



RESEARCH ARTICLE

DEGREE OF UTILIZATION OF MATERNAL AND CHILD HEALTH SERVICES AMONG CHILDBEARING MOTHERS ACCESSING TAX-SUPPORTED HEALTH FACILITIES IN SOUTHEAST NIGERIA

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ABSTRACT

Background: Maternal and child health services are appropriate measures put in place to tackle maternal and child mortality.

Aim: To determine the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria and to verify the null hypotheses of no significant differences.

Methods and Materials: A descriptive survey research was conducted on 650 child bearing mothers accessing tax-supported health facilities in Southeast Nigeria using convenient sampling procedure. Data was collected through interview method and questionnaire. Descriptive statistics was adopted for data analysis. All the analyses were done using SPSS version 18.

Results: The study revealed that the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria was high. Statistically, significant difference existed on some socio-demographic variables while no significant difference was indicated on others at 0.05 level of significance.

Conclusion: The degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria was high. This finding is quite encouraging as it reflected on the decreased rates of both maternal and child mortality in the study area.

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INTRODUCTION

Globally, improving maternal and child health -MCH through appropriated services has remained one of the greatest concern of health sector. This is because, MCH services embrace all the services for mothers throughout the child bearing age, that is 15-49 years and the services for children from conception through adolescence (Indacochea and Leahy, 2009). According to Nwala et al. (2013), the MCH services should include: ante natal, oral rehydration, delivery, immunization, post natal, growth monitoring, family planning, breastfeeding initiative and health education focusing on promotive, preventive, curative and rehabilitative health care for mothers and under-five children (Pathfinder International, 2004). This indicates that MCH services should be comprehensive enough to achieve the expected goal which is total reduction in maternal and child mortality and morbidity. In Nigeria, MCH services are provided by the government in all the tax-supported health facilities on free-basis.

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However, other health facilities such as the private or voluntary which has been accredited and registered with the Nigerian government can as well offer MCH services based on government regulations. The MCH service is one of the interventions by Nigerian government to achieve optimum health for the mothers and children. These services are provided to maintain high sense of availability, suitability, affordability, acceptability, accessibility, continuity and integratedness in all the tax-supported health facilities in the country. This initiative has successfully reduced the maternal and child mortality ratio unlike the previous decades when Nigeria was estimated to have contributed 10% of the global estimates of maternal and child deaths which was translated to about one death per every three minutes (Nwala et al., 2013). Previous research showed that women of child bearing age possess adequate knowledge of the available MCH services in the health facilities (Nwala et al., 2013). It is also reported that women only know more about ante natal and delivery services (Lubbock et al., 2008). Other studies further maintained that strong and indispensable is the role of knowledge in the utilization of services (Mpembeni et al., 2007; Babola and Fatusi, 2009; Nwala et al., 2013). Literature evidence also revealed that the use of services is strongly correlated to socio-economic and demographic phenomenon (Mpembeni et al.,

2007). However, data regarding the degree of utilization of MCH services among child bearing mothers accessing tax-supported health facilities is still inadequate. Thus, the need for the present study which determined the degree of utilization of MCH services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria. This was the major focus of this study and was restricted to child bearing mothers

Objective: To determine the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria and to verify the null hypotheses of no significant differences

MATERIALS AND METHODS

A descriptive survey research was conducted on 650 child bearing mothers accessing tax-supported health facilities in Southeast Nigeria using convenient sampling procedure. Data was collected through interview method and questionnaire. The validated item statements measured the degree of utilization of MCH services among child bearing mothers with five point response options. That is to say that, each of the items has five options for selection. Descriptive statistics was used for data analysis. All the analyses were done using SPSS version 18. The cut-off point for the weighted mean score was 3.0 accrued from the five-point response options. Thus, the mean value of 3.0 and above signifies high degree of utilization while below indicate low utilization. All the postulated null hypotheses were verified at 0.05 level of significance. This study was approved by the Research Review Committee of Ministry of Health in Nigerian. The informed consent of the respondents was obtained. This consent was approved by the Ethical Committee of Nigerian Universities and the Ministry of Education.

RESULTS

A total of 650 child bearing mothers accessing tax-supported health facilities were studied. Table 1 showed the frequency and percentage representatives of the demographic characteristics of the subject. For instance, in number of children, approximately 57% and 28% had 2 or 3 children and 4 or 5 children respectively. About 9.2% had 6 children and above while only 6.2% had one child. Only 40% were rural dwellers while 60% were urban dwellers. In housing apartment, about 55.4% and 29.2% were owned and rented, while approximate 10% and 6% were hired and squatted apartments respectively. Chronologically, approximately 54%, 31% and 11% were within the ages of 25-34 years, 35-44 years and 15-24 years respectively, while only 4.6% were 45-49 years. A good number of the subjects were Christians and Pagans with about 63.1% and 26.2%. Only 9.2% and 1.5% were Muslims and Traditionalists respectively. In occupation, approximately 48% and 19% were civil servants and traders. About 16.9% and 9.2% were farmers and professionals. Only 7.7% were unemployed child bearing mothers. Convincingly, about 69.2% respondents were married. Approximately 11% were single. While only 9.2%; 6.2% and 4.6% were divorced; widowed and separated respectively. In the respondents' educational qualifications, approximately 31% were Bachelor's Degree holders. About 26.2% and 20% were NCE/HND and WASSC/GCE/NECO holders. Only 10%; 6.2%; and 5.3% were Master's Degree; FSLC; Doctorate Degree holders respectively.

Table 1. Demographic characteristics of Child Bearing Mothers (N = 650)

Variables	Frequency	Percentage (%)
Number of Children		
With 1 Child	40	6.2
With 2 or 3 children	370	56.9
With 4 or 5 children	180	27.7
With 6 children and more	60	9.2
Location		
Urban	390	60
Rural	260	40
Housing Apartment		
Rented	190	29.2
Owned	360	55.4
Hired	64	9.9
Squatted	36	5.5
Age Distribution		
15-24	70	10.8
25-34	350	53.8
35-44	200	30.8
45-49	30	4.6
Religious Affiliation		
Christianity	410	63.1
Muslim	10	1.5
Pagan	170	26.2
Traditional	60	9.2
Occupation		
Civil Servant	310	47.7
Professional	60	9.2
Farmer	110	16.9
Trader	120	18.5
Unemployed	50	7.7
Marital Status		
Single	70	10.8
Married	450	69.2
Separated	30	4.6
Divorced	60	9.2
Widowed	40	6.2
Educational Qualifications		
No Formal Education	10	1.5
FSLC	40	6.2
WASSC/GCE/NECO	130	20
NCE/HND	170	26.2
Bachelor's Degree	200	30.8
Master's Degree	65	10
Doctorate Degree	35	5.3
Living Condition		
With Family	465	71.5
Alone	35	5.4
With Relatives	120	18.5
With Friends	30	4.6

Table 2. Presenting the Degree of Utilization of MCH Services by Child Bearing Mothers accessing Tax-Supported Health Facilities in Southeast Nigeria (N = 650)

Degree of Utilization of MCH Services	Mean	Standard Deviation	Remark
Antenatal services	3.12	0.231	High
Oral rehydration services	2.89	0.121	Low
Delivery services	3.43	0.091	High
Immunization services	3.61	0.218	High
Post natal services	3.52	0.082	High
Growth monitoring services	2.55	0.235	Low
Family planning services	3.29	0.653	High
Breastfeeding initiative	2.41	0.019	Low
Health education	3.66	0.167	High
Average Mean Value	3.16	.202	High

Approximately 2% had no formal education. There was evidence that the majority of respondents live with family members and relatives with approximately 72% and 19% respectively. Only 5.4% and 4.6% live alone and with friends respectively. Data in Table 2 showed that the average mean value 3.16 and standard deviation 0.202 on the degree of utilization of maternal and child health services by child bearing mothers accessing tax-supported health facilities in Southeast Nigeria was above the cut-off point of 3.0 indicating high utilization. The Table further showed that the degree of utilization of antenatal services; delivery services; immunization services; post natal services; family planning services; and health education was high with mean values above the cut-off point of 3.0. The Table also indicated that the low utilization was evidenced on oral rehydration services; growth monitoring services and breastfeeding initiative with mean values below the cut-off point of 3.0.

Table 3. Presenting Socio-demographic Differences in Degree of Utilization of Maternal and Child Health Services by Child Bearing Mothers and Significant Differences between Variables (N = 650)

Variables	N	Mean	S.D	Usage	t-cal	P-value	Remark	Decision
Number of Children						-1.2	.71	* Rejected
With 1 Child	40	3.10	.211	High				
With 2 or 3 children	370	3.12	.011	High				
With 4 or 5 children	180	2.72	.018	Low				
With 6 children and more	60	3.71	.011	High				
Location								
Urban	390	3.81	.091	High				
Rural	260	2.81	.031	Low				
Housing Apartment								
Rented	190	3.01	.921	High				
Owned	360	3.32	.021	High				
Hired	64	2.19	.012	Low				
Squatted	36	3.61	.432	High				
Age Distribution								
15-24	70	2.81	.098	Low				
25-34	350	3.19	.021	High				
35-44	200	3.43	.041	High				
45-49	30	2.91	.321	Low				
Religious Affiliation						.04	.61	* Rejected
Christianity	410	3.83	.372	High				
Muslim	10	2.33	.021	Low				
Pagan	170	3.21	.031	High				
Traditional	60	2.19	.370	Low				
Occupation						.32	.01	** Accepted
Civil Servant	310	3.44	.024	High				
Professional	60	3.02	.901	High				
Farmer	110	2.72	.032	Low				
Trader	120	3.32	.033	High				
Unemployed	50	2.12	.001	Low				
Marital Status						.09	.02	** Accepted
Single	70	2.82	.021	Low				
Married	450	3.88	.091	High				
Separated	30	2.78	.902	Low				
Divorced	60	3.01	.111	High				
Widowed	40	3.12	.032	High				
Educational Qualifications						-.52	.41	* Rejected
No Formal Education	10	2.11	.012	Low				
FSLC	40	3.01	.011	High				
WASSC/ GCE/ NECO	130	3.33	.021	High				
NCE/ HND	170	3.29	.053	High				
Bachelor's Degree	200	3.28	.088	High				
Master's Degree	65	3.82	.091	High				
Doctorate Degree	35	3.01	.119	High				
Living Condition						-.73	.73	* Rejected
With Family	465	3.41	.032	High				
Alone	35	2.43	.091	Low				
With Relatives	120	3.77	.017	High				
With Friends	30	3.18	.032	High				

Data in Table 3 presented the socio-demographic differences in the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities and the significant differences between variables. As contained in the Table, only child bearing mothers with 4 or 5 children; rural location; hired apartment; 15-24 years; 45-49 years; Muslims; traditionalists; farmers; unemployed; single; separated; no formal education; and living alone indicated low utilization of maternal and child health services with mean value above 3.0. The Table further showed that the respondents with 1 child; 2 or 3 children; 6 children and above; urban location; rented; owned; squatted; 25-34 years; 35-44 years; Christianity; Pagans; civil servants; professionals, traders; married; divorced; widowed; FSLC; WASSC/GCE/NECO; NCE/HND/ bachelor's degree; master's degree; doctorate degree; living with family; with relatives; and with friends indicated high degree of utilization of maternal and child health services with mean values below 3.0. Statistically, data in Table 3 showed that significant differences existed on the socio-demographic variables of respondents on number of children; housing apartment; age distribution, religious affiliation, educational qualifications and living condition (P-value > 0.05) while location, occupation and marital status showed no significant difference (P-value < 0.05).

DISCUSSION

This descriptive survey has shown that the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria was high.

The expected finding was quite encouraging as it reflected the present situation regarding reduced maternal and child mortality as well as morbidity in the study location. However, such expected finding could be attributed to some obvious factors. For instance, it could be that the respondents' level of education influenced their interest in the utilization of MCH services. As shown in the study, only 1.5% of the respondents had no formal education (see Table 1), indicating about 98.5% had formal education. Secondly, about 60% of the respondents were urban dwellers which were also an indication that experiences and exposures in the city have played significant role in the utilization of MCH services. It was evidenced that the respondents indicated low utilization on oral rehydration services; growth monitoring services and breastfeeding initiative (see Table 2).

Thus, the surprising finding contradicted the main interventions which have made significant contributions to the dramatic fall in maternal and child mortality rate in most developing countries. These include: immunization, oral rehydration, growth monitoring, breast feeding, family planning, female education, and supplementary feeding of pregnant women (Sanders, 1998; Garfield and Waldman, 2003). The study equally revealed that differences existed on the degree of utilization of MCH services according to socio-demographics of the respondents. However, the respondents with 4 or 5 children; rural location; hired apartment; 15-24 years; 45-49 years; Muslims; traditionalists; farmers; unemployed; single; separated; no formal education; and living alone indicated low utilization of MCH services while others showed high.

This result had more similarities with the findings of other researchers which revealed that the utilization of MCH services was strongly correlated to socio-economic and demographic phenomenon (Mpembeni *et al.*, 2007; Indacochea and Leahy, 2009). Controversially, it was not quite surprising particularly when the Muslims were the major focus since their religion and doctrine restrict male doctors from attending to female patients especially during pregnancy. The implication may be endangering since some of the doctors found in the studied tax-supported health facilities were males. However, other factors such as shyness and inexperience could be responsible for low utilization among the respondents within the ages of 15-24 years. Statistically, the study found that significant differences existed on the socio-demographic variables of respondents on number of children; housing apartment; age distribution, religious affiliation, educational qualifications and living condition while no significant differences were shown on location, occupation and marital status. Studies found that rural women tend to use less of MCH services for themselves and their children (National Population Commission, 2009; Ethiopian Central Statistical Agency, 2008). This was in accordance with the present study.

Conclusion

The present has attempted to establish the degree of utilization of maternal and child health services among child bearing mothers accessing tax-supported health facilities in Southeast Nigeria. The increased utilization of MCH services would not only reduce maternal and child mortality rate but also promote optimum health. A proper intervention such as public health education and awareness campaign should be strategically targeted to empower child bearing mothers irrespective of socio-demographic variations, in order to enhance maximum utilization of MCH services.

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Nil

Competing Interest

The authors have no competing interests.

Authors' Contributions

UCU analyzed and interpreted the data. OJI wrote the manuscript. ICC contributed to the study concept and design, acquisition of subjects and manuscript review. UCU drafted the manuscript and revising it critically for important intellectual content. All authors have read and approved the final version of the manuscript

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