

Research Article

Client satisfaction with maternal and child health care services at a public specialist hospital in a Nigerian Province

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Received date 07.02.2016, Accepted date: 15.12.2016

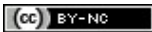
Abstract

Objective: The level of service satisfaction of a client determines further utilization and also recommendations to others. Thus, this study assessed client satisfaction with Maternal, Newborn and Child Health (MNCH) services provided at the Mother and Child Hospital, in Ondo State, Nigeria. **Methods:** This is a descriptive study carried out during July and August, 2012 among 321 respondents. Data were collected using an interviewer-administered questionnaire at selected clinics in the hospital. Proportionate sampling was used to determine the total number of clients to be selected from each clinic. **Results:** Most of the respondents were generally satisfied with the services at the hospital with a majority (81.5%) rating the intrapartum service as the service they were most satisfied with. Overall, 62.5% of respondents were very satisfied with services provided by the hospital. Patient expectations, facility structures/equipment and healthcare providers' attitude and the educational level of clients were found to be statistically associated with clients' satisfaction ($p < 0.05$). **Conclusion:** The overall satisfaction with services at the facility was 62.6%. The satisfaction level was higher among illiterate patients, who had no costs for transportation and those who had high expectation while coming to the hospital.

Keywords: Expectation, client, satisfaction, transportation

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Nijerya'da bir ilde kadın ve çocuk sağlığı hastanesi hizmetlerinden memnuniyetin değerlendirilmesi

Özet

Amaç: Bir kişinin aldığı hizmetten memnuniyet düzeyi, o hizmetin daha sonraki kullanımını ve başka bireylere önerilme durumunu belirler. Bu çalışmada Nijerya, Ondo Eyaletinde hastaların Kadın ve Çocuk Hastanesinde sunulan anne, yenidoğan ve çocuk Sağlığı hizmetlerinden memnuniyeti değerlendirildi. **Yöntem:** Temmuz-Ağustos 2012'de **yapılan** tanımlayıcı tipteki bu çalışmaya 321 kişi katıldı. Veriler, hastanede seçilen belirli kliniklerde yüz yüze görüşme yöntemiyle elde edildi. Her klinikten seçilecek toplam hasta sayısının belirlenmesinde orantılı örnekleme kullanıldı. **Bulgular:** Araştırmaya katılanların çoğunluğu hastanede sunulan hizmetlerden genel olarak memnundu; en fazla memnuniyet intra-partum hizmetlerin sunulduğu bölüm için bildirildi (%81,5). Genel olarak katılımcıların %62,5'i hastanenin sunduğu hizmetlerden çok memnundu. Hastaların beklentileri, sağlık kurumunun özellikleri ve mevcut ekipman, hizmet sunanların tutumları ve hastaların eğitim düzeyi hasta memnuniyeti ile anlamlı düzeyde ilişkiliydi bulunan etkenlerdi ($p<0.05$). **Sonuç:** Kurumda tüm hizmetlerden memnuniyet düzeyi %62,5'ti. Memnuniyet düzeyi, okuma yazma bilmeyen hastalarda, ulaşma para vermeyenlerde ve hastaneye gelirken beklentisi yüksek olanlarda daha fazlaydı.

Anahtar kelimeler: Beklenti, hasta, memnuniyet, ulaşım

Introduction

Many women lose their lives in the process of procreation. Maternal, Newborn and Child Health (MNCH) is a priority that emerged long ago. It has been built over the past century with varied programs and activities. One such was inaugurated in 2009 as the "Abiye" safe motherhood initiative by one of the state governments in South-west Nigeria. Many countries, including Nigeria, were not able to meet the 2015 deadline for achieving Millennium Development Goals (MDGs) set by the United Nation to reduce the mortality rate for children (under-five) by two-thirds and also reducing the maternal mortality rate by three quarters. These were proposed as goals 4 and 5 respectively by United Nation. There is a need to assess factors which had affected achieving these MDG goals, one of which is the level of satisfaction provided by MNCH services at public health facilities.

Across the world approximately 830 women die from preventable causes related to pregnancy and childbirth daily. 99% of all maternal deaths occur

in developing countries.¹ Sub-Saharan Africa and South Asia, accounted for 87 per cent of these deaths.² Sub-Saharan Africa suffers from the highest maternal mortality rate, ranging from 640 to as many as 1200 maternal deaths per 100,000 live births. This is followed by South Asia with a maternal mortality rate (MMR) of 290. In stark contrast, the MMR in industrialized countries is 14 per 100,000 live births. About half of the deaths of under 5 children in the world occur in only five countries: India (22%), Nigeria (11%), the Democratic Republic of Congo, Pakistan and China. Almost 30 per cent of neonatal deaths occur in India. Sub-Saharan Africa has the highest risk with 70% of the under-five year-old deaths occurring within the first year of life.²

MNCH is a cause of serious concern in developing countries. The rate of morbidity and mortality in pregnant women, mothers and newborns remain shockingly high, particularly among poorer groups, and complications of pregnancy and childbirth are the leading cause.³ The

majority of these deaths occur at the service delivery level through a lack of accessible, well-functioning staff and resources, and at the policy and system level through poor planning, management, supervision, and a lack of political commitment.³ Conversely, high quality accessible health care has made maternal deaths a rare event in developed countries.³ Women's lifetime risk of maternal death is almost 40 times higher in the developing countries than in the developed ones: one woman in every 1,800 die from pregnancy-related complications in developed countries, while in developing countries the lifetime risk is 1 in 48.²

A survey of client satisfaction with healthcare services at healthcare facilities is one of the major tools for measuring the quality of the service.⁴ The satisfaction of patients which is an integral part of hospital services has been widely accepted as a measure of the effectiveness of healthcare delivery.⁴ Various studies have shown that following the physician's prescriptions, continuing to use a healthcare facility and recommending their use to others, all depend on how satisfied a patient is with their own previous experience.⁵⁻⁹ The knowledge on the degree of client satisfaction serve as means of identifying areas of improvement in the quality of services offered and also highlighting the need for corrective actions when clients' expectations exceed what an organization can afford to offer or what a particular program is meant to provide.^{10,11}

This study thus aimed at determining the level of clients' satisfaction with Maternal Neonatal and Child Health (MNCH) services rendered at a public maternal and child specialist hospital and factors influencing their satisfaction.

Methods

The Mother and Child hospital is a model public Maternal and Child health specialist hospital located in Ondo State. It was launched in 2010 under the safe motherhood initiative program of the state government.¹² The hospital provides the following services: prenatal, normal

delivery, comprehensive emergency, obstetric care, as well as postnatal and family planning services for women and treatments for neonatal and under-five children.

The hospital record shows an average of 25 deliveries per day and more than 26,150 patients treated, with more than 5,879 babies safely delivered (15.4% of them delivered by caesarean section) within the first two years of establishment. Information received from the hospital shows that a postnatal clinic takes place twice a week, antenatal clinics three times a week, under-five clinics four times a week, childhood immunization clinics six times a week and intra-partum care every day.

The study population comprises women who came for antenatal care, intra-partum care, or postnatal care at the hospital and also mothers of under-five children who came for immunization and treatment of childhood diseases. Those coming to the hospital for the first time were excluded.

This is a descriptive study carried out during July to August, 2012. A total sample size of 321 respondents was calculated for the study. Using proportionate sampling, 72 respondents were selected from the antenatal clinic, 64 from intra-partum care and 57 from the postnatal clinic. Also, there were 67 respondents from the pediatrics outpatient clinic and 61 from the children immunization clinic.

Independent variables of the study were socio demographic factors, cost of transportation, travel time to the health facility, health care provider's attitude and client's expectation level. The Client's satisfaction was the dependent variable of the study. To measure the level of satisfaction, indicators were categorized into three groups: poor, fair, good. Likert's scale was used to determine the level of clients' satisfaction, focusing on physical facilities, providers' services, health care services and other services. All questions relating to satisfaction were scored using a scale of 1 to 5 (1-dissatisfied, 2-dissatisfied, 3-neutral, 4-satisfied, 5-very satisfied) and

individual scores were summed up for grading. Based on the percentage grade obtained, the overall satisfaction was categorized into three groups; not satisfied (0 to 49%), somewhat satisfied (50 to 69%) and very satisfied (70 to 100%).

A pretested questionnaire, administered by an interviewer was used for data collection. Epi info-7 version 3.4.3 and IBM-SPSS package (version 20.0) were used for data entry and analysis. Chi-square test was performed to describe the association between independent variables and clients' satisfaction. The level of significance was set at 5% ($p \leq 0.05$).

Ethic

Ethical issues (Including Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, plagiarism) have been completely observed by the authors. Ethical approvals were received from the Health Research and Ethics Committee of Lagos University Teaching Hospital and Research Committee of Mother and Child Hospital Ondo State, Nigeria. Consent of the patients for their voluntary participation was also sought and confidentiality was maintained.

Results

Forty-one percent of the women were employees of either a private or a public establishment. Their employment status was translated into daily income which had 60.4% of the women earning less than 3 dollars (Table 1).

The travel time to the health facility and amount spent on transportation showed that the facility was easily accessible (Table 2).

Most of the respondents (89.4%) said that the entrance procedure was well organized, whereas 54.2% of them said the waiting space was not enough. According to 65.4% of the respondents the waiting area was not conducive to comfort. Most of the respondents (55.1%) felt that they waited for a long time before receiving treatment while majority (77.9%) of them said the

attitude of the healthcare providers was generally good (Table 3).

Table 1. Socio-economic and demographic characteristics of respondents

Variables	n=321	%
Age (years)		
17 - 25	58	18.1
26 - 35	194	60.4
36 - 45	64	19.9
45 - 48	5	1.6
Mean= 30.42±5.42 yrs		
Number of children		
1-2	197	61.4
3-5	124	38.6
Mean ±SD =2.24 ±1.15		
Religion		
Christianity	288	89.7
Islam	31	9.7
Others (traditional and free thinkers)	2	0.6
Marital status		
Married	312	97.2
Single	6	1.9
Others (Widow, Divorced/Separated)	3	0.9
Educational level		
None	29	9.0
Primary	31	9.7
Secondary	163	50.8
Post-secondary	98	30.5
Employment status		
Public/Private Employee	132	41.1
Self-employed	98	30.5
Unemployed	91	28.3
Daily income (US \$)		
3 & above	127	39.6
< 3	194	60.4

The highest proportion (81.3%) of the respondents who came for intra-partum care was very satisfied with the services they received and also a majority (68.9%) of them who came for children immunization was also very satisfied (Table4).

Table 2. Respondents' hospital accessibility

Accessibility to the hospital	n= 321	%
Mode of transport to the hospital		
Commercial bus/Taxi	91	28.3
Bike (Okada)	163	50.8
On Foot	17	5.3
Personal car	43	13.4
Others (e.g ambulance)	7	2.2
Travel time		
<30 mins	253	78.8
30 mins & above	68	21.2
Cost of transportation		
No cost	70	21.8
< 50 cents	149	46.4
50 cents & above	102	31.8

Table 3. Respondents' perception of hospital procedures and attitude of healthcare providers

Variables	n= 321	%
Registration and entrance procedures		
Not Organized	34	10.6
Organized	287	89.4
Waiting space		
Less than enough	174	54.2
Enough	145	45.2
More than enough	2	0.6
Waiting area		
Not Conducive to comfort	210	65.4
Partially conducive to comfort	66	20.6
Conducive to comfort	45	14.0
Treatment waiting time		
Less time than usual experience.	28	8.7
Relatively average time	116	36.1
More time than usual experience.	177	55.1
Providers' attitude		
Poor	54	16.8
Fair	228	71.0
Good	39	12.2

After scoring and grading, majority of the respondents (62.6%) were very satisfied with services received at the facility (Figure 1).

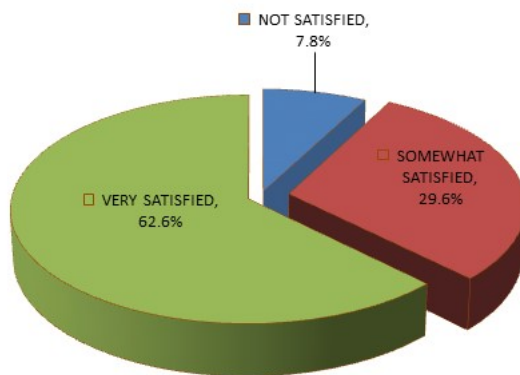


Figure 1. Overall level of clients' satisfaction

There was a statistically significant association between educational level and the level of satisfaction with MCH care services ($p < 0.05$). Illiterate women were more satisfied with MCH care services than educated women (Table 5).

Cost of transportation to health facility, components of healthcare facility structures, healthcare providers' attitude and service expectation level were all associated with satisfaction level (Table 6).

Table 4. Clients' satisfaction with the maternal and child healthcare services they received.

Health care services	n	(%)
Antenatal care	(n =72)	
Not satisfied	1	1.4
Somewhat satisfied	26	36.1
Very satisfied	45	62.5
Intra-partum care	(n = 64)	
Not satisfied	7	10.9
Somewhat satisfied	5	7.8
Very satisfied	52	81.3
Post-natal care	(n =57)	
Not satisfied	1	1.8
Somewhat satisfied	23	40.3
Very satisfied	33	57.9
Childhood immunization	(n = 61)	
Not satisfied	6	9.8
Somewhat satisfied	13	21.3
Very satisfied	42	68.9
Child medical treatment	(n =67)	
Not satisfied	10	14.9
Somewhat satisfied	28	41.8
Very satisfied	29	43.3

Table 5. Association between sociodemographic factors and clients' satisfaction with mnch care services

Variables	Satisfaction Level			p
	Not satisfied n (%)	Somewhat Satisfied n (%)	Very Satisfied n. (%)	
Age (yrs)				
17 - 25 (n=58)	3 (5.2)	20 (34.5)	35 (60.3)	0.080
26 - 35(n=194)	17 (8.8)	59 (30.4)	118 (60.8)	
36 - 45 (n=64)	5 (7.8)	12 (18.8)	47 (73.4)	
Above 45 (n=5)	0 (0.0)	4 (80.0)	1 (20.0)	
Marital status				
Single (n=6)	0 (0.0)	4 (66.7)	2 (33.3)	0.142
Married (n=312)	25 (8.0)	89 (28.5)	198 (63.5)	
Other (n=3)	0 (0.0)	2 (66.7)	1 (33.3)	
Highest educational level attained				
No formal education (n=29)	0 (0.0)	1 (3.4)	28 (96.6)	0.007
Primary (n=31)	4 (12.9)	14 (45.2)	13 (41.9)	
Secondary (n=163)	12 (3.7)	48 (29.4)	103 (63.2)	
Post-secondary (n=98)	9 (9.2)	32 (32.7)	57 (58.2)	
Employment status				
Public/Private employee (n=132)	11 (8.3)	42 (31.8)	79 (59.8)	0.839
Self-employed (n=98)	8 (8.2)	25 (25.5)	65 (66.3)	
Unemployed (n=91)	6 (6.6)	28 (30.8)	57 (62.7)	
Average monthly income (US \$)				
< 100 (n=185)	12 (6.5)	54 (29.2)	119 (64.3)	0.555
≥ 100 (n=136)	13 (9.6)	41 (30.1)	82 (60.3)	
Total	25 (7.8)	95 (29.6)	201 (62.6)	

Table 6. Association between other factors and clients' satisfaction with mnch care services

Variables	Satisfaction Level			p
	Not satisfied n (%)	Somewhat satisfied n (%)	Very satisfied n (%)	
Cost of transportation to health facility (\$)				
No cost (n=70)	7 (10.0)	9 (12.9)	54 (77.1)	0.001
< 20 cents (n=149)	14 (9.4)	57 (38.3)	78 (52.3)	
20 cents and above (n=102)	4 (3.9)	29 (28.4)	69 (67.6)	
Travel time (mins)				
< 30 (n=253)	19 (7.5)	81 (32.0)	153 (60.5)	0.186
30 & above (n=68)	6 (8.8)	14 (20.6)	48 (70.6)	
Health facility structure/equipment				
Good (n=111)	5 (4.5)	12 (10.8)	94 (84.7)	<0.001
Fair (n=113)	10 (8.8)	35 (31.0)	68 (60.2)	
Poor (n=97)	10 (10.3)	48 (49.5)	39 (40.2)	
Healthcare providers' attitude				
Good (n=39)	0 (0.0)	1 (2.6)	38 (97.4)	<0.001
Fair (n=228)	9 (3.9)	59 (25.9)	160 (70.2)	
Poor (n=54)	16 (29.6)	35 (64.8)	3 (5.6)	
Expectation level				
Low (n=22)	3 (13.6)	11 (50.0)	8 (36.4)	0.040
Average (n=126)	12 (9.5)	39 (31.0)	75 (59.5)	
High (n=173)	10 (5.8)	45 (26.0)	118 (68.2)	
Total (n=321)	25 (7.8)	95 (29.6)	201 (62.6)	

Discussion

Assessment of the quality of health care through assessment of the satisfaction of patients has been a priority area of research worldwide.¹³ Various investigators have identified the level of patient satisfaction as being an important determinant in the assessment of quality of care.¹³ This study revealed that a majority (62.6%) of the respondents were very satisfied and 29.6% were somewhat satisfied while few (7.8%) were not satisfied. This finding is similar to a study carried out in south east Nigeria to determine community satisfaction with MCH services in the region which also showed that most of the respondents were satisfied, with 90.6% of them rating the services to be at least good.¹⁰ It is also similar to another result obtained from a study carried out in one of the tertiary hospital in the south western part of the country which revealed that majority of the studied population were satisfied with the overall perceived quality of health care received.⁹ Findings from this studies also show that a high proportion (73.4%) of respondents that were between 36-45 years were very satisfied with services received although there was no statistically significant association.

The association between educational level and satisfaction shows that a high proportion (96.6%) of the respondents with no formal education was very satisfied. The majority of them said the health providers allowed them to express themselves easily and they were pleased with the attitude of the healthcare workers. This result is similar to a previous study which revealed that uneducated mothers were more satisfied with the MCH services they received in rural Bengal when compared with their educated counterparts.¹¹ With respect to employment status, there was no significant association between employment status and clients' satisfaction. It was observed that the satisfaction level is higher among self-employed (66.3%) and unemployed (62.7%) respondents as compared with either the public/private employee respondents. A possible explanation for this is that, the

public/private employee might be nursing the fear of losing their jobs as a result of the long waiting time they spent at the hospital and thus, affecting their satisfaction level. This conforms to a previous study where it was found that a majority of the non-working (full) housewives when compared with the working mothers were more satisfied.¹¹

In addition, this study also revealed that there was a statistically significant association between perceived services relating to facilities and client satisfaction. Women (84.7%) who perceived the hospital facilities to be good were very satisfied with the services they received. Similarly, there was a statistically significant association between healthcare providers' attitude and overall clients' satisfaction. A high proportion (97.4%) of patients who perceived attitude of the healthcare provider has been very good was very satisfied with services received at the hospital. This means that the communication between patients and providers plays a major role in determining the satisfaction of patients.

More of the clients that came for intra-partum care had the highest satisfaction level when compared with clients that came for care in other clinics. This might be due to the fact that the respondents based their satisfaction primarily on a safe delivery. The joy that they and their babies survived labor might have made them to forget some of the challenges they encountered just before and during delivery.

For child health services, this study revealed that a high proportion of respondents for childhood immunization (68.9%) were very satisfied with the service while fewer than half of respondents for child medical treatment (43.3%) were very satisfied. The low satisfaction for the latter, might due to the stressful entrance procedure and long waiting time associated with accessing child treatment as complained by majority of respondents.

There was a statistically significant association between clients' expectation and satisfaction level. It was observed that

majority (68.2%) of the respondent that had high expectation before coming to the hospital were very satisfied with the service they received.

Conclusion

The overall service satisfaction received at the facility was 62.6%. The satisfaction levels of the healthcare was higher in the following: illiterate participants, participants who had high expectation before coming to the hospital, participants who visited the hospital at no cost of transportation, participants who were satisfied with structure of the healthcare facility and the providers' attitude.

Acknowledgement

We would like to express our appreciation to our research assistants and all those who participated in the study. We declare that there is no conflict of interest.

Potential conflicts of interest

All authors report no conflicts of interest relevant to this article.

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