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Clients' satisfaction with maternal and child health services in primary health care centers in Sokoto metropolis, Nigeria

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ABSTRACT

Aims: Client satisfaction is the extent to which the clients feel that their needs and expectations are met by the service provided, it is a sensitive tool used in measuring quality of service within and outside the health system. This study, therefore, aimed to assess the degree of client satisfaction with maternal and child health services in primary health care centers in Sokoto metropolis. Methods: A cross-sectional study was conducted among 250 clients accessing maternal and child health services, sampled through a multi-staged sampling technique. The data was analysed using SPSS version 20.0 and ethical approval was obtained from the state ethical committee. Results: The mean age of the respondents was 26.3±7.2 years and 74.7% of them had no formal education. Overall 96.7% of the respondents were satisfied with the services they received, major areas of dissatisfaction was long waiting time, poor sanitary facilities and poor staff attitude. Waiting time at different levels was found to be statistically significantly associated with client satisfaction. Conclusion: The results showed, there was an overall good level of satisfaction with services received, however, more efforts need to be put into reducing the time spent before accessing services, improving facilities and interpersonal skills of the health personnel.

Keywords: Child, Health, Maternal, Satisfaction

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INTRODUCTION

Maternal and Child Health (MCH) care services in health systems constitute a large range of curative and preventive health services of particular importance to the health of women of reproductive age and their infants [1]. The health of the mother and child constitutes one of the most serious health problems affecting the community, particularly in the developing countries like Nigeria [2]. Improving maternal and child health was one of the eight major developmental areas of Millennium Development Goals of World Health Organization (WHO) at the 2000 summit. Today, maternal and infant mortality are not only health indicators but also one of the indicators used in developing communities, and shows the extent of care of the societies regarding maternal health and gives an insight to the health status of the country [3]. The poor

maternal health indices in developing countries have remained a great burden for the governments of the various countries concerned, as well as the international health community. Several attempts at correcting this anomaly have been made at various levels. However, every year about 287,000 women die of causes associated with childbirth, 99 % in developing countries [4–6].

To alleviate this problem, Maternal and Child Health (MCH) services have been a spectrum of services dating from antiquity to the more recent developments which have been included in Primary Health Care [2].

Maternal and child health services are essential components of the comprehensive primary health care package and most patients' health largely depends on the primary health care sector of the country because it usually is the first point of call and maybe the only source of health they have. High quality accessible health care has made maternal deaths a rare event in developed countries while the risk of maternal death for a pregnant woman in developing countries is 1 in every 48 deliveries, the risk for a pregnant North American woman is only 1 in 3200 [7]. Primary health care centers have an important role to play in providing the basic health services and if they fail to provide satisfactory services to patients, this will lead to adverse negative attitudes towards the health care system generally [8, 9]. The main purpose of providing health care services is to improve public health through the provision of desirable and necessary health and treatment services. Improvement of quality of care requires evaluation of the quality of services and the level of clients' satisfaction with the services provided is one way to do so [10, 11].

Patient satisfaction is the extent to which the patients feel that their needs and expectations are being met by the service provided. It reflects providers' ability to successfully deliver care that meets expectations and needs [12]. Patient satisfaction is a concept that is of particular importance in today's health care [13, 14]. Patient satisfaction depends on the health care that the patient receives, and this issue is very important. Evidence on women's perception of and satisfaction with the quality of maternal care help determine other aspects of care that need strengthening in developing country contexts to support long-term demand, generate significant changes in maternal care-seeking behavior, and identify barriers that can and should be removed [15]. A satisfied patient is more likely to develop a deep and long-term relationship with their health care provider, leading to improved compliance, continuity of care, and ultimately better health outcomes [16, 17].

Most studies on satisfaction with quality of services has been in the higher levels of the health facilities but this study is on the primary level which is actually the first port of call to the health system and which is expected to serve majority of the populace.

Therefore, this study aimed to assess the level of patient satisfaction with maternal and child health services provided in selected primary health care centers in Sokoto state.

MATERIALS AND METHODS

The study was carried out in selected primary health care centers in Sokoto metropolis. Sokoto metropolis includes four Local Government Areas (LGAs) of the state, Sokoto North, Sokoto South, Dange–Shuni, and Wamakko Local Government Areas [18] and it has a total population of about 937,471 [19]. The primary health care facilities are under the care of the LGAs, which refers cases to the secondary health facilities in the state. The primary health care centers provide promotive, preventive and curative services, which include a range of maternal and child health services on a daily basis usually between the hours of 8 am–2 pm. They also offer emergency services through the day but most do not offer 24 hours maternity services.

A cross-sectional descriptive design was used and multistage sampling technique was used to enroll 250 mothers and/or caregivers of under five children utilizing maternal and child health services in the selected primary health care centers who resided in the study area not less than six months prior to the commencement of the study. The sample size was determined using the formula for descriptive study with a proportion (p) of women satisfied with maternal services from a previous study [20, 21]. The instrument of data collection was a semi-structured pretested interviewer-administered questionnaire (containing both open and closed ended questions). The questionnaire was administered by trained data collectors (research assistants), who conducted exit interviews to obtain data from the respondents after receiving care on their way out of the facility. The data was entered into and analyzed using IBM SPSS version 20.0 statistical software and was presented in form of tables and charts.

Ethical approval was obtained from the State Ethical Committee and permission was sought from the Ministry of LGA affairs, informed consent was obtained from the study participants.

RESULTS

The mean age of the respondents was 26.3±7.3 years with 111 (45.3%) of them within 15–24 years age group. Majority of them were married 240 (98%) and Muslim 237 (96.7). Most of the women had only Qur'anic education 183 (73.9%) while only 11 (4.5%) had completed tertiary education with about two-thirds of them being housewives (Table 1).

Most of the respondents who came to the health facility (56.7%) came for maternal health services such as antenatal check, about 36% of them came for child health services specifically bringing a sick child. Only 2.4%

Table 1: Socio demographic characteristics of respondents

Variables	Frequency n = 245	Percentage %
Age (years)		
15–24	111	45.3
25–3	95	38.8
35–44	35	14.3
≥45	4	1.6
Mean	26.3±7.3 years	
Marital status		
Married	240	98.0
Unmarried	5	2
Religion		
Muslim	237	96.7
Christian	8	3.3
Tribe		
Hausa	195	79.6
Fulani	27	11.0
Yoruba	5	2.0
Others	18	7.3
Highest Educational status		
Qur'anic	183	74.7
Primary	25	10.2
Secondary	26	10.6
Tertiary	11	4.5
Occupational		
Unemployed/full-term housewife	156	63.7
Business women	77	31.4

came for family planning (Figure 1). The registration time ranged from 1–168 minutes, with mean of 24.7±37.1 minutes whereas clinic wait time ranged from 1–219 minutes with a mean of 47.2±52.1 minutes. The mean consultation time was 13.7±10.8 minutes and the mean total clinic wait time from entry to the time of leaving the clinic was 73.4±56.8 minutes (Table 2).

In aspects regarding satisfaction with registration process as seen in (Table 3) more than 80% of the respondents were satisfied with all aspects, however, 6 (2.4%) were dissatisfied with the time they had to wait before registration and another 7 (2.9%) were also dissatisfied with the entire registration process. With respect to satisfaction with healthcare provider results showed that over 80% of the respondents were satisfied with all aspects related to the healthcare provider except on how the healthcare providers explained the patients illness or condition to them, here 135 (77.1%) were

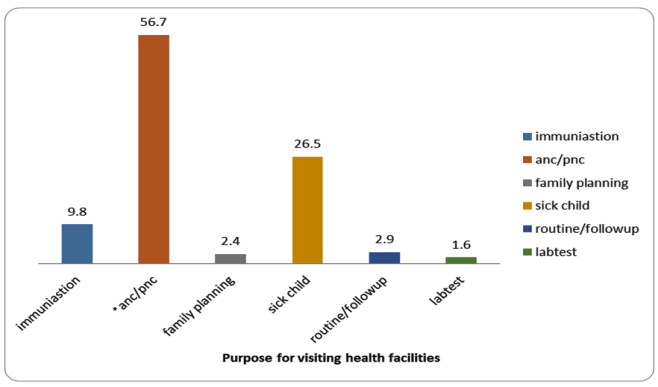

Figure 1: Respondent's purpose for visiting the health facilities
*anc: Antennal care, pnc: Postnatal care

satisfied while 9 (5.1%) were not satisfied. Only 6 (2.4%) of the respondents had some level of dissatisfaction with the waiting time before seeing the health care provider and 1 (0.5%) respondent was dissatisfied with how he/she was examined (Table 4).

Table 5 gives 45 (18.4%) of the respondents were very satisfied with the condition and cleanliness of the waiting area with 10 (4.1%) having some level of dissatisfaction. Regarding availability of water and the cleanliness of the toilet, only 18 (7.8%) and 16 (7.1%) respectively were very satisfied and a significant proportion 87 (37.8%) and 91 (40.4 %) respectively were indifferent.

One hundred and forty-eight (82.7%) of the respondents that received some form of treatment were satisfied with the explanation given to them, another 126 (64.3%) were satisfied with the cost of the drugs and none of them had any level of dissatisfaction with laboratory test they did, the diagnoses and treatment given or the outcome of the visit (Table 6). The overall satisfaction with the services in the primary health cares was 96.7% with about half 49.8% grading their satisfaction very good and another 44 (18%) felt the services they received were excellent (Table 7 and Table 8). Some suggestions for improvement include need to reduce waiting time, provide clean toilet facilities and increase number of staffs (Table 9). However, majority of them (98.4%) were willing to use the health facility again and only 11 (4.5%) were not willing to recommend it to others (Table 10).

Table 2: Duration of different categories of respondent's wait time

Variables	RT (mins)	CWT (mins)	CT (mins)	TCWT (mins)
Mean	24.7	47.2	13.7	73.4
Std. Deviation	37.1	52.1	10.8	56.8
Median	5.0	22.0	10.0	56.0
Minimum	1	1	2	5
Maximum	168	219	46	223

Abbreviations: CWT: Clinic Wait Time, RT: Registration Time, CT: Consultation Time, TCWT: Total Clinic Wait Time

Table 3: Respondents' satisfaction with registration process

Variables	Very Satisfied	Satisfied	Indifferent	Dissatisfied	Very Dissatisfied
Reception on arrival	29 (11.8%)	208 (84.9%)	5 (2.0%)	3 (1.2%)	0
Wait time before registration	26 (10.6%)	201 (82.0%)	11 (4.5%)	6 (2.4%)	1 (0.4%)
Entire registration process	30 (12.2%)	198 (80.8%)	9 (3.7%)	7 (2.9%)	1 (0.4%)

Table 4: Respondents' satisfaction related to health care provider

Parameters	Very Satisfied	Satisfied	Indifferent	Dissatisfied	Very Dissatisfied
Care/Concern showed by Health Providers n =245	28 (11.4%)	206 (84.1%)	7 (2.9%)	4 (1.6%)	0
Being allowed to speak of your problems n =233	29 (12.4%)	195 (83.7%)	6 (2.6%)	3 (1.3%)	0
The history taking of health provider n =195	27 (13.8%)	157 (80.5%)	9 (4.6%)	2 (1.0%)	0
The physical examination process n = 195	24 (12.3%)	159 (81.5%)	11 (5.6%)	1 (0.5%)	0
How your illness/ condition was explained to you. n =175	29 (16.6%)	135 (77.1%)	9 (5.1%)	2 (1.1%)	0
The Instructions on investigation n =166	21 (12.7%)	140 (84.3%)	4 (2.4%)	1 (06%)	0
The Instructions on prescription n =180	29 (16.1%)	144 (80.0%)	5 (2.8%)	2 (1.1%)	0
Waiting time before seeing the healthcare provider n =245	21 (8.6%)	207 (84.5%)	11 (4.5%)	4 (1.6%)	2 (0.8%)
Duration of time spent with healthcare provider n =245	27 (11.0%)	199 (81.2%)	16 (6.5%)	3 (1.2%)	0

Table 5: Respondents' satisfaction related to environment/facilities

Parameters	Very Satisfied	Satisfied	Indifferent	Dissatisfied	Very Dissatisfied
The condition/cleanliness of the waiting area n =245	45 (18.4%)	157 (64.1%)	33 (13.5%)	9 (3.7%)	1 (0.4%)
The condition/cleanliness of the consulting room n =239	61 (25.5%)	168 (70.3%)	7 (2.9%)	3 (1.3%)	0
The privacy of consulting room n =239	35 (14.6%)	185 (77.4%)	15 (6.3%)	4 (1.7%)	
The water supply n =230	18 (7.8%)	122 (53.0%)	87 (37.8%)	3 (1.3%)	0
The cleanliness of the toilet n =225	16 (7.1%)	103 (45.8%)	91 (40.4%)	10 (4.4%)	5 (2.2%)

Table 6: Respondents' satisfaction with treatment received and outcome of visit

Parameters	Very Satisfied	Satisfied	Indifferent	Dissatisfied	Very Dissatisfied
The explanation of the treatment received	22 (12.3%)	148 (82.7%)	7 (2.9%)	2 (1.1%)	0
Availability of drugs in the pharmacy	25 (12.6%)	154 (78.6%)	15 (7.7%)	2 (1.0%)	0
Waiting time in the pharmacy	21 (10.6%)	162 (81.4%)	15 (7.5%)	1 (0.5%)	0
The Cost of the drug	28 (14.3%)	126 (64.3%)	39 (19.9%)	3 (1.5%)	0
Laboratory tests done	18 (11.2%)	138 (86.3%)	4 (2.6%)	0	0
The diagnoses and treatment given	18 (11.3%)	137 (86.2%)	4 (2.5%)	0	0
The outcome of treatment received /visit	15 (9.3%)	140 (87.0%)	6 (3.7%)	0	

Table 7: Respondents' satisfaction with maternal and child health services

Parameters	Very Satisfied	Satisfied	Indifferent	Dissatisfied	Very Dissatisfied
Health education/counselling given n = 137	2 (1.5%)	130 (94.9%)	0	2 (1.5%)	3 (2.2%)
Antenatal check up n= 139	11 (7.9%)	117 (84.2%)	4 (2.9%)	7 (5.0%)	0
Family planning n= 6	1 (16.7%)	4 (66.7%)	0	1 (16.7%)	0
Child health check/treatment n= 65	7 (10.8%)	51 (78.4%)	4 (6.2%)	3 (4.6%)	0
Immunisation n =24	0	18 (75.0%)	6 (25.0%)	0	0
Laboratory/investigation n=115	2 (1.7%)	0	112 (97.4%)	0	1 (0.9%)

Table 8: Overall level of satisfaction with the services in the PHC

Variables	Frequency n=245	Percentage %
Not satisfied	8	3.3
Average	18	7.3
Good	53	21.6
Very good	122	122
Excellent	44	18.0

Table 9: Respondents' recommendation/area of improvement

Variables	Frequency n=8**	Percentage %
Provide some entertainment	1	12.5
Improve on waiting time	5	62.5
Improve toilet cleanliness	2	25.0
Increase number of staff	1	12.5
Reduce cost of drugs	1	12.5
Provide adequate facilities	1	12.5

** Multiple responses

Table 10: Respondents' response to returning or recommending the health facilities to others

Variables	Frequency n=245	Percentage %
Will you use this facility again		
Yes	241	98.4
No	4	1.6
Will you recommend it to others		
Yes	234	95.5
No	11	4.5

DISCUSSION

Client satisfaction is considered as one of the desired outcomes of health care and it is directly related with utilization of health services, it reflects the gap between the expected and the experience of the service from the client's point of view. Therefore, a client who is satisfied will keep using a service and this will definitely help in improving the health outcome of the individual. In this study, the mean age of the respondents was 26.3±7.2 years with majority of them being less than 35 years, and were married. The findings were similar to studies carried out in northern part of Nigeria, this is expected as this age is the most fertile period in a woman's lifespan and most accessing maternal and child health services are within the reproductive age group and are married [21–23]. In this study the most common purpose of visiting the primary health care was for antenatal care, followed by consultations for a sick child, very few 6 (2.4%) came to for family planning, this was similar to a study in India where most of the clients came for antenatal and immunization services, only 2.9% came for family planning [24]. Whereas a study by Uzochukwu et al. found most of the respondents utilizing the health facility came for immunization (91.1%) [25]. This finding was not surprising as Sokoto has one of the poorest immunization coverage in the country and the parents usually rely more on immunization outreach programs to get their children vaccinated [26].

In this study, the registration time ranged from 1–168 minutes, with mean of 24.7±37.1 minutes, whereas clinic wait time ranged from 1–219 minutes with a mean of 47.2±52.1 minutes. The mean consultation time was 13.7±10.8 minutes and the mean total clinic wait time from entry to the time of leaving the clinic was 73.4±56.8 minutes. In this study, the average waiting time for every aspect was long with a wide variation owning to the fact that some clients spent much longer hours to see the health care provider while others barely waited, this could be because of the different range of services the respondents came to access. Studies from within and outside Nigeria have recorded lower clinic wait times [27, 28]. The Institute of Medicine has since recognized the problems of prolonged wait time in the clinics, resulting in dissatisfaction amongst patients and has recommended that at least 90% of patients should be seen within 30 minutes of their scheduled appointments time [29, 30].

Client satisfaction was studied in four main dimensions. These are; registration process, provider-associated factors, facility-related aspects and general outcome of the visit to the health facility.

More than 80% of the respondents were satisfied with all aspects of registration. However 7 (2.8%) had some level of dissatisfaction with the time they had to wait before registration. Similar to the finding in this study, Abodunrin found the respondent to have high level of satisfaction though the study had a higher proportion of the respondents (over 90%) [31]. In this study, the major reason for dissatisfaction was long waiting time, which is similar to most studies where waiting time, was a serious issue for most respondents as they would wait for long durations and yet spend only a few minutes with the health provider.

In addition, more than 80% of the respondents were satisfied with all aspects related to the healthcare provider except on healthcare providers explanation of the patients

illness or condition, where 135 (77.1%) were satisfied and 9 (5.1%) were not satisfied with this aspect, most studies have similar results with clients being satisfied with the way the health care providers greeted them or explained to them about their illness but these studies had higher proportion of clients being satisfied [25, 31, 32, 33]. As regards waiting time before seeing the health care provider, even though most of the respondents were satisfied, this was the aspect that had the highest level of dissatisfaction. This was similar to a study in South Africa where the area of highest dissatisfaction was with how long it took see the health care provider [21].

In this study, only 45 (18.4%) of the respondents were very satisfied with the condition and cleanliness of the waiting area with 10 (4.1%) having some level of dissatisfaction, a significant proportion 87 (37.8) and 91 (40.4) respectively were indifferent towards the water supply and the cleanliness of the toilet. Lack of clean toilet facilities and no chairs in waiting area were the two major concerns of the clients that were not satisfied with the facilities in the primary health care.

This is similar to most studies in other parts of Nigeria where only a quarter of the respondents expressed full satisfaction with the sanitation of the toilets and only one-third were satisfied with the waiting space [23]. In Calabar, Nigeria dissatisfaction with care was mostly attributed to lack of basic amenities and poor sanitation [34]. The differences with level of satisfaction with cleanliness may be due to the subjective nature, as what one may perceive clean another will perceive dirty for instance in some of the health facilities selected for this study they had no cleaning staff yet the respondents were satisfied with the conditions of the clinic.

None of the respondents were very dissatisfied with the Antenatal check-up, Family planning and Child health check/treatment they received but none of those who were asked to do a laboratory test were satisfied with the services. The most common reasons for dissatisfaction with maternal and child health services in the health facilities were staff behavior and long waiting time 5 (29.2%) in each case. However, it was different in a study in India which showed low levels of overall satisfaction of antennal care services was 51.49% and this proportion was low compared to that found in a study in Egypt where 83% to 94% of clients were satisfied with access to vaccination services provided [35, 36].

Some of the reasons for the differences in their satisfaction, could be because of low cost of services in the health facilities, as most of the health facilities offer free maternal and child health services. This may also attribute for the high level of satisfaction with the maternal health services reported by the clients in this study, despite the poor quality of services provided.

Looking back at all aspects of their visit to the health facilities majority of respondents (96.7%) had an overall satisfaction with the services in the primary health cares with just about half 49.8% grading their satisfaction very good and 44 (18%) felt the services they received were excellent. This finding corresponds with the overall high level of satisfaction related in different studies carried out in the South east Nigeria, in South west Nigeria as well as studies by Iliyasu et al., Sufiyan et al. and Balogun, respectively in northern past of Nigeria [23, 25, 37–41]. This conforms that clients may generally express satisfaction to the quality of services despite some inconsistencies between received care and their expectations. It has been reported that interaction of caregivers with the clients has always been the key to high satisfaction with the service. Other local studies, in Nigeria showed that a lower proportion of those studied were satisfied with the overall services received [6, 37, 40]. The possible reason of a higher proportion in this study compared to other parts of the country could be because majority of the respondents in this study had no formal education and studies have shown that the lower the educational status the most likely a client is to be pleased with the services they receive.

In this study, almost all the respondents (98.4%) were willing to use the health facility again and only 11 (4.5%) were not willing to recommend it to others, in Zaria similar to what was obtained in this study most of respondents were willing to return to the health facility again to patronize antennal care services; additional 98.3% of the respondents were willing to recommend the antennal care services to others such as family and friends [23]. The study by Oladapo and a study in South Africa also found that over 80% of those interviewed said they would attend the same facility again on another occasion [37, 42]. The finding from this study and others cited is not surprising as most of the respondents were satisfied with the services therefore it is understandable why they would be willing not just to return to the facility but also recommend it to others.

CONCLUSION

Client satisfaction is an important aspect of quality of care and affects the health outcome of patients. Therefore, incorporating client's views is vital in making health services more inclined to the needs of people accessing it. This study made an effort to give an overview of clients' satisfaction with components of maternal and child health services at primary health care centers in Sokoto metropolis. The findings from this study showed that the overall satisfaction with the range of maternal and health services provided in the health facilities was good with ranging levels of satisfaction. The average waiting time in all aspects was long and the waiting time was significantly associated with the clients' satisfaction, the longer the waiting time the lower the level of satisfaction. The findings in this study suggest that more efforts need to be put into reducing the time spent before accessing services, also there is a need to improve facilities and

interpersonal skills of the health personnel through development of cultural sensitivity training programs in medical schools, continuing medical education and public health programs.

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Jessica Timane Ango – Conception and design, Acquisition of data, Analysis and interpretation of data. Drafting the article, Critical revision of the article. Final approval of the version to be published
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Ismail Abdulateef Raji – Analysis and interpretation of data. Drafting the article. Final approval of the version to be published

Guarantor
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Conflict of Interest
Authors declare no conflict of interest.

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