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## Utilization of Maternal Health Services among Women of Child Bearing Age in Mbaitoli L. G. A.

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### ABSTRACT

This study assessed Utilization of maternal health care services among women of child bearing age in Mbaitoli LGA. Four research questions guided the study. Descriptive study design was employed for the study and sample size of 405 was drawn from the target population of 3720. The respondents were selected in multistages involving purposive and proportionate cluster sampling techniques. Instrument for data collection was structured questionnaire which was self-administered to respondents by the researcher and her research assistants during various meetings. On utilization, most of the respondents used the services for antenatal (88.39%), delivery (89.38%) and postnatal care (79.25%). Major factors that affected utilization include distance 38(88.37%), cost of care 33(76.74%). There was a statistically significant difference between age, parity and level of education and utilization of maternal health services.

**Keywords:** Utilization, maternal health services, women, child bearing age

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### INTRODUCTION

Utilization of maternal health services has emerged as the most important issue that determined global and national wellbeing of every childbearing mother [1-4]. This is because every individual, family and community are at some point intimately involved in pregnancy and the success of childbirth [5]. Despite the honour bestowed on womanhood and the appreciation of the birth of a new born baby, pregnancy and childbirth are still considered as perilous journey. The situation of utilization of maternal health services in Nigeria is among the worst in Africa and has not improved substantially and in some areas of the country, has worsened over the past decade [6]. Many factors affect the utilization of maternal health care services which are; family size women from large families underutilize various health care services because of too many demands on their number [7-10]. Large families can cause resource constraints, which have a negative effect on health care utilization [11]. It is well recognized that mothers' education has a positive impact on the utilization of health care. In a global study, Becker [12] discovered that mother's education is the most consistent and important determinant of the utilization of maternal health care services. It is argued that better educated mothers are more aware of health problems, the way to tackle it and know about the availability of health care in order to maintain or achieve optimum health status. Mother's education may also act as a proxy variable to a socio-economic status, thus enabling her to seek for proper medical care whenever she perceives it necessary.

It is equally known that increased income has an active effect on the utilization of maternal health care services [13]. The occupation of a mother and socio-economic status can be considered as a proxy of family income as well as social status. Many women avoid the modern health care facilities for fear of

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being subjected to operative delivery which they believe are performed unnecessarily in hospitals. Other factors affecting the utilization of maternal health care services include accessibility, affordability, availability, cultural beliefs, and inappropriate location of health facilities, poor road and communication networks and lack of means of transportation [14].

## RESEARCH METHODS

### Study Design

The research design adopted in this study is a descriptive survey.

### Study Setting

The study was done in Mbaitoli Local Government Area.

### Population of the study

The target population of the study comprised of women of child bearing age in Mbaitoli Local Government Area of Imo State. The population is made up of (3,720) mothers in Mbaitoli Local Government Area of Imo State.

### Sample size determination

Using the G\* power software, with power of the study set at 0.80, a power analysis was done to estimate the required sample size for the study. The estimated sample size is given as 368. Alternatively, using the manual equation, the sample was estimated as follows:

$$N = \frac{Z^2_{\alpha/2} * P * (1-P) * D}{E^2}$$

Where  $Z^2_{\alpha/2} = 1.96$  (normal deviate for a two tailed test at 0.05 level of significance)

P = 61% (proportion or prevalence of event of interest from previous studies)

E = Precision or margin of error (10% of P)

D = Design effect (2 for proportionate sampling design)

$$\frac{(1.96)^2 \times 0.61 (1-0.61) \times 2}{0.061^2} = 368$$

Allowing for non-response rate or attrition, 10% of the calculated sample will be added.

Therefore  $368 + 36.8 (10\%) = 404.8 \approx 405$

### Inclusion and exclusion criteria

#### Inclusion criteria

Mothers who are within the child bearing age and were willing to participate, physically stable and alert, reside at Mbaitoli LGA as at the time of the study

#### Exclusion criteria

Those women who are not within the age of childbearing, unwilling to participate or not physically stable and do not reside in Mbaitoli LGA at the time of the study were excluded.

### Sampling Procedure

The sampling for this study was done in multi stages involving purposive, proportionate and cluster sampling techniques. Women of child bearing age between ages 15-45 were purposively selected. Cluster sampling was used to ensure even selection of women across the communities in Mbaitoli Local Government Area while proportionate sampling was used to select the required number of women per community.

### Instrument for Data Collection

The researcher used one approach in data collection which is the quantitative method.

The instrument for the quantitative data collection was a close ended self-structured questionnaire. The questionnaires composed of five sections namely; sections A, B, C, D and E. Section A consisted of three (3) questions on bio-data of the respondents. Sections B-E consist of questions to elicit information on types of MHS available, factors affecting maternal health services, usage of maternal health facilities and possible solution to factors affecting MHCS utilization in Mbaitoli respectively.

### Method of Data Collection

The questionnaires were distributed by the researcher and three research assistants in line with the sample mapped out for the study. Through contact with the respondents in their monthly meetings, with the help of the president of the women association of each village group and the research assistants, the questionnaires were distributed after due explanation of the objectives, purpose and method of data collection. The questionnaires were distributed on face-to-face basis and were collected immediately after completion to ensure that a good percentage was returned. Time for completion of the questionnaire was 50minutes in each of the meetings

### Method of Data Analysis

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Data collected were analyzed using descriptive statistics of frequency counts, percentage and presented in tables. Hypotheses for the study were tested at 0.05 level of significance, using inferential statistic of chi-square ( $\chi^2$ ). The statistical analysis was performed with Statistical Package for Social Science (SPSS version 21).

#### Ethical Consideration

A letter of permission was obtained from the Department of Nursing Sciences, Imo State University Orlu campus and ethical approval from Imo State Research Ethical Committee. Permission was gotten from the chairman of Mbaitoli LGA and the Eze of each of the five settlements. The exercise time, purpose and nature of the study was explained to each of the participants. The collected data were entered into the computer without name rather code numbers were used and were accessible to researchers alone for confidential purpose.

## RESULTS

**Table 1: Responses on level of utilization of maternal health services**

Use of maternal health care services	Frequency	Percentage (%)
Antenatal services	358	88.39
Delivery services	362	89.38
Postnatal care	321	79.25
Family planning	129	31.85
Immunisation	200	49.38
Treatment of minor ailments	56	13.82
Health education and counselling	71	17.53
Youth friendly services	0	0
<b>Frequency of use</b>		
Always	147	36.29
Frequently	200	49.38
Occasionally	15	3.70
Never	43	10.62

Table 1 revealed the responses of women on the utilisation of maternal health care services in Mbaitoli Local Government Area of Imo State. The table shows that 358 (88.39%) of the respondents use Antenatal services, 362 (89.38%) use delivery services, 321(79.35%) use Postnatal services, 129(31.85%) use family planning services, 200(49.38%) use Immunization services, 56(13.82%) use the services of treatment of minor ailments, 71(17.53%) of the respondents use Health education and counselling services while none of the women of child bearing age in Mbaitoli use Youth friendly services. Also, on the frequency of the use of maternal services available, the responses show that 147 (36.29%) of the respondent always use the maternal health services, 200 (49.38%) use the maternal health services frequently, 15 (3.70) use the services occasionally while 43 (10.62%) have never used the maternal health care services.

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**Table 2: Responses to the Factors affecting maternal health care utilization among Women of Child Bearing Age**

Factors affecting maternal health care (multiple options)	Frequency = 43	Percentage
Cost of care	33	76.74
Distances to the facility	38	88.37
unavailability of the services	5	11.63
Attitude of health workers	9	20.93

Table 2 shows the responses of the women who have never used the maternal health care services on factors affecting maternal health care utilization. The results indicate that 33 (76.74%) of the respondents cited cost of care, 38 (88.37%) gave reasons as distance to the facility, 5 (11.63%) cited unavailability of services and 9 (20.93%) cited attitude of health workers.

### DISCUSSION

Findings from the study also revealed that some maternal health care services were being utilised by the women of child bearing age in Mbaitoli Local Government Area Imo State. Generally, a total number of 362 (89.38%) respondents use maternal health care services while 43 (10.62%) have never used maternal health care services. From the findings, it was revealed that the maternal services mostly used were antenatal (88.39%), delivery (89.38%) and post-natal (79.25%) services. This finding is in consonance with the findings of Galtung (2015) who in a study on use of maternal health care services in Enugu state Nigeria, reported that antenatal and delivery services were highly used by women of child bearing age in the vicinity. Findings from the study showed that among the 43 (10.38%) who have never used maternal health care services, the major factors that affected utilization of maternal health care services in Mbaitoli Local Government of Imo State are distance to the facility (76.74%) and cost of care (88.37%). Opeyemi [15] supported this finding in a similar study on factors affecting use of maternal health care services in south west Nigeria. The major findings from Opeyemi as cited by respondents were cost of health care services and distance of the health care facilities. This result correlates with Abbas and Walker [16] who in their study on determinants of maternal health care service utilization among women of child bearing age in North China, reported that the age of the women and educational status were strong determinants of maternal health care utilisation. They further reported that women whose educational status were below tertiary education were prone to ignore maternal health care services while utilisation of health care services increased with level of education and age.

### CONCLUSION

It is therefore concluded that women in the reproductive age in Mbaitoli utilized the antenatal care services and the determinants contributing to this utilisation were: The age of the majority of respondents, the high level of education and parity. However, if pregnant women did not utilize maternal health care services, many obstetric problems could become life threatening crises for both mother and baby by the time these were diagnosed. Utilizing maternal health care services is particularly important to the pregnant women who are most likely to be prone to developing obstetric complications.

### REFERENCES

1. Ibebuikie JE, Ojie CA, Nwokike GI, Obeagu EI, Nwosu DC, Nwanjo HU, Agu GC, Ezenwuba CO, Nwagu SA, Akujuobi AU. Barriers to utilization of maternal health services in southern senatorial district of Cross Rivers state, Nigeria. *International Journal of Advanced Multidisciplinary Research*. 2017;4(8):1-9.
2. Obeagu EI. An update on utilization of antenatal care among pregnant Women in Nigeria. *Int. J. Curr. Res. Chem. Pharm. Sci*. 2022;9(9):21-6.
3. Ibebuikie JE, Ojie CA, Nwokike GI, Obeagu EI, Nwosu DC, Nwanjo HU, Agu GC, Ezenwuba CO, Nwagu SA, Akujuobi AU. Factors that influence women's utilization of primary health care services in Calabar Cros river state, Nigeria. *Int. J. Curr. Res. Chem. Pharm. Sci*. 2017;4(7):28-33.

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4. Ogomaka IA, Obeagu EI. Methods of Breast Feeding as Determinants of Malaria Infections among Babies in IMO State, Nigeria. *International Journal of Medical Science and Dental Research*. 2019 Jan;2(01):17-24.
5. WHO. Maternal Mortality in 1995; Estimates Developed by WHO/UNICEF, Geneva, World Health Organization. 2016.
6. Ladipo R. Compliance with Medical Advice. In Steptoe, A. and Mathews, A. (ed.), *Health Care and Human Behaviour*, London, Academic Press. 2015.
7. Marter F. killed Birth Attendance: What Does it Mean and How can it be Measured? A Clinical Skills Assessment of Maternal and Child Health Workers in Nepal, *International Journal of Gynaecology and Obstetrics*, 2016; 89, 200-208.
8. Ajugwo A, Opigo RU, Obeagu EI. Prevalence of Anaemia and Associated Factors in Lactating Mothers Accessing Health Services at Ishaka Adventist Hospital, Bushenyi District. *Asian Journal of Dental and Health Sciences*. 2023 Jun 15;3(2):1-6.
9. Obeagu EI, Obeagu GU, Musimenta E. Post partum haemorrhage among pregnant women: Update on risks factors. *Int. J. Curr. Res. Med. Sci.* 2023;9(2):14-7.
10. Obeagu EI, Abdirahman BF, Bunu UO, Obeagu GU. Obstetrics characteristics that effect the newborn outcomes. *Int. J. Adv. Res. Biol. Sci.* 2023;10(3):134-43.
11. Moreno V. Is antenatal care effective in reducing Maternal morbidity and mortality. *Public health Nursing*, 2018; 9, 15-21.
12. Becker MH. The health belief model and personal health behaviour. Thorofare NJ: Charles B. Slack. 2016.
13. WHO. Maternal Mortality Factsheet. 2018. Available at [www.who.org](http://www.who.org).
14. Galtung O. Maternal and Child Health Services in Rural Nepal: Does Access or Quality Matter more? *Health Policy and Planning*, 2017; 15(2), 223-229.
15. Opeyemi DV. Can PHC system in India deliver emergency obstetric care? *A Management Perspective on Child Survival and Safe Motherhood Programme Social Change*, 2016; 26(3-4): 14-29
16. Abbas N, Walker T. Negotiating commitment and involvement in the Nurse- patient relationship. *Journal of Advanced Nursing*, 2019; 16.455-468.

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