



## Client Satisfaction with Antenatal Care Services in Primary Health Care Centres in Sabon Gari Local Government Area, Kaduna State Nigeria.

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### KEYWORDS

Assessment,  
Client  
satisfaction, ANC,  
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### ABSTRACT

**Introduction:** Patients' satisfaction is related to the extent to which general health care needs and condition-specific needs are met. Evaluating to what extent patients are satisfied with health services is clinically relevant, as satisfied patients are more likely to comply with treatment, take an active role in their own care, continue using medical care services and stay with a health provider (where there are some choices), maintain with a specific system and recommend the services to others. The study was aimed at assessing the degree of client satisfaction with antenatal care services provided among primary health care centers in Sabon Gari local government area.

**Method:** A cross sectional descriptive study was conducted among 234 women attending ANC who were randomly selected using multistage sampling technique in Sabon Gari Local Government Area of Kaduna state. An exit interview was conducted using pre-tested semi structured questionnaire for data collection over two weeks.

**Results:** During clients visit to the primary health care centers their views about the different aspects of client-provider interaction was satisfactory, as 60.3% related that personnel greet them warmly and with respect, more than half (59.0%) also relate that personnel introduced themselves first before attending to them, thereby establishing a good rapport. Privacy and confidentiality was however not maintained within the health facility as related by 77.4% of respondents. Close to half (48.0%) felt the waiting time in the facility was long, as 85.0% of all respondents had to wait an average of greater than an hour before seeing the health provider. Overall, the respondents (74.0%) were satisfied with ANC services received.

**Conclusion:** Clients receiving antenatal care in primary health care centers in Sabon Gari LGA were overall satisfied with the services provided. However, privacy, confidentiality and waiting time are of concern to them.

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### Introduction

Patients' satisfaction is related to the extent to which general health care needs and condition-specific needs are met. Evaluating to what extent patients are satisfied with health services is clinically relevant, as satisfied patients are more likely to comply with treatment, take an active role in their own care, to continue using medical care services and stay with a health provider (where there are some choices), maintain with a specific system and to recommend the services to others.<sup>1,2</sup>

Evaluation of care must be done, so as to improve accountability, to identify, to raise standard and quality of care, to improve responsiveness to patients, to monitor health care seeking behavior, to improve patients compliance with care, and to

improve outcomes of care.<sup>3</sup> The measurement of patients' satisfaction is a common component of many evaluations but it is a wholly subjective and dynamic assessment of the quality of health care and, as such, is not a measure of final outcome. This has inadvertently steered up some debates about using the client's perspective in evaluation of the quality of services. While many stakeholders have viewed the client's perspective as a meaningful indicator of health services quality, others have dismissed the views of clients as too subjective. For the latter point of view, how a client feels is important, even though the provider's assessment of reality may be different, because at a minimum, the subjective assessment of quality by clients can still provide useful input to help the provider understand and establish acceptable standards of

services.<sup>4</sup> Consumer assessments of interpersonal processes of care during antenatal care provide important information about how well clinicians satisfy the perceived needs of the clients they serve. Furthermore, perceived quality of care received in health facilities is directly proportionately related to the use of health facilities.<sup>5</sup>

In spite of the global efforts to improve maternal health in the developing countries, the present quality of maternal care as depicted by the magnitude of the high maternal morbidity and mortality in this region makes the realization of the Millennium Development Goal for maternal health uncertain.<sup>6</sup> Among the various pillars of Safe Motherhood, antenatal care remains one of the interventions that have the potential to significantly reduce maternal morbidity and mortality when properly conducted.<sup>7</sup>

## Objective

To assess the degree of client satisfaction with antenatal care services in Primary Health Centers of Sabon Gari local government area and to correlate it with quality of care offered.

## Methodology

Sabon Gari local government was created on 27<sup>th</sup> August 1991 from the defunct Zaria Local Government Area of Kaduna state. It is located in the Guinea Savannah zone of the Northern Nigeria, about 5 kilometers from Zaria City and 65 kilometers from Kaduna Town. It is 660 meters above sea level with a land area 600 square kilometer approximately. It is bounded to the North by Ikara Local Government Area, to the North West by Makarfi Local Government Area, to the west by Giwa Local Government Area, Soba Local Government Area lies to the east and Zaria Local Government Area to the south. Has an annual rainfall of 1000-1250mm per annum and is an area of undulating landscape with generally loamy soil and is hilly in some areas. According to the 2006 population census Sabon Gari had a population of

286,671 in its 2 districts (Sabon Gari and Basawa districts) which has 11 wards, some 235 settlements and the population of women within child bearing age (15-45years) is put at 64,256.<sup>8</sup>

It is an urban local government area consisting of various ethnic groups with Hausa as the predominant group, others being, Fulani, Yoruba, Igbo, Bajju, among others. The majority of this mostly Hausa populace practices Islam, although Christianity is also widely practiced.

Sabon Gari local government area has a total of 22 primary health care facilities consisting of 8 family health units (PHCs with emphasis in provision of maternal & child health services), 9 health clinic and 5 health posts. These health facilities are distributed between 6 health districts, they all provide maternal and child health services with only 6 of these centers providing free ANC services. These are: PHC Samaru, PHC Audu kwari, PHC Muchia, PHC Sakadadi, PHC Basawa and PHC Jama'a, consequently gaining the highest patient load. In addition there are a total of 25 registered private clinics and hospitals and 12 institutional clinics belonging to industries or training institutions. Numerous patent medicine vendors, chemists and traditional medical practitioners also exist and are well patronized because of their close proximity to the people. The Ahmadu Bello University Teaching Hospital, located less than 5km from the centre of Sabon Gari LGA serves as the main referral centre for these facilities.

Transportation within Sabon Gari is mainly by road which link to the various health facilities. A railway line extends to Kano, Kaduna and Zamfara, and a mini airport is located within the college of aviation. Communication is via modern telecommunication services which include, digital telephone services, general system of global mobile communication telephone services, postal services and interpersonal means. The occupation of the majority of the populace is farming but a wide variation of professionals is contained within.

## Study design

A cross-sectional descriptive to assess client satisfaction with antenatal care services among

primary health care centers in Sabon Gari Local Government Area.

### Study population

The study was carried out among pregnant women attending antenatal clinics in Primary Health Care Centers of Sabon Gari LGA.

### Inclusion criteria

1. Pregnant women registered for antenatal care and have at least made two or visits to the PHC centres
2. Pregnant women who gave consent to participate in the study

### Exclusion criteria

1. Pregnant women who have not registered for antenatal care in the PHC centres
2. Pregnant women registered for antenatal care, but have not made up to two or visits to the centres
3. Pregnant women who did not give consent to participate in the study

### Sample size determination

The sample size was calculated using the formula:<sup>9</sup>

$$n = \frac{Z_a^2 pq}{d^2}$$

Where n = Sample Size

$Z_a = 1.96$ , Standard deviation set at 95%

$p = 0.814$ , proportion of clients satisfied with services among primary health care centers was 81.4%<sup>11</sup>

$q = 1 - p$ , complementary probability =  $1 - 0.814 = 0.186$

$d = 0.05$ , degree of accuracy

Therefore;

$$n = \frac{Z_a^2 pq}{d^2}$$

$$= \frac{1.96^2 \times 0.814 \times 0.1}{(0.05)^2}$$

$$(0.05)^2$$

$$= \underline{234 \text{ clients}}$$

### Sampling technique

A multistage sampling technique was used in selecting the required sample size. In the first stage, a list of all the wards in the LGA was obtained out of which two wards were selected randomly through balloting. From the two selected wards, the list of all the PHC's was obtained. One PHC in each of the two selected wards was then randomly selected through balloting. Based on client flow in each of the selected PHC, the sample size was distributed proportionately. Clients were then interviewed as they exited the primary health care centers on antenatal clinic days until the required number was obtained

**Data collection tool:** An exit interview was conducted using pre-tested semi structured questionnaire for 234 women attending antenatal clinics in the selected Primary Health Care centers. Data was collected over a period of two weeks (23/05/2011 to 06/06/2011) by the researchers and 4 trained research assistants after pretesting the tool in a different Primary Health Care centre of a different Local Government Area.

### Data analysis

Data collected was entered, validated, and analyzed using statistical package for social sciences (SPSS) software version 19.0. For the descriptive aspect of the analysis, frequency distributions were generated for all categorical variables. Means and standard deviations and other descriptive measures were determined for quantitative variables. Chi square test was applied where appropriate for the comparison of proportions and for evaluating associations of categorical variables in contingency tables. Statistical calculations were carried out at P-value of 0.05.

### Ethical consideration

An ethical clearance was obtained from the Ethical Clearance Committee of Ahmadu Bello University Teaching Hospital, Zaria before embarking on the

study. Permission was obtained from the chairman of the Local Government Area through the Director of PHC. Permission was also sought from the Heads of the Primary Health Centers with detailed explanation about the nature of the study. Verbal consent was obtained from individual clients involved in the study before administration of the questionnaires with emphasis made on confidentiality of responses obtained and the liberty of opting out of the study at any time if they so wish.

### Limitations of the study

1. There was a language barrier as the area under study is predominantly Hausa speaking area and so interpreters were used as a source of communication.
2. Some patients had not experienced all activities because they have not visited all sections of the health facility, hence, could not answer all questions.

## RESULTS

A total of 234 questionnaires were administered to the women attending PHC in Sabon Gari LGA. Out of the total of respondents 64.5% were within 15-24 years of age and 5.6% were 35-45 years old. Illiterate were 1.7% and those with secondary level of education was 38.9% of the respondents. Hausa speaking women constituted 77.4% of the respondents. 60.3% of the respondents reported that the personnel greeted them warmly with respect whereas 39.7% respondents did not. 59% of the personnel introduced themselves to the clients and 70.5% of personnel did not explain to the clients what to expect in the course of obtaining a service. 88.9% of the personnel encourage clients to ask questions pertaining their various conditions, and 86.3% clients had their questions answered completely. 56% of respondents had procedures explained to them before been conducted and only 22.6% respondents had their privacy/confidentiality maintained in the process of accessing health service(s).

**Table 1: Socio-demographic characteristics of clients attending ANC in PHCs of Sabon Gari LGA, Kaduna State.**

Variable	Frequency	Percent
<b>Age</b>		
15-24	151	64.5
25-34	70	29.9
35-45	13	5.6
<b>Educational status</b>		
Illiterate	4	1.7
Quranic	57	24.4
Primary	67	28.6
Secondary	91	38.9
Tertiary	15	6.4
<b>Tribe</b>		
Hausa	181	77.4
Yoruba	4	1.7
Ibo	2	0.9
Others	47	20.1
<b>Religion</b>		
Islam	202	86.3
Christianity	32	13.7

Table 2: Health workers' reception of clients attending ANC in PHCs of Sabon Gari LGA, Kaduna State.

Variable	Frequency	Percent
<b>Greeted warmly with respect</b>		
Yes	141	60.3
No	93	39.7
<b>Personnel introduced him/herself</b>		
Yes	138	59
No	96	41
<b>Personnel explained what to expect</b>		
Yes	69	29.5
No	165	70.5
<b>Provider encourage client to ask questions</b>		
Yes	208	88.9
No	26	11.1
<b>Clients' questions answered completely</b>		
Yes	202	86.3
No	32	13.7
<b>Procedure explained</b>		
Yes	131	56
No	103	44

Table 3: ANC clients' satisfaction of interpersonal relationship with Health workers in PHCs of Sabon Gari LGA, Kaduna State.

Variable	Frequency	Percent
<b>Satisfied with interpersonal relationship</b>		
Yes	150	64.1
No	6	2.6
Don't know	78	33.3
<b>Privacy/confidentiality maintained</b>		
Yes	53	22.6
No	181	77.4

Table 4: Opinions of clients on waiting time and time spent with health provider during ANC visits at PHCs of Sabon Gari LGA, Kaduna State

Variable	Frequency	Percent
<b>Opinion on waiting time</b>		
Very long	73	31.2
Long	113	48.3
Adequate	48	20.5
<b>Opinion on time spent with health provider</b>		
Too short	5	2.1
Just right	229	97.9

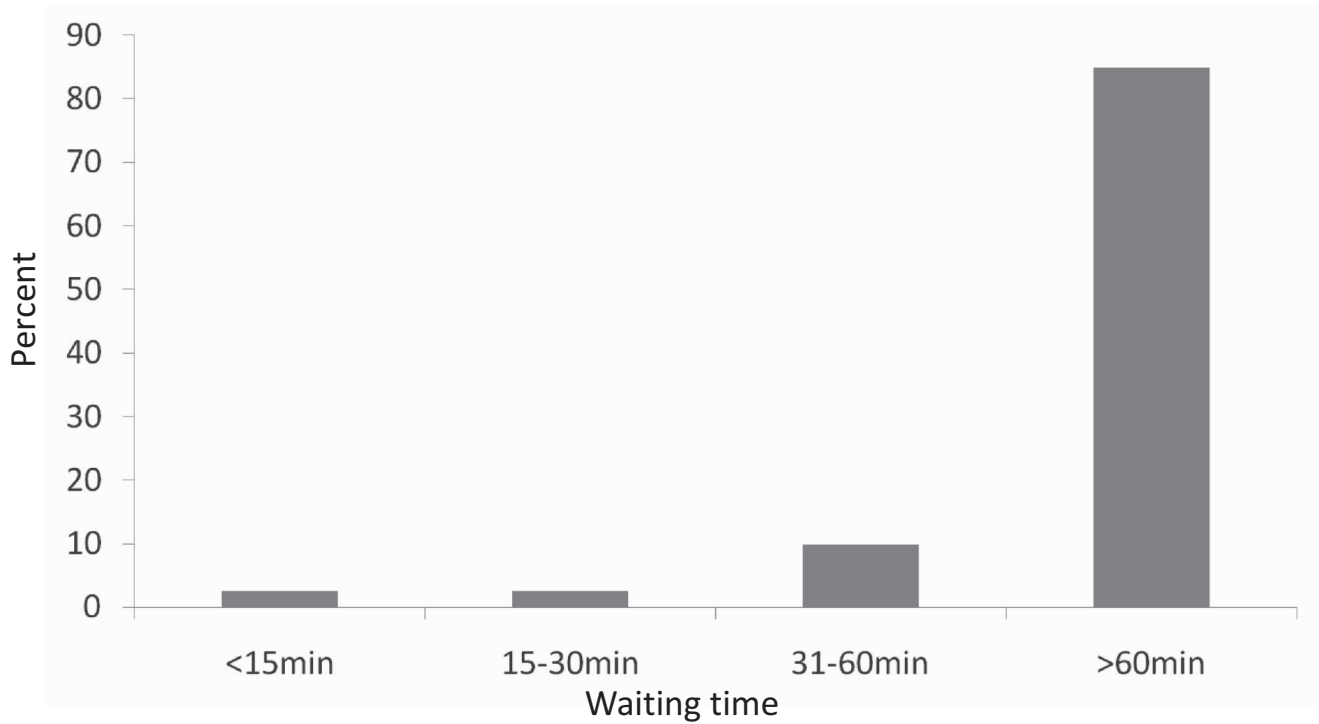
Table 5: Willingness of ANC clients to recommend or return for services in PHCs of Sabon Gari LGA, Kaduna State.

Variable	Frequency	Percent
<b>Will return</b>		
Yes	227	97
No	7	3
<b>Will recommend</b>		
Yes	230	98.3
No	4	1.7

Table 6: Satisfaction with services by clients attending ANC in PHCs of Sabon Gari LGA, Kaduna State.

Variable	Frequency	Percent
<b>Level of satisfaction</b>		
Very satisfied	45	19.2
Satisfied	120	55.1
Neutral	52	22.2
Dissatisfied	4	1.7
Very dissatisfied	4	1.7
<b>Reasons for satisfaction</b>		
Presence of competent staff	146	84.4
Friendliness of personnel	27	15.6

**Figure 1: waiting time of ANC attendees in PHC of Sabon gari LGA Kaduna state.**



**Table 8: Relationship between waiting time and level of satisfaction of clients with services in PHCs of Sabon Gari LGA, Kaduna State.**

Waiting time	Level of satisfaction					Total
	very satisfied	satisfied	neutral	dissatisfied	very dissatisfied	
<15min	6	-	-	-	-	6
16-30min	3	3	-	-	-	6
31-60min	3	9	11	-	-	23
>60min	33	116	42	4	4	199
Total	45	128	53	4	4	234

$\chi^2 = 40.1$

df = 12

$\alpha = 0.05$

**Table 9: Relationship between time spent with provider and level of satisfaction of clients attending ANC in PHCs of Sabon Gari LGA, Kaduna State.**

Time spent	Level of satisfaction					Total
	very satisfied	satisfied	neutral	dissatisfied	very dissatisfied	
<10minutes	38	122	43	4	4	211
11-15minutes	7	6	-	-	-	13
16-20minutes	-	-	4	-	-	4
>20minutes	-	-	3	-	-	3
Don't know	-	-	3	-	-	3

$$\chi^2 = 40.1 \quad df = 12 \quad \alpha = 0.05$$

**Table 10: Relationship between cleanliness of the health facilities and level of satisfaction with ANC services at PHCs of Sabon Gari LGA, Kaduna State.**

Cleanliness	Level of satisfaction					Total
	very satisfied	satisfied	neutral	dissatisfied	very dissatisfied	
Very clean	21	19	8	-	-	48
Clean	18	63	20	-	-	101
Average	6	43	23	4	4	80
Dirty	-	3	2	-	-	5
Total	45	128	53	4	4	234

$$\chi^2 = 43.4 \quad df = 12 \quad \alpha = 0.05$$

## DISCUSSION

Out of the 234 respondents interviewed, 94.4% of them were within the reproductive age range of between 20-34 years. As this is the most fertile period in a woman's lifespan, other studies too will as expected have a similar finding, a study by Oladapo in the South-western part of Nigeria confirms this, with 81.3% of the respondents falling within the same age range.<sup>7</sup>

Greater than two-thirds of the respondents (73.9%) had some form of formal education, 24.4% had Qur'anic education and only 1.7% of the respondents were uneducated. This implies that the patronage of ANC services even at the grassroots is higher among the literate portion of the population and is similar to the finding of Oladapo, where 92.9% of clients attending PHC's for antenatal care had formal education at different levels, 2.0% had Qur'anic education and 5.2% had no education.<sup>7</sup>



Most of the respondents 77.4% and 86.3% were Hausa and Muslims respectively, which is not surprising as they are the predominant tribe and religion in the Northern part of Nigeria.<sup>10</sup>

During their visit to the health facility, most of the respondents, 64.1% felt their health concerns were addressed by the health provider, although, greater than a third of the respondents (33.3%) couldn't really say if their health concerns were addressed and only 2.6% respondents felt their health concerns were not addressed. The large number of those who don't know if their health issues were addressed could be attributed to the fact that the clients patronizing the PHC are mostly those who are otherwise normal, with only those physiologic changes experienced by all pregnant women.

During their visit to the health facility, majority of respondents related that personnel, ranging from the records staff to the doctors had a positive attitude, as 60.3% said they were greeted warmly and with respect and 59.0% said personnel introduced themselves. This is an important aspect as most clients were referred by others because a favorable atmosphere was created for them and this also influences their will to continue patronage of the services in the PHC. The study by D. Pitaloka and A.M. Rizal in Malaysia pointed this out too as 62.0% of respondents were satisfied with interpersonal relationships with staffs.<sup>11,12,13</sup> Also the study by Oladapo in the South-western part of Nigeria showed greater than 90.0% of respondents were satisfied with interpersonal relationships with staffs.<sup>7</sup>

All respondents rated client provider interaction satisfactory in different aspects, viz-a-viz the provider being interested in their condition, listening to them, provider understanding their concerns and being comfortable talking to them. On the other hand, majority of respondents (77.4%) said privacy and confidentiality was not maintained during the consultations with the health provider. This is because they have a large patient load relative to personnel which now forces certain aspects of the antenatal care e.g. measurement of blood pressure and performance of investigations

to be done en bloc, this is done so as to save time. In contrast the study by Oladapo reported 93.8% of the respondents' privacy was protected.<sup>7</sup> Also another study by O. R Balogun showed 95.5% of respondents said confidentiality was maintained in the health facility they attended.<sup>14,15</sup>

The average waiting time from entry into the health facility and to the time a client sees the health provider was greater than 60 minutes for most of the respondents (85.0%), another 9.8% still had to wait for 31-60 minutes with only 6.2% of respondents spending less than 30 minutes. About half of respondents, 48.3% thought this waiting time was 'long' with a further 31.2% saying it was 'too long', although a significant proportion (20.5%) were still considerate enough to think it was 'adequate'.

Another study by Rashmi and Vijay Kumar B in India also showed that duration of waiting for service provider was not satisfactory for 20% of people coming for ANC as they had to wait for more than 2-3 hours to be attended to.<sup>16</sup> Majority of respondents (90.2%) spent less than 10 minutes with the health provider as the time to put forth their complaints, as questions, have their blood pressure checked and have abdominal examination done. The remaining 8.5% spent more than 10 minutes with the health provider, 5.5% spent 10-15 minutes, 1.7% spent between 16-20 minutes and 1.3% spent greater than 20 minutes.

This time spent with the health provider was viewed by most of the respondents (97.9%) as adequate while only a minority (2.1%) were of the view that the time was too short and none felt the time was too long. As most of the clients are in an otherwise steady state, with no complications, no fresh complaints are usually lodged, therefore making the time spent adequate. The study by Oladapo also shows a similar finding, which showed the mean time spent with caregiver to be less than 10 minutes. 74.7% of respondents were satisfied with it while 15.3% were not satisfied with the length of consultation time. Furthermore, 84.7% believed that they spent enough time with the care provider during consultation, 7.3% preferred a little more

time while 10.7% preferred a lot more time with the care provider.

Most respondents (97.0%) are willing to return to the health facility again to patronize ANC services; additional 98.3% of the respondents were willing to recommend the ANC services to others such as family and friends. Reasons postulated to this effect include; personnel's friendly attitude (85.9%) and the close proximity of the facility to their homes (1.7%). The minority of respondents that won't return or recommend the ANC services (3% and 1.7%, respectively) put forth the following reasons; long waiting time (50%), drugs being out of stock (37.5%) and lack of adequate equipment (12.5%). The study by Oladapo also showed that 85.8% of respondents will return for services while 92.9% of respondents were also willing to recommend the services of the health facility to others including their family and friends.<sup>7</sup>

Looking back at all aspects of their visit to the health facility majority of respondents (74.0%) were satisfied overall with services received while 4.0% were not satisfied overall with the services received. This finding corresponds with the high satisfaction rates in different studies conducted in Nigeria, the study by Oladapo showed 81.4% of respondents were satisfied with the overall services received, also the study by O. R Balogun showed 64% of respondents were satisfied. Also a study by D. Pitaloka and A.M. Rizal in Malaysia also showed, majority of respondents (77.5%) were satisfied overall with the services they received.<sup>17</sup>

Although the system in place was noticed to have an appreciable number of setbacks, this was the level of satisfaction noticed. This could be attributed to the fact that the women were being considerate, not wanting to paint the health providers who have done the best they could as they feel it is a higher authority that is responsible for those setbacks.

Based on study findings, significant relationship was found to exist between the level of satisfaction observed and the following; respondent's educational level, average waiting time, time spent with health provider, and cleanliness of the facility. These findings tally with the findings of D. Pitaloka

and A.M. Rizal, where a significant relationship was noticed between satisfaction and respondent's educational level, average waiting time, and the cleanliness of the facility.<sup>12,18</sup>

## Conclusion

Majority of clients attending Antenatal care amongst Primary Health Centre in Sabon Gari Local Government Area were satisfied with the different aspects of their interaction with health providers in the facilities although, they felt both privacy and confidentiality was not maintained during their visit.

## Recommendations

1. State and the LGA should employ more skilled staff in order to reduce waiting time
2. State and the LGA should train and re-train the staff in interpersonal communication
3. LGA in collaboration with the state should provide more consulting rooms and screens to improve privacy

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