European Journal of Clinical Medicine
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Mother's Satisfaction with Delivery Services and Intended Future Utilization at Federal Teaching Hospital, Gombe, North-Eastern, Nigeria

Bernard Terkimbi Utoo, Christopher Hassan Laima, Amina Baba Rabiu, Sagir Muhammad, Christianah Funsho Oyeniyi, Onuwabuchi Egwu, and Musa Dawha Yahaya

ABSTRACT

Background: **Maternal death reduction could be achieved through the utilization of hospital delivery services. In Nigeria, unfortunately delivery in health facilities where skill birth attendants exist is reported to be only 39%. Maternal satisfaction with hospital services will encourage utilization.**

Aim of the study: **The study was designed to assess the satisfaction of mothers' and their intention to utilize delivery services in subsequent pregnancies at the Federal Teaching Hospital Gombe, North-East, Nigeria.**

Methods: **This was a descriptive, cross-sectional study conducted at the postnatal ward of the hospital amongst 250 women within 48 hours after childbirth. Data was collected with the use of a pretested, semi structured questionnaire and analysis done with SPSS statistical software version 25.**

Results: **Overall satisfaction with delivery services was 84.4% with only 15.6% dissatisfied. Total satisfaction with the cleanliness of the facility was 92.8%, interpersonal relationship 84.8%, information provided 74.4% and technical aspects of care 82.8%. As many as 78.4% of women will utilize the facility in future for delivery services. The major reason amongst this category being satisfaction with services (76.5%). Those who do not intend to utilize facility in the future were 21.6% amongst which 27.8% gave reasons as completed family size and only 22.2% would not because of dissatisfaction. Satisfaction was only statistically related to ethnicity (P value=0.02) and none amongst obstetric variables tested.**

Conclusion: **Majority of the women were satisfied with delivery services rendered and would utilize the facility in the future. There is need to sustain and further improve upon the quality of services.**

Keywords: Antenatal, clients, childbirth, mother, perception, satisfaction, skill birth attendant, utilization.

Published Online: May 10, 2023

ISSN: 2736-5476

DOI:10.24018/ejclinicmed.2023.4.3.276

B. T. Utoo*
Department of Obstetrics and Gynaecology, Benue State University Teaching Hospital, Makurdi, Nigeria.
(e-mail: bernardutoo@yahoo.com)
C. H. Laima
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.
A. B. Rabiu
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.
S. Muhammad
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.
C. F. Oyeniyi
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.
O. Egwu
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.
M. D. Yahya
Department of Obstetrics and Gynaecology, Federal Teaching Hospital Gombe, Nigeria.

****Corresponding Author***

I. Introduction

There has been an increase in global efforts to reduce maternal deaths [1]. Even though it has been reported that these deaths have decline by 47%, the maternal mortality ratios are still quite high particularly in low-income countries compared with reports in high income countries [2]. It has been reported that in the whole of the European Union (EU) countries, the estimated number of women that die due to pregnancy related, delivery or puerperal complications are 300-1000 [3].

Asia which is one of the continents with poor MMRs seems to even have better indices than lowest income countries [4]. For instance, estimates in Indonesia, South-East Asia are reported to be 126 to 359 per 100, 000 live births. The newborn mortality rate was reported to be 19 per 1000 live births as of 2012 [4].

It is believed that making childbirth safe do not necessarily require high technologically advanced gadgets. In developing nations, many women who attempt to deliver end up experiencing suffering, morbidity and in many cases preventable death [1], [5]. With an estimated maternal mortality ratio of 500 per 100,000 live births, sub-Saharan Africa accounts for 56% of all maternal deaths worldwide [6,7]. The MMR in Kenya and Ethiopia in East Africa is reported to be 362/100,000 and 676/100,000 live births respectively [2]. In South Africa the report is 135 per 100,000 live births [2]. In West Africa, Nigeria alone is said to contributes 14% of global maternal deaths with a maternal mortality ratio of 814 per 100, 000 live births [6]. Even in the

midst of global decline in maternal mortality ratios, the situation in Nigeria is still not encouraging to say the least [8].

Evidence through research suggests that delivery in a health facility is associated with lower maternal and newborn morbidity and mortality rates compared with delivery in unorthodox places [9], [10]. Unfortunately, the 2008 Nigeria Demographic and Health Survey (NDHS) showed that only 39 % of women delivered in a health facility in Nigeria [6]. Studies have reported diverse reasons that are behind these observations. These include; level of health care system in operation at the facility, perception of the quality of institutional maternal healthcare by clients and the community, and the belief system of communities about the importance of delivery in a health facility [1], [8].

Others are; socio-economic factors, literacy level, cultural issues, political inclinations, lack of infrastructures such as roads, transportation, distance from health facility, knowledge of the benefits of having deliveries assisted by skilled health attendants, husband's occupation as well as socio-economic status and preferences of relations to the women etc. [1], [8].

It is important to know the perception of the women themselves as regards the quality of services rendered in the health facilities [11], [12]. This is necessary because mothers who had a positive childbirth experience are more likely to have a better, mother-baby relationship [13], [14]. There is stronger bonding thereby enhancing higher chance of exclusive breastfeeding. She is also more likely to relate better with other family members. The same woman is more likely to return for delivery in the hospital as well as encourage other women to accept institutional delivery [1], [5], [15], [16].

Hence the World Health Organization (WHO) recommends the evaluation of satisfaction by the women so as to help improve quality and effectiveness of maternity care services [2], [17]. To the best of my knowledge there is scarcity of studies which focused on evaluating the satisfaction of women who deliver in our health facilities in the North-Eastern part of Nigeria. The aim of this study is therefore to assess the satisfaction of mothers and their intention to utilize delivery services in subsequent pregnancies at the Federal Teaching Hospital Gombe, North-East, Nigeria and to make recommendations that will guide maternal health care policies aimed at promoting satisfaction and utilization of delivery services at the facility.

II. Method

A. Study Setting

The study was conducted at the Obstetrics and Gynaecology department of the Federal Teaching Hospital Gombe. The hospital is located in the state capital. It serves as a referral center to so many public and private health facilities within the state and neighboring states. It is a training center for both undergraduate and postgraduate (residency) students as well as a research institute. The maternity unit which is a 50 bedded unit is well equipped with a labour suite and two operating theatres. There is a 24-hour coverage by Obstetricians, anesthesiologist and neonatologist with full laboratory and blood bank support services. The unit records over 3000 deliveries annually.

B. Study Design

This was a descriptive cross-sectional study utilizing quantitative research methodology. The study period was from March to August 2022.

C. Study Population

These were mothers who had delivered but were yet to be discharged and were in the postnatal ward.

D. Inclusion Criteria

They were mothers with a parous experience, mentally stable and not severely ill. They also gave consent to participate in the study.

E. Exclusion Criteria

Mothers who were severely ill, mentally unstable and refused consent were excluded from the study.

F. Sample Size Estimation

This was determined using the Fisher's formula of proportion studies in which it is assumed that z (level of significance, 5%=1.96); P (the proportion of satisfied mothers with delivery care services: P= 81.5% (previous study at a specialist health facility in Akure, Nigeria [13]; q=1-p; d (marginal error, 5%=0.05), and 10% of the calculated sample size will be added to compensate for non-responses.

Then, the sample size based on the above assumptions was: $N= pqz^2/d^2$

$N= 0.82x0.18x (1.96)^2/ (0.05)^2= 226$, 10%=23, Total = 226+23=249 Approx. 250.

G. Sampling Technique

This was simple convenient non-probability sampling technique.

H. Data Collection Tool

A pretested, semi-structured questionnaire was used. It was developed after intensive literature review. It was written initially in English and converted to the local dialect and then English again. The questionnaire was then divided into 4 major parts. Part (A) was focused on bio data, (B) was focused on obstetric variables (C) was focused on maternal satisfaction. (D) Was focused on future utilization. Satisfaction was further divided into 4 parts which was assessed on a 5-point Likert scale which ranged from 1 (very dissatisfied) up to 5 (very satisfied). Neither satisfied nor dis-satisfied was allotted 3. First part was on health facility related statements (6 statements), second part was on interpersonal issues (8 statements), third part was on information provided (9 statements) and fourth part on technical aspects (9 statements). Mean score less than or equal to 3 was considered as dissatisfied, whereas mean score greater than 3 was considered as satisfied. This model of assessing satisfaction that contained 32 questions was adopted from Donabedian quality assessment framework and the scale for measuring maternal satisfaction in normal birth [18].

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I. Data Collection Procedure

The data was collected by the researcher and 2 well trained research assistants. There was a pretesting with at least 10% of mothers admitted at the delivery ward to test for comprehensibility of the tool and its possible redesign before finally administering the questionnaires on respondents. Consent was sought from the mothers; they were assured of confidentiality and care; even if they chose to opt out, their welfare and rights was to be safeguarded.

J. Dependent and Independent Variables

Dependent variable was mother's satisfaction and future utilization. Independent variables were maternal characteristics and other obstetric variables.

K. Operational Definitions

The mother's satisfaction was considered to be her perception i.e. her view about delivery services based on her experience in the last delivery at the facility. The overall satisfaction of mothers was measured based on the answer which they gave for questions related to satisfaction.

L. Data Processing and Analysis

The data was entered into SPSS statistical software version 25 for analysis that was done with use of descriptive and inferential statistics.

M. Ethical Clearance

The research and ethics committee of the Federal Teaching Hospital Gombe gave a written approval for the conduct of the research.

III. Results

Out of the 250 participants studied**,** 53.6% were aged between 26-35 years. Majority (97.2%) were married, Fulani was the leading (36.4%) ethnicity followed by Tera (22.4%). As much as 40.0% were not engaged with a formal job, 15.6 % civil servants, and 12.4% businesswomen among others. Majority (55.2%) were urban dwellers, 26.0% sub-urban and 18.8% rural. Educationally, 39.6% had secondary level, 38.8% tertiary, 14.4% primary and 7.2% none at all. Most (64.0%) belonged to the Islamic faith, 34.4% were Christians and 1.6% traditional worshipers (Table I). While 64.4% were multiparous, 35.6% were nulliparous women. Majority (72.0%) had two or more children and 28.0% had only one living child. Most (76.0%) of the participants had less than 8 ANC visits, 18.4% had 8 and 5.6% had more than 8 visits. Most 52.4%) had delivered through caesarean section, 46.0% vaginally and only 1.6% had instrumental delivery (Table II). Overall satisfaction with delivery services was 84.4% with only 15.6% dissatisfied (Fig. 2). Overall satisfaction within the four (4) domains studied showed; that the cleanliness of the facility was 92.8%, interpersonal relationship 84.8%, technical aspects 82.8% and information provided 74.4% (Fig. 1). Satisfaction levels with the facility from highest to lest were represented as: Number of Doctors/health workers (93.2%), cost of services (92.4%), cleanliness of toilets (89.6%), availability of medicines/supply (86.0%), cleanliness of the environment (82.4%) and promptness of care (70.8%) (Table III). Satisfaction levels with interpersonal relationships showed; Orientation for patients and explaining treatment/procedures done with highest satisfaction of 81.6% each.

TABLE I: Socio-Demographic Characteristics of Respondents

Variable	Frequency(n=250)	Percentage (%)
Age		
15-25	74	29.6
26-35	134	53.6
36-45	42	16.8
Marital Status		
Married	243	97.2
Divorced	5	2
Single	2	0.8
Ethnicity		
Fulani	91	36.4
Tera	56	22.4
Tangale	19	7.6
Bolewa	17	6.8
Yoruba	12	4.8
Ibo	11	4.4
Waja	9	3.6
Others	35	14.0
Occupation		
Unemployed	100	40.0
Civil Servants	39	15.6
Business	31	12.4
Petty trading	22	8.8
Farming	16	6.4
Students	16	6.4
Others	26	10.4
Area of Residence		
Urban	138	55.2
Sub-Urban	65	26.0
Rural	47	18.8
Education		
None	18	7.2
Primary	36	14.4
Secondary	99	39.6
Tertiary	97	38.8
Religion		
Islam	160	64.0
Christianity	86	34.4
Traditional	4	1.6

TABLE II: Frequency Distribution of Obstetric Variables

Variables	Frequency (n=250)	Percentage (%)
Parity		
Primipara	89	35.6
Multipara	161	64.4
No of living children		
1	70	28.0
≥2	180	72.0
Number of ANC visits		
<8	190	76.0
8	46	18.4
>8	14	5.6
Mode of Delivery		
SVD	115	46.0
C/S	131	52.4
Instrumental	4	1.6

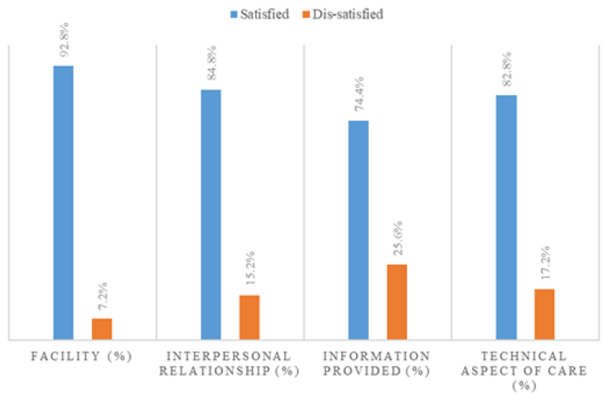

Fig. 1. Maternal satisfaction on the four domains of delivery services.

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TABLE III: HOW WERE YOUR SATISFACTION WITH THE FACILITY?

S/N	Item	VS	S	NSND	D	VD	Mean	SD
1	Cleanliness of facility	83(33.2%)	123(49.2%)	16(6.4%)	5(2.0%)	23(9.2%)	3.95	1.14
2	Cleanliness of toilet	80(32.0%)	144(57.6%)	14(5.6%)	7(2.8%)	5(2.0%)	4.15	0.81
3	Promptness of Services	66(26.4%)	111(44.4%)	32(12.8%)	38(15.2%)	3(1.2%)	3.8	1.04
4	Availability of necessary medicine & supplies	93(37.2%)	122(48.8%)	27(10.8%)	6(2.4%)	2(0.8%)	4.19	0.78
5	Numbers of Doctors, Nurses who attended to me were enough	114(45.6%)	119(47.6%)	10(4.0%)	5(2.0%)	2(0.8%)	4.35	0.73
6	Overall cost of treatment was affordable	113(45.2%)	118(47.2%)	12(4.8%)	4(1.6%)	3(1.2%)	4.34	0.75
	Grand Mean						4.13	0.87

TABLE IV: HOW WERE YOU SATISFIED CONCERNING INTERPERSONAL ISSUES OF CARE?

S/N	Item	VS	S	NSND	D	VD	Mean	SD
1	I was warmly welcomed into admission	78(31.2%)	116(46.4%)	36(14.4%)	13(5.2%)	7(2.8%)	3.98	0.96
2	Proper orientation	86(34.4%)	118(47.2%)	33(13.2%)	10(4.0%)	3(1.2%)	4.1	0.86
3	Privacy	96(38.4%)	104(41.6%)	37(14.7%)	11(4.4%)	2(0.8%)	4.12	0.88
4	Emotional/psychological support	86(34.4%)	113(45.2%)	27(10.8%)	19(7.6%)	5(2.0%)	4.02	0.97
5	Treatment with dignity & respect	97(38.8%)	105(42.0%)	35(14.0%)	12(4.8%)	1(0.4%)	4.14	0.86
6	Polite & helpful	107(42.8%)	96(32.4%)	38(15.2%)	8(3.2%)	1(0.4%)	4.2	0.84
7	They explained to me treatment and procedures	104(41.6%)	100(40.0%)	37(14.8%)	7(2.8%)	2(0.8%)	4.19	0.85
8	I was involved in decision making	101(40.4%)	100(40.0%)	34(13.6%)	13(5.2%)	2(0.8%)	4.14	0.90
	Grand mean						4.11	0.89

TABLE V: HOW WERE YOU SATISFIED WITH INFORMATION PROVIDED TO YOU?

S/N	Item	VS	S	NSND	D	VD	Mean	SD
1	I was given much information	89(35.6%)	108(43.2%)	34(13.6%)	15(6.0%)	4(1.6%)	4.05	0.94
2	Information about exams	84(33.6%)	117(46.8%)	26(10.4%)	21(8.4%)	2(0.8%)	4.04	0.92
3	Information about diet	89(35.6%)	95(38.0%)	34(13.6%)	28(11.2%)	4(1.6%)	3.95	1.04
4	Information about new-born	75(30.0%)	84(33.6%)	59(23.6%)	25(10.0%)	7(2.8%)	3.78	1.07
5	Information about breastfeeding	73(29.2%)	101(40.4%)	50(20.0%)	21(8.4%)	5(2.0%)	3.86	1.00
6	Information about hygiene	69(27.6%)	105(42.0%)	49(19.6%)	21(8.4%)	6(2.4%)	3.84	1.00
7	Information about pot-natal care	73(29.2%)	101(40.4%)	50(20.0%)	21(8.4%)	5(2.0%)	3.96	0.95
8	Information about baby care and immunization	96(38.4%)	92(36.8%)	36(14.4%)	23(9.2%)	3(1.2%)	4.02	1.00
9	Information about danger signs for mother and baby during postnatal period	106(42.4%)	91(36.4%)	34(13.6%)	17(6.8%)	2(0.8%)	4.13	0.94
	Grand Mean						3.96	0.98

TABLE VI: HOW WERE YOU SATISFIED WITH THE TECHNICAL ASPECTS OF CARE?

S/N	Item	VS	S	NSND	D	VD	Mean	SD
1	Provided with relief	95(38.0%)	86(34.4%)	45(18.0%)	19(7.6%)	5(2.0%)	3.99	1.02
2	Monitor of fetal heart regularly	97(38.8%)	114(45.6%)	21(8.4%)	13(5.2%)	5(2.0%)	4.14	0.92
3	Monitor of maternal sign regularly	91(36.4%)	125(50.0%)	30(12.0%)	3(1.2%)	1(0.4%)	4.21	0.73
4	Monitor of labour	89(35.6%)	125(50.0%)	28(11.2%)	8(3.2%)	-	4.18	0.75
5	Assisted in perennial hygiene	76(30.4%)	113(46.8%)	43(17.4%)	12(4.8%)	2(0.8%)	4.01	0.86
6	Assisted in breastfeeding	72(28.8%)	103(41.2%)	54(21.6%)	16(6.4%)	5(2.0%)	3.88	0.97
7	Assisted in perennial care/wounds	83(33.2%)	106(42.4%)	40(16.0%)	17(6.8%)	4(1.6%)	3.99	0.96
8	Assisted in early ambulation	83(33.2%)	103(41.2%)	46(18.4%)	16(6.4%)	2(0.8%)	4.00	0.92
9	Assisted in comfortable position	93(37.2%)	108(43.2%)	33(13.2%)	15(6.0%)	1(0.4%)	4.11	0.88
	Grand mean						4.06	0.89

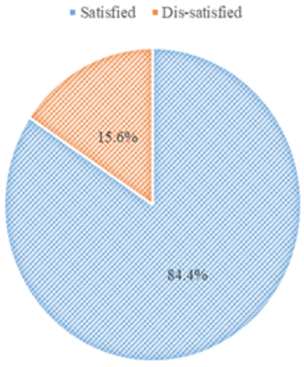

Fig. 2. Overall level of satisfaction with delivery services.

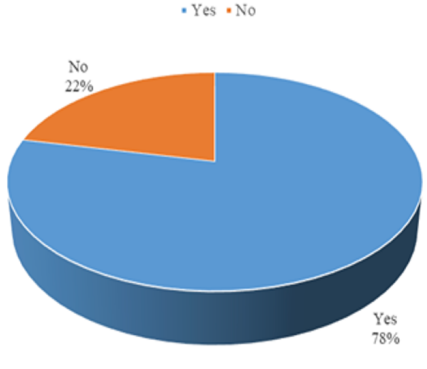

Fig. 2. Intention to utilize the facility for future delivery services.

TABLE VII: REASON FOR UTILIZATION OF FACILITY FOR FUTURE DELIVERY SERVICES

Reason for utilization	Frequency (n=250)	Percentage (%)
Satisfied with services	150	76.5
I have been referred	18	9.2
Proximity to my place of residence	13	6.6
Cost is affordable	11	5.6
Drugs and supplies are available	4	2.1
Total	196	100.0

TABLE VIII: REASON FOR NON-UTILIZATION OF FACILITY FOR FUTURE DELIVERY SERVICES

Reason for non-utilization	Frequency (n=250)	Percentage (%)
Completed family size	15	27.8
Dis-satisfied with services	12	22.2
Cost of services is high	9	16.7
Poor attitude of staff	6	11.1
Lack of cleanliness	4	7.4
Lack of availability of drugs and supplies	4	7.4
Distance from my residence	4	7.4
Total	54	100

TABLE IX: ASSOCIATION BETWEEN SOCIODEMOGRAPHIC CHARACTERISTICS OF POSTNATAL MOTHERS AND MATERNAL SATISFACTION

Variable	Satisfaction Level (n = 250) Satisfied, N (%)	Dis-satisfied, N (%)	P-value
Age			
15-25	67(90.5)	7(9.5)	0.114
26-35	112(83.6)	22(16.4)	
36-45	32(76.2)	10(23.8)	
Marita Status			
Single	1(50)	1(50)	0.387
Married	206(84.8)	37(15.2)	
Divorced	4(80)	1(20)	
Ethnicity			
Fulani	84(92.3)	7(7.7)	0.015
Tera	50(89.3)	6(10.7)	
Bolawa	13(76.5)	4(23.5)	
Tangale	15(78.9)	4(21.1)	
Waja	7(77.8)	2(22.2)	
Yoruba	9(75)	3(25)	
Igbo	10(90.9)	1(9.1)	
Other(specify)	23(65.7)	12(34.3)	
Occupation			
Business	26(83.9)	5(16.1)	0.197
Farmer	15(93.8)	1(6.3)	
Unemployed	86(86)	14(14)	
C/Servant	32(82.1)	7(17.9)	
Students	10(62.5)	6(37.5)	
Petty trading	18(81.8)	4(18.2)	
Other (specify)	24(92.3)	2(7.7)	
Area of residence			
Urban	121(87.7)	17(12.3)	0.261
Sub-urban	53(81.5)	12(18.5)	
Rural	37(78.7)	10(21.3)	
Education			
Primary	31(86.1)	5(13.9)	0.525
Secondary	87(87.9)	12(12.1)	
Tertiary	79(81.4)	18(18.6)	
None	14(77.8)	4(22.2)	
Religion			
Islam	139(86.9)	21(13.1)	0.085
Christianity	70(81.4)	16(18.6)	
Traditional	2(50)	2(50)	

Patients were treated with respect (80.8%), carried along with decision making (80.4%), privacy (80.0%), emotional/psychological support (79.6%), warmly received into admission ward (77.6%) and politeness/helpfulness (75.2%) (Table IV). Satisfaction levels with information offered to the patient showed; Examination (80.4%), General information (78.8%), danger signs to mother and baby (78.8%), immunization (75.2%), diet (73.6%) and breastfeeding, hygiene, postnatal care (69.6%) each (Table V). Satisfaction levels on technical aspect of care showed; maternal vital signs (86.4%), monitoring labour (85.6%), monitoring fetal heart rate (84.4%), assistance with comfortable positioning (80.4%), assistance with perennial hygiene care (77.2%), assistance with perennial wound care (75.6%), assistance with early ambulation (74.4%), pain relief (72.2%), assistance with breastfeeding (70.0%) (Table VI). As many as 78.4% of women will utilize the facility in future for delivery services and only 21.6% will not do so (Fig. 3). The major reason amongst this category being satisfaction with services (76.5%) (Table VII). Amongst those who do not intend to utilize facility in the future, 27.8% gave reasons as completed family size and only 22.2% would not because of dissatisfaction etc. (Table VIII). Satisfaction was only statistically related to ethnicity (P value=0.02) amongst the socio-demographic characteristics namely; age, marital status, occupation, area of residence and religion (Table IX) and none amongst obstetric variables namely; parity, number of living children, number of ANC visits, mode of delivery, complications of newborn and complications of mother (Table X).

TABLE X: ASSOCIATION BETWEEN OBSTETRIC CHARACTERISTICS OF POSTNATAL MOTHERS AND MATERNAL SATISFACTION

Variable	Satisfaction Level (n = 250) Dis-satisfied, N (%)	Satisfied, N (%)	P-value
Parity			
Prim-parous	14(15.7)	75(84.3)	0.966
Multi-parous	25(15.5)	136(84.5)	
No of Living Children			
1	11(15.7)	59(84.3)	0.975
>2	28(15.6)	152(84.4)	
No of ANC visit			
<8	28(14.7)	162(85.3)	0.748
8	8(17.4)	38(82.6)	
>8	3(21.4)	11(78.6)	
Mode of delivery			
SVD	18(15.7)	97(84.3)	0.685
C/S	21(16)	110(84)	
Instrumental	0(0)	4(100)	
Complication of new-born			
YES	13(22)	46(78)	0.119
NO	26(13.6)	165(86.4)	
Complication of mothers			
YES	10(18.2)	45(81.8)	0.55
NO	29(14.9)	166(85.1)	

IV. DISCUSSIONS

The study showed an overall satisfaction of 84.4%. This is similar to that of Debre Markos town in Ethiopia (81.7%), Nepal 89.9%, and Akure in western Nigeria where it was reported to be 81.5% in a specialist hospital [2], [13], [19]. It is lower than the report in Mozambique 92.5% but higher than Egypt 78.5%, southern Ethiopia 67.9% and India especially among vaginal births 68.7% [9], [20]-[22]. The places where a higher satisfaction was reported are referral centers or specialist health facilities. In fact the referral facility at Debre Markos town in Ethiopia was said to have once received a national quality award [2].

Domains of satisfaction were in order of highest to least; cleanliness of the facility, interpersonal relationship, technical aspects and information provided to patients. Another study done in Ibadan western Nigeria showed that 97% of the women were satisfied with the cleanliness of the hospital environment [23]. In the study done in Nepal, women were more satisfied with interpersonal and technical aspects than information and cleanliness [19]. A clean health facility environment is mandatory for healing and cure for the sick while a dirty environment is detrimental to health as well as discourages patient who wish to utilize such a facility for future health care services.

A large proportion of the women (93.2%) were satisfied with the number of doctors/health workers (93.2%), cost of services (92.4%) and availability of medicines/supply (86.0%). Although, these findings could be debatable because of reports in health facilities in Nigeria where there are inadequate staffing, high cost of medical care and out of stock syndrome [15], [23]. The utilization of national health insurance scheme (NHIS) by most of the women for health care could have minimized the burden of cost for health services utilized at the facility. It is imperative to note that going by the current reality in Nigeria where many health workers are leaving the country for greener pastures and the level of poverty increasing daily, the narrative even in the study facility my soon change. Hence, the government of the Federal Republic of Nigeria must take proactive steps now or never to curb the tide to avoid a collapse in satisfactory maternal services delivery in her health facilities. The least satisfaction (70.8%) was for promptness of care which is an area that the facility has to improve on.

In the aspect of interpersonal relationship, as much as 81.6% of the women were satisfied with the orientation they received in the facility and explanation during treatment and procedures. A good proportion were also satisfied that they were carried along with decision making (80.4%). The woman in labour actually needs to be comforted, told what she should expect, what to do and how to go about it [24]. It is very important that patients are well guided and carried along during care to enhance compliance to treatment. Unlike reports in several studies of verbal abuse, disrespect and abandonment, 80.8% said they were accorded respect. Women should not be dehumanized or made to loss their dignity and value [25]. Privacy and confidentiality for women is also key for satisfaction and 80.0% were satisfied with this aspect. This report was similar to that of the study in Sokoto north-west Nigeria [1]. Certainly, services to women in these parts of Nigeria has to be fashioned in line with the culture and religion of the clients for them to be acceptable.

For a woman who just had a newborn, emotional/psychological support is critical for her well-being and it was good to note that 79.6% were satisfied with this. Thereafter, reception into the ward was said to be warm for 77.6% of the women. The least aspect of care was politeness/helpfulness (75.2%). Whether they have given birth for the first time or not, health workers need to readily give helping hand to women after childbirth. Unfortunately, at times the few numbers of health workers compared to the number of patients and the magnitude of work expected of the workers do make then give less attention to postnatal women [24].

Women also expect to be examined promptly when they arrive in labour. This help to allay their fears and concerns with the baby and their health generally, failure to do this suggest lack of empathy and care by health workers [24].

In our study 80.4% were satisfied with examination, maternal vital signs (86.4%), monitoring labour (85.6%), monitoring fetal heart rate (84.4%), and assistance with comfortable positioning (80.4%). The satisfaction with assistance with breastfeeding (3.86±1.00) needs to be improved upon especially for primiparous women. Similarly, assistance with hygiene (3.84±1.00), newborn (3.78±1.07) and diet (3.95±1.04) need to be improved upon. It has become a common practice in most of our health facilities to deny women in labour pain relief [15]. In our study there was (3.99±1.02) mean satisfaction and this has adverse sequel on the labour process during and after. These areas need to be improved going forward.

Majority of the women 78.4% were satisfied with services and would return for utilization. Those who do not intend to utilize the facility in the future were only 21.6%, amongst which 27.8% gave reasons as completed family size and only 22.2% would not because of dissatisfaction. Satisfaction was demonstrated to be related to ethnicity which suggest that the services were culturally and religiously accepted to majority of the women. Consistently improving on quality of care will enhance sustained utilization of facility for childbirth services from skilled birth attendants thereby reducing morbidity and mortality from childbirth [26], [27].

V. Conclusion

Majority of the women were satisfied with delivery services rendered and would utilize the facility in the future. There is need to sustain and further improve upon the quality of services.

VI. Limitations of the Study

The response of the participants may not be the actual perception because the data was collected with the use of a researcher administered questionnaire. The findings in this study cannot be generalized for the health care delivery services in the Nigerian health sector.

Abbreviations

ANC: Antenatal care, MMR: Maternal Mortality Ratio, NDHS: Nigeria Demographic Health Survey, NHIS: National Health Insurance Scheme, WHO: World Health Organization.

Acknowledgement

We acknowledge the cooperation/input of the HOD and all residents in the Department during the presentation of the proposal and research findings.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

[1] Lawali Y and Lamide A. The health workers and delivery process related maternal satisfaction with delivery services at UDUTH Sokoto Nigeria. *Perception in Reproductive Medicine.* 2020; 3(5): PRM0000573.

[2] Bitew K, Ayichiluhm M and Yimam K. Maternal Satisfaction on Delivery Service and Its Associated Factors among Mothers Who Gave Birth in Public Health Facilities of Debre Markos Town, Northwest Ethiopia. *BioMed Res Int*. 2015: 1-6.

[3] Bouvier-Colle M, Mohangoo A, Gissler M, Novak-Antolic Z, Vutuc C, Szamotulska K, Zeitlin J for The Euro-Peristat Scientific Committee. What about the mothers? An analysis of maternal mortality and morbidity in perinatal health surveillance systems in Europe. *BJOG.* 2012; 119: 880-890.

[4] Demis A, Getie A, Wondmieneh A, et al. Women's satisfaction with existing labour and delivery services in Ethiopia: a systematic review and meta-analysis. *BMJ Open.* 2020; 10: e036552.

[5] Edaso A U, Teshome GS. Mothers' satisfaction with delivery services and associated factors at health institutions in west Arsi, Oromia regional state, Ethiopia. *MOJ Women's Health.* 2019; 8(1): 110-119.

[6] Ope BW. Reducing maternal mortality in Nigeria: addressing maternal health services' perception and experience. *Journal of Global Health Reports.* 2020; 4: e2020028.

[7] Adegbe O. Factors That Determine the Place of Childbirth in Lagos State, Nigeria. Ph.D. Thesis Public Health Walden University; 2021.

[8] Chizoba N, Tobiloba O, Chigozie N. Factors Influencing the Choice of Health Care Provider during Childbirth by Women in Ibadan, Oyo State, Nigeria. *Int J Caring Sc.* 2017; 10(1): 511-521.

[9] Darebo TD, Abera M, Abdulahi M, Berheto TM. Factors Associated with Client Satisfaction with Institutional Delivery Care at Public Health Facilities in South Ethiopia. *J Med, Physiol and Biophysics.* 2016; 25: 19-28.

[10] Debela AB, Mekuria M, Kolola T, Bala ET, Deriba BS. Maternal Satisfaction and Factors Associated with Institutional Delivery Care in Central Ethiopia: a Mixed Study. *Patient Preference and Adherence*. 2021; 15: 387-398.

[11] Somade EC, Ajao EO. Assessing Satisfaction with Quality of Maternal Healthcare among Child Bearing Women in Selected Primary Healthcare Centers in Ogun State, Nigeria. *Int J Acad Res Bus Arts Sc.* 2020; 2(3): 200-210.

[12] Timane AJ, Oche OM, Umar KA, Constance SE, Raji IA. Clients' satisfaction with maternal and child health services in primary health care centers in Sokoto metropolis, Nigeria. *Edorium J Matern Child Health.* 2017; 2: 9-18.

[13] Babalola TK, Okafor IP. Client satisfaction with maternal and child health care services at a public specialist hospital in a Nigerian Province. *Turk J Public Health.* 2016; 14(3): 117-127.

[14] Srivastava A, Avan BI, Rajbangshi P, Bhattacharyya S. Determinants of women's satisfaction with maternal health care: a review of literature from developing countries. *BMC Pregnancy and Childbirth.* 2015; 15: 97.

[15] Okonofua F, Ogu R, Agholor K, Okike O, Abdus-salam R, Gana M, et al. Qualitative assessment of women's satisfaction with maternal health care in referral hospitals in Nigeria. *Reprod Health.* 2017; 14: 44.

[16] Ononokpono DN, Odimegwu CO. Determinants of Maternal Health Care Utilization in Nigeria: a multilevel approach. *Pan Afr Med J.* 2014; 17(Supp 1):2.

[17] Oikawa M, Sonko A, Faye E O, Ndiaye P, Diadhiou M, Kondo M. Assessment of Maternal Satisfaction with Facility-based Childbirth Care in the Rural Region of Tambacouda, Senegal. *Afr J Reprod Health.* 2014; 18(4): 95-104.

[18] Gungor I, Beji NK. Development and psychometric testing of the scales for measuring maternal satisfaction in normal and caesarean birth. *Midwifery.* 2012; 28(3): 348-357.

[19] Panth A, Kafle P. Maternal Satisfaction on Delivery Service among Postnatal Mothers in a Government Hospital, Mid-Western Nepal. *Obstet Gynaecol Int.* 2018: 1-11.

[20] Mocumbi S, Högberg U, Lampa E, Sacoor C, Valá A, Bergström A, et al. Mothers' satisfaction with care during facility-based childbirth: a cross-sectional survey in southern Mozambique. *Pregnancy and Childbirth.* 2019; 19: 303.

[21] Sayed W, ElAal, DEM, Mohammed HS, Abbas AM, Zahran KM. Maternal satisfaction with delivery services at tertiary university hospital in upper Egypt, is it actually satisfying?. *Int J Reprod Contracept Obstet Gynaecol.* 2018; 7(7): 2547-2552.

[22] Jha P, Larsson M, Christensson K, Svanberg AS. Satisfaction with childbirth services provided in public health facilities: results from a cross- sectional survey among postnatal women in Chhattisgarh, India. *Global Health Action*. 2017; 10: 1386932.

[23] Odetola TD, Fakorede EO. Assessment of Perinatal Care Satisfaction amongst Mothers Attending Postnatal Care in Ibadan, Nigeria. *Annals of Global Health.* 2018; 84(1): 36-46.

[24] Bohren MA, Vogel JP, Tunçalp Ö, Fawole B, Titiloye MA, Olutayo AO, et al. Mistreatment of women during childbirth in Abuja, Nigeria: a qualitative study on perceptions and experiences of women and healthcare providers. *Reprod Health.* 2017; 14(9).

[25] Izugbara CO, Wekesah F. What does quality maternity care mean in a context of medical pluralism? Perspectives of women in Nigeria. *Health Policy and Planning*. 2018; 33: 1-8.

[26] Wiegers TA. The quality of maternity care services as experienced by women in the Netherlands. *BMC Pregnancy and Childbirth.* 2009; 9: 18.

[27] Okedo-Alex IN, Akamike IC, Nwafor JI, Onwasigwe CN. Determinants, reasons for choice and willingness to recommend birthing facility among mothers in public and private health facilities in Ebonyi, Nigeria. *Pan African Medical Journal.* 2021; 38(289).