services as women of child bearing age in resource-poor settings are least likely to receive adequate, timely and affordable health services by skilled personnel compared to their counterparts in more developed countries. According to a UNICEF report, Nigeria loses a great number of children's lives during pregnancy and childbirth and the country loses about 2,300 under-five year olds every single day (UNICEF, 2016). Nigeria is regarded as the second largest contributor to the under–five and maternal mortality rate in the world.

Okonofua et al (2019) reported that the Federal Government of Nigeria has adopted Primary Health Care (PHC) as a policy to achieve universal health coverage for citizens and to ensure that women of childbearing age, especially in rural areas, gain access to evidence-based skilled pregnancy care, immunization, family planning and other health services for the prevention of maternal morbidity and mortality. Several reports indicate higher rates of maternal mortality in rural parts of Nigeria as compared to urban areas (Odetola, 2015). Nwko (2015) reports indicate substantial under-utilisation of PHC centres for skilled pregnancy care, immunization, family planning, and other services by vulnerable rural women of child bearing age throughout the country. With continued under-utilisation of services, it would be difficult to attain the milestones contained in the national health strategic plan as well as the 2030 Sustainable Development Goals in the country. To date, several demand and supply factors have been identified in quantitative research as reasons why women of child bearing age do not use primary health care services in Nigeria.

Dahiru and Oche, (2015), reported these factors which influence the utilization of PHC services such as ignorance and inadequate knowledge, family-related/personal factors, perceptions relating to costs and distance to services, abusive care by health providers, preferences for cultural/traditional/religious forms of care, perceptions about poor quality services in PHC centres, including socio-demographic, education level of the clients, age, marital status, inadequate drugs and consumables, providers not in sufficient numbers and not always available in the facilities, long waiting times, and inappropriate referrals, and high costs of services, which include the inability to pay for services even when costs are not excessive, and the introduction of informal payments by staff. Some of these reasons have been identified in several studies in many parts of Nigeria (Okonofua, et al., 2019) for women of childbearing age's under-utilisation of primary health care services.

Ovikuomagbe, (2017) found that several studies have shown that income, education, distance, amongst others played significant roles in enabling women seek healthcare services. Osubor et al. (2016) claims that Poor health seeking behaviours in terms of low antenatal care use, postnatal care use, and skilled birth attendant at delivery exist in rural Nigeria. Say and Raine (2017) found that the differences in the use of primary health care services in developing countries was attributed to age, education, medical insurance and distance to health facility. Furthermore, very few have documented the views of women of childbearing age in ways to enable the proper understanding of deeper reasons that women of childbearing age do not use skilled pregnancy care, immunization, family planning, and other services especially at the primary health care level in rural areas.

Azuh, et al, (2017) found that in Ota, Ogun State, south-western Nigeria, for instance, several women believe that delivering in a non-institutional setting is better than in a modern facility because traditional birth attendants show more concern and compassion than skilled birth attendants. This perhaps shows a clear distinction between actual qualities of care provided and perceived quality of care; even if the primary health care facilities in Ota have sufficient health experts with internationally recognized good practice, the maternal deaths might still be on the increase, because women's perception of 'quality' influences primary health care service utilization.

Ahmad, et al. (2019) research study found that utilization of PHC services is largely an outgrowth of the extent to which people are aware of the existence of such services in their locality or elsewhere. This is largely a function of the health education programmes being conducted in the locality by the PHCs. However, social networks such as family and friends, religious organizations and elders were also found to be of influence in raising awareness among the people concerning available primary health care services. In essence therefore, increase in people's level of awareness, can help promote the utilization of available primary health care facilities. This study also found that organizational factors such as availability of health services, average population covered by health facilities, less waiting time, availability of drugs and their functional status. .

Okonofua, et al. (2019) found that it was evident that reasons for non-use of PHCs for antenatal were related to perceptions about distance of PHCs, quality of PHC service delivery (costs, availability of health personnel, etc.), and partners consent to use of the facilities. As for skilled delivery care in PHCs, evidently only women who recently delivered could be

relied on to provide information on this question. The result showed that more than 45.0% of women delivered in PHCs while up to 25% delivered at home or in the homes of traditional birth attendants. The reasons given by women for not using PHCs for delivery were: poor quality service, provider not in facility, facility too far, costs too much, and facilities not open.

Lorretta, et al (2019) claim that perceptions relating to poor quality of care in PHC centres, including inadequate drugs and consumables, abusive care by health providers, providers not in sufficient numbers and not always available in the facilities, long waiting times, and inappropriate referrals. Kaba, et al (2017) study found that needs to be highlighted are the attitudinal barriers women of child bearing age often face when they seek primary healthcare services. Single pregnant women, for example, can be stigmatized, preventing them from accessing. Amroussia, et al (2017) study from Tunisia revealed discrimination, stigmatization, and abusive treatment of single mothers during childbirth at health institutions. Most women complaining about disrespect and abuse during childbirth in this literature review were from poor socio-economic levels.

Reducing maternal mortality in rural areas is currently one of the most important unmet public health needs in Nigeria due to the fact that most women of childbearing age do not utilize the primary health care services even when these services are available in their communities. In this study, an attempt was made to determine the factors influencing the utilization of primary health care services among the women of child bearing age in Odeda Local Government Area, Ogun State and to make recommendations for interventions to increase access to skilled pregnancy care, immunization, family planning, and other services for women of childbearing age.

The main objective of the study was to determine the factors influencing the utilization of primary health care services among the women of childbearing age in Odeda Local Government Area, Ogun State. The specific objectives were to:

1. assess the level of utilization of PHC services among women of childbearing age
2. assess the level of knowledge of PHC services among women of childbearing age;
3. assess the perception of PHC services among the women of childbearing age towards;
4. assess the influence of knowledge, marital status, educational level and family size on PHC services' utilization among women of childbearing age.

## Research Questions

The following research questions were answered;
1. What is the level of utilization of PHC services among respondents?
2. What is the level of knowledge of PHC services among respondents?
3. What is the perception of women of childbearing age towards utilization of PHC services?

## Research Hypotheses

The following hypotheses were tested in the research study:

$Ho1$: There is no significant influence of knowledge of PHC services on its utilization among women of childbearing age.

$Ho2$: There is no significant influence of perception of PHC services on its utilization among women of childbearing age.

**Ho3:** There is no significant influence of demographic data (age, marital status, family size and educational level) on PHC services' utilization among women of childbearing age.

**Methodology**

A quantitative design descriptive cross sectional study was utilized to determine the factors influencing utilization of primary health care services among women of childbearing age in Odeda Local Government Area, Ogun State. The population of the study consisted of women of child bearing age attending Primary health care centres in Odeda Local Government Area, Ogun State. The sample size for this study was calculated using Slovin's formula;

Slovin's formula is written as;

Where n= Number of samples, N = Total population (2892) and e = Error tolerance (0.05)

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

$$n = \frac{2892}{(1 + 2892 \times 0.05 \times 0.05)}$$

$$n = \frac{2892}{(1 + 2892 \times 0.0025)}$$

$$n = \frac{2892}{1 + 7.23}$$

$$n = \frac{2892}{8.23}$$

$$n = 351.39$$

$$n = 351$$

To make provision for attrition rate, 10% of the sample size was added

10% of 351= 35

351+35=386

Therefore, sample of 386 women of childbearing age was selected for this study. A multistage sampling procedure was used to choose the sample for this study. Data from the respondents was collected with the use of researcher-designed questionnaire. The questionnaire was made up of 33 items. The question was divided into four (4) sections which are A, B, C, and D. Section A gathered information on demographic and socioeconomic characteristics data of respondents and consists of 10 items on age, marital status, location, educational status, family size, occupation, religion, ethnicity, average income per month and social class.

Section B gathered information on respondent's level of utilization of primary health care services and contains 9 items that sought to know if the childbearing women have ever use any PHC services such as general outpatients services, antenatal services, delivery services, postnatal services, immunization services, infant welfare services, health education, and family planning. Section C gathered information on respondents' knowledge on the primary health care services  and contains 12 items that sought to know if the respondents have heard about the PHC services, their sources of information about PHC services, services that are rendered at PHC services such as general outpatient services, antenatal care, delivery, postnatal care, immunization services, infant welfare clinic, health education and

family planning and to know if the PHC services improve their health and wellbeing. Section D gathered information on respondents' perception towards utilization of primary health care services consists of 3 items that sought to know if the PHC services is cost effective, PHC services providers keep their patients waiting for long, do not encourage patients with their attitude, do not always available at the PHCs and do not refer their patients to another facility when need arises.

The researcher consulted relevant literatures to develop the questionnaire. The questionnaire was subjected to review of experts in the field of health and statistics for scrutiny. Their suggestions and corrections were effected. Content and face validity of the questionnaire were ensured. The reliability of the instrument was established by a pilot test using internal consistency method among 37 women of childbearing age utilizing primary health care services which is not in the same location with the sample for the study. Data collected was computed using Cronbach Alpha test and was found to be 0.72 for section A; 0.791 for section B; 0.743 for section C; and 0.803 for section D. The above coefficients are high enough to guarantee the reliability of the instrument.

The Nurses-in-charge of the PHCs were duly informed; inform consent was obtained from the respondents after which they were asked to fill the questionnaire. Three research assistants were employed to assist in the distribution and collection of questionnaires. They received training on the study objectives, sampling procedures, data collection and confidentiality before they begin the field work. The researchers and her assistants ensured that the questionnaires were properly filled before retrieval from the respondents. The data obtained was processed and analysed using the Statistical Package Social Science (SPSS) software package version 26. Frequency table was made and data presented on it. The research questions 1-3 were answered using descriptive statistics of frequency counts. However, all the three (3) research hypotheses were tested at 0.05 as level of significance using multiple regressing analyses.

## Results

**Table 1: Respondents' Demographical Data**

| SN | Variable (N =367) | | Frequency | Percent (%) |
|---|---|---|---|---|
| 1 | Age | 15-19yrs | 18 | 4.9 |
| | | 20-29yrs | 114 | 31.1 |
| | | 30-39yrs | 161 | 43.9 |
| | | 40-49yrs | 74 | 20.2 |
| | | Mean age = 33.7; Std Dev. 9.16 | | |
| | | **Total** | **367** | **100.0** |
| 2 | Religion | Christianity | 191 | 52.0 |
| | | Islam | 163 | 44.4 |
| | | Others | 13 | 3.5 |
| | | **Total** | **367** | **100.0** |
| 3 | Marital Status | Single | 48 | 13.1 |
| | | Married | 277 | 75.5 |
| | | Widow | 23 | 6.3 |

**8**    International Journal of Medicine, Nursing & Health Sciences (IJMNHS) ®
(IJMNHS.COM)
Email: editor.ijmnhs@gmail.com   editor@ijmnhs.com  Website: **ijmnhs.com**

*Published By*

| | | Divorced | 19 | 5.2 |
|---|---|---|---|---|
| | | **Total** | **367** | **100.0** |
| 4 | Ethnicity | Yoruba | 298 | 81.2 |
| | | Hausa | 12 | 3.3 |
| | | Igbo | 57 | 15.5 |
| | | **Total** | **367** | **100.0** |
| 5 | Educ. Background | No formal education | 12 | 3.3 |
| | | Primary | 32 | 8.7 |
| | | Secondary | 108 | 29.4 |
| | | Tertiary | 215 | 58.6 |
| | | **Total** | **367** | **100.0** |
| 6 | Average Monthly Income | Below #20,000 | 6 | 1.6 |
| | | #21,000-40,000 | 47 | 12.8 |
| | | #41,000-60,000 | 93 | 25.4 |
| | | #61,000 above | 221 | 60.2 |
| | | **Total** | **367** | **100.0** |
| 7 | Family Size | 1-3 | 244 | 66.5 |
| | | 4-5 | 100 | 27.2 |
| | | 6 above | 23 | 6.3 |
| | | **Total** | **367** | **100.0** |
| 8 | Occupation | Farming | 30 | 8.2 |
| | | Trading | 108 | 29.4 |
| | | Civil servant | 198 | 54.0 |
| | | Full housewife | 13 | 3.5 |
| | | Unemployed/Student | 47 | 12.8 |
| | | **Total** | **367** | **100.0** |

Results presented in Table 1 revealed that majority (161; 43.9%) of the respondents claimed they are within ages 30-39 years with a mean age of 33.7; 191 (52%) were Christians; 277 (75.5%) of the respondents were married; and 298 (81.2%) were Yoruba. The reason for the high population observed among the Yoruba is because the study area is situated in Yoruba land. The respondents' educational background revealed that 215 (58.6%) of the respondents had tertiary education, 221 (60.2%) earned an average income of #61,000 above. The result of the analysis of the demographic variable as regards the family size of the respondents reveal that 244 (66.5%) had 1-3 children, and 198 (54%) were civil servants.

**Research Question 1:** What is the level of utilization of PHC services among respondents?
**Table 2: Utilization of Primary health care services by women of childbearing age**

| S/N | N = 367 | Yes | No | Mean |
|---|---|---|---|---|
| 1 | Have you ever used any PHC services? | 367 (100.0) | - | 1.00* |
| 2 | General outpatients services | 256 (69.8) | 111 (30.2) | 0.70* |

| 3 | Antenatal services | 367 (100.0) | - | 1.00* |
|---|---|---|---|---|
| 4 | Delivery services | 367 (100.0) | - | 1.00* |
| 5 | Postnatal services | 300 (81.7) | 67 (18.3) | 0.82* |
| 6 | Immunization services | 367 (100.0) | - | 1.00* |
| 7 | Infant welfare | 217 (59.1) | 150 (40.9) | 0.59* |
| 8 | Health Education | 102 (27.8) | 265 (72.2) | 0.28 |
| 9 | Family planning | 234 (63.8) | 133 (36.2) | 0.64* |
| **Weighted mean score = 0.781* (78.1%)** | | | | |

The table 2 above revealed the outcome of the research question measuring the level of utilization of primary health care services which shows that women of childbearing age are accessible to all the primary health care services. These are delivery services (100%), antenatal services (100%), and immunization services (100%). Others include postnatal services (81.7%), general outpatient's services (69.8%), family planning (63.8%) and infant welfare (59.1%). However, health education services was found to be poorly rated. However, the most common utilised primary health care services among the women are the delivery services (100%), antenatal services (100%), and immunization services (100%). They are the top three ranked items, 1st, 2nd and 3rd respectively. This study observed that the overall utilization mean score of 0.781 and percentage of 78.1% for primary health care services, which signifies that the respondents has above average level of utilization of primary health care services.

**Research Question 2:** What is the knowledge level of women of childbearing age on primary health care services?

**Table 3: Knowledge level of women of childbearing age on primary health care services**

| Variable | | Frequency | % |
|---|---|---|---|
| Have you heard of PHC services? | Yes | 300 | 81.7 |
| | No | 67 | 18.3 |
| Do you know services that are rendered at PHC services? | Yes | 291 | 79.3 |
| | No | 76 | 20.7 |
| Is your source of information from Hospital, Mass media, Friend and Family? | Yes | 288 | 78.5 |
| | No | 79 | 21.5 |
| Do you know what general outpatient is all about? | Yes | 267 | 72.8 |
| | No | 100 | 27.2 |
| Do you know what antenatal care is all about? | Yes | 367 | 100.0 |
| | No | - | - |
| Do you know what delivery service is all about? | Yes | 367 | 100.0 |
| | No | - | - |
| Do you know what postnatal care is all about? | Yes | 298 | 81.2 |
| | No | 69 | 18.8 |
| Do you know what immunization services is all about? | Yes | 300 | 81.7 |
| | No | 67 | 18.3 |
| Do you know what infant welfare clinic is all about? | Yes | 269 | 73.3 |

|  | No | 98 | 26.7 |
|---|---|---|---|
| Do you know what health education is all about? | Yes | 200 | 54.5 |
|  | No | 167 | 45.5 |
| Do you know what family planning is all about? | Yes | 367 | 100.0 |
|  | No | - | - |
| Does the PHC service improve your health and wellbeing? | Yes | 298 | 81.2 |
|  | No | 69 | 18.8 |
| **Knowledge weighted % = 82.0** | | | |

Table 3 reveals the knowledge level of women of childbearing age on primary health care services. All the women of childbearing age have heard of PHC services. Majority of the respondents 291 (79.3%) claimed to know those services rendered at PHC, and 288 (78.5%) agreed that their sources of information were from Hospital, Mass media, Friend and Family. On the PHC services, all the respondents agreed they have knowledge of delivery service and family planning, immunization services (81.7%), postnatal care (81.2%), infant welfare (73.3%), and health education (54.5%). Majority (81.2%) of the respondents agreed that PHC service improve their health and wellbeing. This study observed that the overall knowledge level of women of childbearing age on primary health care services was 82% which signifies that the respondents have high knowledge level of primary health care services.

**Research Question 3:** What is the perception of women of childbearing age towards utilization of PHC services?

**Table 4: Perception of women of childbearing age towards utilization of PHC services**

| N = 367 | Yes | No | Don't know |
|---|---|---|---|
| Primary health care is cost effective. | 215 (58.6) | 100 (27.2) | 52 (14.2) |
| Primary health care services providers keep you waiting for long when seeking for primary health care services | 288 (78.5) | 70 (19.1) | 9 (2.4) |
| Primary health care services providers do not encourage patients with their interpersonal relationships | 315 (85.8) | 52 (14.2) | - |
| Primary health care services providers are not always available at the primary health care centres. | 188 (51.2) | 179 (48.8) | - |
| Primary health care services providers do not refer patients to another health facility when need arises. | 157 (42.8) | 99 (27.0) | 111 (30.2) |

Table 4 reveals that 215 (58.6% of the respondents claimed primary health care is cost effective. More than three-quarter (78.5%) of the respondents claimed that primary health care services providers keep one waiting for long when seeking for primary health care services; 315 (85.8%) agreed that primary health care services providers do not encourage patients with their attitude; 188 (51.2%) consented that primary health care services providers are not always available at the primary health care centres; and 157 (42.8%) claimed that primary health care services providers do not refer patients to another health facility when need arises

**Table 5: Summary of the Perception of primary healthcare services utilization among childbearing women.**

| Category | Criteria | Frequency | % | Remark |
|---|---|---|---|---|
| 8-15 | Good | 148 | 40.3 | Respondents with good perception of PHCS |
| 1–7 | Bad | 219 | 59.7 | Respondents with bad perception of PHCS |

The table 5 above presents the result of the perception of women of childbearing age on primary health care services. Their perception was categorized as good (8-15) and bad (1-7). Majority 219 (59.7%) of the respondents had bad perception of primary health care services. Therefore, it could be said that the perception of women of childbearing age on primary health care services was bad.

**Test of Hypotheses**

**Research Hypothesis 1:** There is no significant influence of PHC services' knowledge on utilization of PHC services among women of childbearing age

**Table 6: Summary of Analysis of variance on the influence of PHC services' knowledge on utilization of primary health care services by women of childbearing age**

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | p-value |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 11.421 | .309 | | 13.900 | .000 |
| Knowledge | .081 | .066 | .311 | 5.808 | .000 |

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 24.516 | 1 | 24.516 | 6.356 | .000 |
| Residual | 1430.435 | 365 | 3.919 | | |
| Total | 1454.951 | 366 | | | |

**a. Dependent Variable: Utilization of PHC services**

**b. Predictors: (Constant), Knowledge**

The above table 6 reveals that respondents' knowledge of PHC services yielded a beta value of .311 and t-value of 5.808 significant at p-value of 0.000 alpha levels. The calculated value of f = 6.356 significant at p-value of 0.000 alpha level indicated that utilization of primary health care services by women of childbearing age was significantly influenced by their knowledge of PHC services (t-value = 5.808, $f_{(1,365)}$ = 6.356, p-value = 0.000). Therefore, the earlier set null hypothesis was rejected. The implication of this result is that PHC services' knowledge significantly influences the utilization of primary health care services by women of childbearing age.

**Research Hypothesis 2:** There is no significant influence of perception of primary health care services on its' utilization of by women of childbearing age

**Table 7: Summary of Analysis of variance on the influence of perception on utilization of primary health care services by women of childbearing age**

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | p-value |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 6.237 | .300 | | 9.001 | .000 |
| Perception | .069 | .050 | .278 | 4.505 | .000 |

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 22.136 | 1 | 22.136 | 6.326 | .000 |
| Residual | 1277.135 | 365 | 3.499 | | |
| Total | 1299.271 | 366 | | | |

**a. Dependent Variable: Utilization of PHC services**
**b. Predictors: (Constant), Perception**

The table 7 reveals the respondents' perception yielded a beta value of .278 and t-value of 4.505 significant at p-value of 0.000 alpha levels. The calculated value of f = 6.326 significant at p-value of 0.000 alpha level indicated that utilization of primary health care services by women of childbearing age was significantly influenced by their perception of the services (t-value = 4.505, $f_{(1,365)}$ = 6.326, p-value = 0.000). Therefore, the earlier set null hypothesis was rejected. The implication of this result is that women's perception of PHC significantly influenced their utilization of primary health care services.

**Research Hypothesis 3:** There is no significant influence of socio-demographic factors (age, marital status, and educational level) on utilization of primary health care services by women of childbearing age

**Table 8: Summary of Multiple Regression Analysis of relative and composite influence of age, marital status, family size and educational level on utilization of primary health care services by women of childbearing age**

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | p-value |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| (Constant) | 13.099 | .476 | | 8.548 | .000 |
| Age | .156 | .119 | .200 | 2.432 | .000 |
| Marital status | .179 | .147 | .303 | 3.098 | .000 |
| Family size | .076 | .057 | .290 | 3.441 | .000 |
| Educational level | .113 | .100 | .211 | 5.276 | .000 |

| Source of variation | Sum of Squares | Df | Mean Square | F-Ratio | P |
|---|---|---|---|---|---|
| Regression | 120.692 | 4 | 30.173 | 6.462 | .000 |
| Residual | 1690.178 | 362 | 4.669 | | |
| Total | 1810.870 | 366 | | | |

**R = 0.492; Multiple R (Adjusted) = 0.242; Multiple R²(Adjusted) = 0.239; Stand error estimate = 7.011**

The table 8 reveals the relative contribution of each predictor variable (age, marital status, family size and educational level) to the variance in utilization of primary health care services by women of childbearing age revealed that educational level of the respondents has a beta value of .211 and t-value of 5.276 significant at p-value of 0.000 alpha level, family size of the respondents has a beta value of .290 and t-value of 5.441 significant at p-value of 0.000 alpha level, marital status has a beta value of .303 and t-value of 3.098 significant at p-value of 0.000 alpha level, and age of the respondents has a beta value of .200 and t-value of 2.432 significant at p-value of 0.000 alpha level. Therefore, educational level, family size, marital status and age were found to be potent factors influencing the utilization of primary health care services by women of child bearing age.

Furthermore, utilization of primary health care services by women of childbearing age yielded a coefficient of multiple regressions (R) of 0.492 and a multiple correlation square of 0.239. This shows that 23.9% of the total variance in the utilization of primary health care services by women of childbearing age is accounted for by educational level, family size, marital status and age. The result also indicates that the analysis of variance of the multiple regression data produced an F-ratio value significant at 0.00 level (R =.492, $R^2$ adj. = .239, $f_{(4,362)}$ = 6.462; P = .000). Educational level, family size, marital status and age combined to influence the utilization of primary health care services by women of childbearing age. Therefore, the hypothesis that stated no significant influence of demographical factors (age, marital status, family size and educational level) on utilization of primary health care services by women of childbearing age was rejected.

## Discussion

Majority of the respondents, that is more than two-third were less than 40 years of age. The high percentage of these young women may be attributed to the fact that women are now aware of the health risk involved in child bearing at old age hence they plan to bear children when they are younger. This is supported by the findings of Ibebuike, et, al, (2017) that more young women visited primary health centres compared to the old ones, and their ages is between 21 to 30 years.

Result shows that women of childbearing age are accessible to delivery services, antenatal services, immunization services, postnatal services, general outpatient's services, family planning and infant welfare. However, health education services was found to be poorly rated among the respondents. This could be as a result of poor awareness. Therefore, the community plays a major role in the implementation of health programs including health seeking behaviour, accessibility, and acceptability of services. This finding is in tandem with the findings of researchers like Ayodele, et al (2015) that the low reproductive health services usage among Nigerians was as a result of poor knowledge and education.

This study observed that the overall knowledge level of women of childbearing age on primary health care services was 82% which signifies that the respondents have high knowledge level of primary health care services. The implication of this finding is that women's empowerment will enhancing the accessibility and utilisation of health care services. The findings of this study is supported by that of Ayodele, et al (2015) that knowledge is a key factor in the accessibility of any services related to women sexuality and wellbeing. Despite the reproductive health challenges experienced by women in Nigeria, the

extent to which they make use of reproductive health services is very limited and poor which was as a result of inadequate knowledge. This predisposes youth to a wide range of reproductive health issues, which include sexually transmitted infections such as unintended pregnancy, HIV/AIDS, unsafe abortion practices and voluntary counselling and HIV testing among others. This corroborates the findings of many studies which consistently shown that reproductive knowledge to be strongly and positively associated with utilization of reproductive health services (Adelekan; et. al., 2014).

The result shows that the perception of women of childbearing age on primary health care services was bad. For instance, more than three-quarter of the respondents claimed that primary health care services providers keep one waiting for long hours, and that primary health care services providers do not encourage patients with their attitude. It corroborates with Okonofua, et al. (2019) who found that it was evident that reasons for non-use of PHCs for antenatal were related to perceptions about distance of PHCs, quality of PHC service delivery (costs, availability of health personnel, etc.), and partners consent to use of the facilities. As for skilled delivery care in PHCs, evidently only women who recently delivered could be relied on to provide information on this question. The result showed that more than 45.0% of women delivered in PHCs while up to 25% delivered at home or in the homes of traditional birth attendants.

Kaba, et al (2017) study found that needs to be highlighted are the attitudinal barriers women of child bearing age often face when they seek primary health care services. Single pregnant women, for example, can be stigmatized, preventing them from accessing. Amroussia, et al (2017) study from Tunisia revealed discrimination, stigmatization, and abusive treatment of single mothers during delivery.

Results show that the higher a women's level of education the more likely she is to utilize primary health care services. Study has suggested that women education at higher level is consistently associated with improved health outcome because more educated women are better able to comprehend the importance of accessing and utilizing primary health care service (Odetola, 2015)

The results show that marital status and educational level were found to be potent factors influencing the utilization of primary health care services by women of childbearing age. This is in line with the findings of Ovikuomagbe, (2017) that income, education; marital status play significant roles in enabling women seek healthcare services. Also, Say and Raine, (2017) found that the differences in the use of primary healthcare services in developing countries was attributed to age, education, medical insurance and distance to primary health care facility. The utilization of primary health care services by women of child bearing age was significantly influenced by family. The implication of this result is that utilization of primary health care services by women of childbearing age is influenced by the number of children they have.

## Conclusion

The study concludes that the level of utilization of primary health care services among women of childbearing age was good as majority of them received almost all the primary health care services and the study revealed that knowledge of PHC services, perception of PHC services, age, marital status, educational level and family size were found to be potent

factors influencing utilization of primary health care services by women of childbearing age. It is therefore recommended that promotion of female education and empowerment are required to improved utilization of primary health care services.

**Recommendations**

In view of the findings stated earlier, there is an urgent need to pay more attention to creating more awareness on knowledge and access to primary health care services by women of childbearing age. The following recommendations are made:

1. The Ministry of Health or the state government should provide alternate sources of electricity such as generators and solar panels to all PHCs within its domain. This can be requested as part of the support provided by donor agencies where the government may not have the required funds to provide these.

2. Appropriate staffing should be provided, the state ministry of health should carry out a survey of current staffing needs across all PHCs in the state and determine the gaps present and find ways to fill identified gaps.

3. Cost of services should be reconsidered and more funding should be provided for health in the budget.

4. The Ministry of Health needs to collaborate with all the relevant stakeholders to disseminate information on the available services using the mass media, Information, Education and Communication materials and workshops for the women.

5. The funding of PHC should not be left to the Local Government alone, the Federal and State Governments should contribute in infrastructural provision particularly buildings and roads, staff of PHC should be encouraged by adequate welfare and motivational schemes to avoid their migration or relocating to industrialized cities where they will be adequately remunerated.

6. Provision of adequate amenities and procurement of equipment including drugs and other consumables should be a matter of top priority.

7. Promotion of female education and empowerment are required to improved utilization of primary health care services.

8. In addition, communities in the study area should be mobilized and given adequate orientation to participate in the activities of PHCs in their various places in order to maximize the benefits and sustainability of PHC delivery services within the local government and beyond.

**References**

Ahmad, D., Ahmad, H., Koya, Muktar, M., Said, Aliyu, s. And Adam, R.A. (2019). Factors Influencing the utilization of Public Primary Health Care Facilities in Kumbotso Local Government Area of Kano State, Nigeria *International Journal of Development and Management Review (INJODEMAR)* 14(1), 54 – 64.

Amroussia, N., Hernandez, A., Vives-Cases, C., & Goicolea, I. (2017). "Is the doctor God to punish me?" An intersectional examination of disrespectful and abusive care during childbirth against single mothers in Tunisia. *Reprod. Health, 14* (32).

Azuh, D., Azuh, A., Iweala, E., Adeloye, D., Akanbi, M., &Mordi, R. (2017).Factors influencing maternal mortality among rural communities in south western Nigeria. *International Journal of Women's Health*. 9,179-188. doi:10.2147/IJWH.S120184.

Dahiru T, & Oche O.M., (2015). Determinants of antenatal care, institutional delivery and postnatal care services utilization in Nigeria. *Pan Afr Med J.* 21, 321–37.https://doi.org/10.11604/pamj. 21.321.6527.20.

Hampton, C., and Nagy, K. (2016). Determining service utilization. Community Tool Box, Available at http://ctb.ku.edu/en/table-ofcontents/assessment/assessing-community-needsand-resources/determine-service-utilization/main

Ibebuike, J.E., Ojie, C.A., Nwokike, G.I., Obeagu, E.I., Nwosu, D.C., Nwanjo, H.U., Agu, G.C., Ezenwuba, C.O.,Nwagu, S.A., and Akujuobi, A.U. (2017). Factors that influence women's utilization of primary health careservices in CalabarCross river state, Nigeria.*Int. J. Curr. Res. Chem. Pharm. Sci.* 4(7), 28-33.

Kaba, M., Taye, G., Gizaw, M., and Mitiku, I. (2017). Maternal health service utilizationin urban slums of selected towns in Ethiopia: Qualitative study. *Ethiop. J. Health Dev31*:92–102.

Lorretta, F. C., Ntoimo, F. G., and Okonofua (2019). Why rural women do not use primary health care centres for pregnancy care: evidence from a qualitative study in Nigeria: BMC Pregnancy and childbirth.

Nkwo P. O. (2015). Poor availability of skilled birth attendants in Nigeria: a case study of Enugu state primary health care system. *Ann Med Health Sci Res.* 5(1), 20–5.

Odetola, T. D. (2015). Health Care Utilization among Rural Women of Childbearing Age: A Nigerian Experience. Pan African Medical Journal, Retrieved from http://www.panafrican-medjournal.com/content/article/20/151/full

Okonofua, F., Ntoimo, L., Ogungbangbe, J., Anjorin, S., Imongan, W., &Yaya, S., (2019). Predictors of women's utilization of primary health care for skilled pregnancy care in rural Nigeria. *BMC Pregnancy and Childbirth*. 18:1-15. doi: 101186/s12884-018-1730-4

Osubor, K. M., Fatusi, A. O. & Chiwuzie, J. C. (2016). Maternal health-seeking behavior and associated factors in a rural Nigerian community. *Maternal Child Health Journal* 10: 159.

Ovikuomagbe, O (2017). Determinants of maternal health care utilization in Nigeria. *International Multi-Disciplinary Journal, Ethiopia.* 11(2), 283- 294.

Say, L. & Raine, (2017). A systematic review of inequalities in the use of maternal health care in developing countries: examining the scale of the problem and the importance of context. *Bulletin of the World Health Organization.*85 (10). http://dx.doi.org/10.1590/S0042-96862007001000019.

UNICEF (2016). Evaluation of the Maternal, New born and Child Health Week in Nigeria: Final Report. Abuja, Nigeria: UNICEF. Retrieved fromhttps://www.Unicef.org/Nigeria a/NG evaluation MNCH W2017.pdf

World Health Organization (2016). *Sexual and Reproductive Health. Maternal Health in Nigeria: Generating Information for Action*. Retrieved from https://www.who.int/reproductivehealth/maternal-health-nigeria/en/.

# Cite this article:

# Published By



**AND**

*ThoughtWares Consulting & Multi Services International (TWCMSI)*