

PREGNANT WOMEN'S SATISFACTION WITH THE ANTENATAL SERVICES PROVIDED BY MIDWIVES IN GOVERNMENT-OWNED HEALTH CARE FACILITIES IN SOUTH-SOUTH, NIGERIA

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Abstract.

Background: The satisfaction of pregnant women with the quality of antenatal services results in adherence to antenatal care regimen, return for subsequent visits and better materno-fetal outcomes.

Objectives: The objectives of the study were to determine pregnant women's satisfaction with the antenatal services they receive from midwives with regard to general satisfaction, satisfaction with technical quality of the antenatal care provided by midwives, satisfaction with interpersonal aspect of the services, communication, financial, time spent with the midwives and availability/access/convenience of the antenatal services provided by the midwives in the health care facilities in South-South Nigeria.

Materials and Methods: The study was a cross sectional survey research design. A total of 1500 pregnant women were selected for the study using multi-stage sampling technique. Patient Satisfaction Questionnaire was the instrument used for data collection. The reliability of the instrument was established through test-retest method using Cronbach's Alpha which yielded a co-efficient of 0.709. Data collected were analyzed using frequencies, percentages, mean and standard deviation to determine the objectives of the study. Factorial Analysis of Variance was used to test the hypothesis at 0.05 level of significance.

Results: The result showed mean of 56.12 ± 10.17 for general satisfaction, satisfaction with technical quality mean = 65.04 ± 7.12 , interpersonal satisfaction mean = 71.07 ± 11.23 , satisfaction with communication mean 63.07 ± 16.59 , satisfaction with financial aspect mean = 59.75 ± 9.88 , mean for time spent with midwife = 73.33 ± 29.82 , and satisfaction with convenience of antenatal services had mean of 59.86 ± 7.62 . There were significant associations between the satisfaction expressed by pregnant women and their occupation F=3.088, p-value = 0.027, and religion F=5.469, p-value=0.016.

Conclusion: Pregnant women were satisfied with the antenatal services provided by midwives in Government-owned Health care facilities in South-South Nigeria. Non-governmental organizations should support the funding of human and material resources needed to further improve the performance of midwives and maintain satisfaction of pregnant women with antenatal services.



Keywords: Antenatal services, Healthcare Facilities, Midwives, Pregnant women, Satisfaction.

Introduction.

The expected outcome of antenatal service is client's satisfaction, and it is derived from the total experience of the client during every antenatal visit [1]. Antenatal service is defined as the care given to a pregnant woman from the time conception is confirmed until the beginning of labour [2]. The scope of antenatal service covers screening policies and vaccination programmes, as well as the support and information provided to pregnant women [3]. The interventions has been categorized as nutritional interventions, maternal and fetal assessment, preventive measures and interventions for common physiological symptoms, as well as health systems interventions to improve the quality of antenatal care [4].

Clients' satisfaction is a reflection of their judgment of different domains of health care which include the technical, interpersonal, financial, time and organizational aspects [5] as well as general, communication, financial, and access/availability/convenience aspects of the health care they received [6]. One thing peculiar to the Nigerian situation and some countries in the West African sub-region is that utilization of antenatal care services by a client does not necessarily mean the client will eventually deliver in the facility at which she registered. This is often related to the intangible concept of satisfaction with care [7].

In reality, satisfaction with care impacts health outcomes, continuity of care, compliance with and relationship with the care provider. Clients who are satisfied with antenatal services during pregnancy are more likely to follow the antenatal care regimen, attend subsequent visits regularly and utilize the same antenatal care center in future pregnancies [1]. As it is with all types of medical care, satisfied clients will recommend a Center's services to others, suggesting that dissatisfaction with antenatal services may impact both individual behavior and the behavior of others within the woman's social cycle [8]. Furthermore, antenatal clients who are dissatisfied with care in the public health system may seek subsequent care in the private health system or from traditional caregivers [1]. In some other instances, dissatisfied clients may delay to seek antenatal care or may not seek antenatal care at all, resulting in poor materno-fetal outcomes or possible irreversible complications. Hence, this study aimed to assess the satisfaction of pregnant women with the antenatal services provided by midwives in government-owned health care facilities in South-South, Nigeria.

Objectives

The objectives of this study were to:

- 1. Determine pregnant women's general satisfaction with the antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria
- 2. Assess the satisfaction of pregnant women with the technical quality of antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria
- 3. Ascertain the satisfaction of pregnant women with the interpersonal aspect of antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria



- 4. Assess the satisfaction of pregnant women with the communication aspect of antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria
- 5. Assess the satisfaction of pregnant women with the financial aspects of antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria
- 6. Assess the satisfaction of pregnant women with the time spent with midwife during antenatal care at government-owned health care facilities in South-South, Nigeria
- 7. Assess the satisfaction of pregnant women with access/availability/convenience of antenatal services provided by midwives at government-owned health care facilities in South-South, Nigeria

Research Hypothesis

There is no significant association between the demographic characteristics of the pregnant women and the satisfaction they express over the quality of the antenatal services provided by midwives in South-South, Nigeria

Materials and Methods

Study Design

This study was a cross sectional survey research design.

Area of the Study

Government-owned health care facilities in the South-South geopolitical zone of Nigeria were used for the study. Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers are the six States that comprise the South-South geopolitical zone. Each State has primary, secondary and tertiary levels of government-owned health care facilities that provide antenatal services to pregnant women.

Population of the Study

The population of the study consisted of all pregnant women attending antenatal clinic in all the government-owned primary, secondary and tertiary level health care facilities in the six States of the south-south geo-political zone of Nigeria.

Sample Size and Sampling Method

The sample size was determined using Power Analysis Formula by Creative Research Systems [9]. Multi-stage sampling technique was used to select the pregnant women for the study. In the first stage, simple random sampling technique was adopted in selecting one tertiary health care facility from each State. This technique allowed all the tertiary health care facilities equal chance to be selected in the States with more than one tertiary health care facility. Simple random sampling was used to select two secondary and two primary health care facilities from each State. This technique ensured that all the health care Facilities had equal chance of being selected within the group. This gave a total of 30 health care facilities. In the second stage, simple random sampling technique was used to select 50 pregnant women from each of the 30 government-owned health facilities. This technique allowed all the pregnant women in each facility to have equal chance of being selected for the study. The sample size for the study was 1,500 pregnant women.



Instrument

Patient Satisfaction Questionnaire (PSQ III) developed by Ware, Snyder and Wright [6] was used for data collection in this study. Items on demographic characteristics of the respondents were added to the PSQ III by the researchers (eg age, parity, level of education, occupation, gestational age and religion). PSQ III is made up of fifty (50) items in seven (7) sub-scales/domains namely: General Satisfaction (GSAT) (e.g. very satisfied with care, some things could be better, medical care is excellent, etc.), Technical Quality (TECH) (e.g. careful to check everything, midwives are very thorough, antenatal clinic has everything needed, etc.), Interpersonal Aspects (INTER) (e.g. not business-like/personal, do best to keep me from worrying, pays attention to privacy, etc.), Communication (COMM) (e.g. explain the reason for tests, midwives use simple and understandable terms when giving explanations, say everything that is important, etc.), Financial Aspects (FINAN) (e.g. care without financial setback, do not worry about large bills, protected from financial hardship, etc.), Time Spent with Midwife (TIME) (e.g. midwives spend plenty of time, not in a hurry when treating me) and Access/Availability/Convenience (e.g. get antenatal care without trouble, easy to get care on short notice, easy to get care in an emergency, etc.). Some items in PSQ III were modified by the researchers by replacing some medical terms with midwifery terms (e.g. "Doctors need to be more thorough" was replaced with "Midwives need to be more thorough", "Medical care is excellent" was changed to "Antenatal service is excellent"). In addition, negatively worded items in PSQ III were reversed so that higher item scores will indicate greater satisfaction (e.g. items like: "ignore what I tell them" was reversed to "do not ignore what I tell them", "use terms without explaining" was reversed to "midwives use simple and understandable terms when giving explanations", etc). PSQ III is designed into five-point rating scale namely: strongly Agree = 5points, Agree = 4points, Uncertain = 3points, Disagree = 2points and Strongly Disagree = 1point.

PSQ III is a validated standardized instrument. Copies of the instrument along with the objectives of the study were given to three experts in MCH, Measurement and Evaluation and Statistics to determine the face and content validity of the instrument.

A reliability test was conducted using the test-retest method to measure the reliability of the instrument. Cronbach's Alpha Coefficient obtained for General Satisfaction subscale was 0.702, 0.706 for Technical Quality subscale, 0.711 for Interpersonal Aspect subscale, 0.718 for Communication subscale, 0.702 for Financial Aspects subscale, 0.719 for Time Spent with Midwife subscale, 0.704 for Access/Availability/Convenience subscale, and 0.709 was the overall reliability for PSQ III.

Ethical Consideration

Ethical approval for the study was obtained from the Health Research Ethics Committee of the Ministries of Health of Akwa Ibom State, Bayelsa State, Cross River State, Delta State, Edo State, and Rivers State. The researchers obtained informed consent from the health facility heads to be allowed access to the respondents. Also informed consent was obtained from the respondents who were also informed that their participation in the study was voluntary. The respondents were assured of anonymity, privacy and confidentiality during and after data collection.



Data Collection

Copies of the questionnaire were administered face to face by the researchers and two (2) assistants in each of the selected tertiary and secondary health facilities as well as one assistant in each Primary Health care Facility. Data collection was done after antenatal sessions on the antenatal clinic days of all selected facilities. The completed copies of the questionnaire were retrieved on the spot and there was 100% return rate. The data collection lasted for a period of two (2) months.

Data Analysis

The data collected in the seven (7) subscales of PSQ III were converted to 100% scale with the PSQ III conversion formula before they were coded for analysis. The scores of items within each subscale were summed to get the subscale score and subsequently transformed to a 0 to 100 scale. Percentages (%) were used to determine the demographic characteristics of the respondents. The objectives were determined with mean scores and standard deviation. The hypothesis was tested using factorial Analysis of Variance (ANOVA) at 0.05 level of significance. The data analysis was done using Statistical Package for Social Sciences (SPSS) version 22. All the results were presented in tables.

Results

S/N	Variables	Variable Classification	Frequency	Percentage
1.	Age (in years)	18-24	296	19.73
		25-31	914	60.93
		32-38	264	17.60
		39-45	13	0.87
		46 and above	13	0.87
2.	Number of deliveries	None	250	16.67
		1	339	22.60
		2-4	839	55.93
		5 and above	72	4.80
3.	Level of education	Non-formal	2	0.13
		Primary	43	2.87
		Secondary	575	38.33
		Tertiary	880	58.67
4.	Occupation	Nil	499	33.27
	•	Farming	14	0.93
		Artisan	72	4.80
		Business/Trading	510	34
		Employed	405	27
5.	Religion	Christianity	1457	97.13
	0	Islam	30	2.00
		Traditional African Religion	13	0.87
6.	Gestational age at	3 or less	223	14.87
	booking (in months)	4-6	1176	78.40
		7 or more	101	6.73

Table 1: Demographic Characteristics of the Pregnant Women

n=1500

Table 1 shows that majority 914 (60.93%) of the respondents were within the age bracket of 25-31years, while minority 26 (1.74%) were aged 39years and above. 839 (55.93%) of the pregnant women had 2-4 deliveries, while 72 (4.80%) had 5 and above deliveries. 880 (58.67%) of the respondents had tertiary level of education, while the least number 2 (0.13%) had non-formal education. The occupation of 510 (34%) respondents was business/trading, while 14 (0.93%) were farmers. 1457 (97.13%) of the respondents were Christians, while a few 13 (0.87%) practiced Traditional African Religion. Among the respondents, 223(14.87%) booked at gestational age of 3months or less, while 101 (6.73%) booked at gestational age of 7months and above.

							n=1500		
S/N	General Satisfaction (GSAT)	SD f (%)	D f (%)	U f (%)	A f (%)	SA f (%)	Mean	Std Dev.	
1.	Very satisfied with care	180	18	30	1088	184			
2.	Nothing could be better	(12) 898 (59.87)	(1.2) 320 (21.33)	(2) 221 (14.73)	(72.53) 27 (1.8)	(12.27) 34 (2.27)			
3.	Antenatal care is excellent	(32.87)	378 (25.2)	97 (6.47)	280 (18.67)	252 (16.8)			
4.	Nothing needs to be improved	898 (59.87)	320 (21.33)	221 (14.73)	27 (1.8)	34 (2.27)			
5.	Antenatal care is just about perfect	493 (32.87)	378 (25.2)	97 (6.47)	280 (18.67)	252 (16.8)			
6.	Satisfied with some things	73 (4.87)	47 (3.13)	80 (5.33)	92 (6.13)	1208 (80.53)			
	Mean Score						56.12	10.17	
S/N	Technical Quality (TECH)	SD f (%)	D f (%)	U f (%)	A f (%)	SA f (%)	Mean	Std Dev.	
7.	Careful to check everything	93	37	139	932	299			
8.	Midwives are very thorough	(6.2) 92 (6.13)	(2.47) 39 (2.6)	(9.27) 124 (8.27)	(62.13) 909 (60.6)	(19.93) 336 (22.4)			
9.	Antenatal clinic has everything needed	172 (11.47)	23 (1.53)	31 (2.07)	1086 (72.4)	188 (12.53)			
10.	Diagnosis is correct	69 (4.6)	32 (2.13)	104 (6.93)	1076 (71.73)	219 (14.6)			
11.	Know latest prenatal developments	164 (10.93)	132 (8.8)	72 (4.8)	128 (8.53)	1004 (66.93)			
12.	Midwives have experience with my problem	0 (0)	107 (7.13)	214 (14.27)	998 (66.53)	181 (12.07)			
13.	Midwives are competent, well-trained	14 (0.93)	22 (1.47)	81 (5.4)	1196 (79.73)	187 (12.47)			
14.	Have no doubt about ability of midwives	14 (0.93)	22 (1.47)	81 (5.4)	1196 (79.73)	187 (12.47)			
15.	Never expose me to risk	487 (32.47)	319 (21.27	114 (7.6)	94 (6.27)	486 (32.4)			
16.	Midwives always give advice	13 (0.87)	9 (0.6)	3 (0.2)	216 (14.4)	1259 (83.93)			
	Mean Score	. ,	. ,	. /	- /	. ,	65.04	7.12	

Table 2: Assessment of Pregnant Women's General Satisfaction and satisfaction with Technical Quality of Antenatal Services Provided by Midwives



Table 2 shows that the mean score for pregnant women's general satisfaction = 56.12 and the mean score for pregnant women's satisfaction with technical quality = 65.04.

Table 3: Assessment of Pregnant women's Satisfaction with Interpersonal andCommunication Aspects of Antenatal Services Provided by Midwives

						n	=1500		
'N	Interpersonal Aspects	SD	D	U	Α	SA	Mean	Std	
	(INTER)	f (%)	f (%)	f (%)	f (%)	f (%)		Dev.	
7.	Not business-like/personal	35	97	218	1011	139			
		(2.33)	(6.47)	(14.53)	(67.40)	(9.27)			
3.	Do best to keep me from	197	104	223	901	75			
	worrying	(13.13)	(6.93)	(14.87)	(60.07)	(5)			
).	Pays attention to privacy	494	235	72	472	227			
		(32.93)	(15.67)	(4.80)	(31.47)	(15.13)			
).	Have genuine interest in me	35	97	218	1011	139			
		(2.33)	(6.47)	(14.53)	(67.4)	(9.27)			
l.	Make me feel dignified	133	147	122	627	471			
		(8.87)	(9.80)	(8.13)	(41.80)	(31.40)			
2.	Very friendly and courteous	49	97	491	230	407			
		(3.27)	(6.47)	(32.73)	(15.33)	(27.13)			
3.	Midwives give me respect	133	147	122	627	471			
		(8.87)	(9.80)	(8.13)	(41.80)	(31.40)			
	Mean Score						71.07	11.23	
'N	Communication	SD	D	U	А	SA	Mean	Std	
	(COMM)	f (%)	f (%)	f (%)	f (%)	f (%)		Dev.	
1.	Explain the reason for tests	213	96	37	235	919			
		(14.20)	(6.40)	(2.47)	(15.67)	(61.27)			
5.	Explain terms when used	15	29	77	260	1119			
		(1)	(1.93)	(5.13)	(17.33)	(74.60)			
5.	Say everything that is	0	0	197	125	1178			
	important	(0)	(0)	(13.33)	(8.33)	(78.53)			
	Pay attention to what I tell	156	134	179	498	533			
7.	Tay alloniton to what I ten		$\langle 0, 0, 0 \rangle$	(11.02)	(33.20)	(35.53)			
7.	them	(10.40)	(8.93)	(11.93)	(33.20)	(00.00)			
7. 3.	•	(10.40) 156	(8.93) 134	(11.93) 179	(<i>33.20)</i> 498	533			
	them		, ,	. ,	. ,				

Table 3 shows that the mean score for pregnant women's satisfaction with interpersonal aspects of antenatal services provided by midwives = 71.07 and the mean score for pregnant women's satisfaction with communication aspect of antenatal services provided by midwives = 63.07.



Table 4: Assessment of Pregnant women's Satisfaction with Financial Aspects ofAntenatal Services Provided by Midwives and Time Spent with Midwife

-					n= 1500			
5/N	Financial Aspects	SD	D	U	Α	SA	Mean	Std
_	(FINAN)	f (%)	f (%)	f (%)	f (%)	f (%)		Dev.
29.	Care without financial setback	233	499	153	317	298		
		(15.33)	(33.27)	(10.20)	(21.13)	(19.87)		
30.	Do not worry about large bills	233	499	153	317	298		
		(15.33)	(33.27)	(10.20)	(21.13)	(19.87)		
31.	Protected from financial	233	499	153	317	298		
	hardship	(15.33)	(33.27)	(10.20)	(21.13)	(19.87)		
32.	Have no problem to cover	629	83	134	366	288		
	share of cost	(41.93)	(5.53)	(8.93)	(24.4)	(19.2)		
33.	Insured, protected financially	233	499	153	317	298		
		(15.33)	(33.27)	(10.20)	(21.13)	(19.87)		
34.	Cost is affordable	238	282	341	313	326		
		(15.87)	(18.80)	(22.73)	(20.87)	(21.73)		
35.	Amount I pay is reasonable	238	282	341	313	326		
		(15.87)	(18.8)	(22.73)	(20.87)	(21.73)		
36.	Receive care because cost is	238	282	341	313	326		
	affordable	(15.87)	(18.80)	(22.73)	(20.87)	(21.73)		
	Mean Score						59.75	9.88
S/N	Time Spent with Midwife	SD	D	U	Α	SA	Mean	Std
	(TIME)	f (%)	f (%)	f (%)	f (%)	f (%)		Dev.
37.	Midwives spend plenty of	200	200	200	200	700		
	time	(13.33)	(13.33)	(13.33)	(13.33)	(46.67)		
38.	Not in a hurry when treating	200	200	200	200	700		
	me	(13.33)	(13.33)	(13.33)	(13.33)	(46.67)		
	Mean Score						73.33	29.82

Table 4 shows that the mean score for pregnant women's satisfaction with financial aspects of antenatal services provided by midwives = 59.75 and the mean score for pregnant women's satisfaction with time spent with midwife = 73.33.



Table5:	Assessment	of	Pregnant	women's	Satisfaction	with	Access/Availability/
Convenie	nce of Antena	tal S	Services Pr	ovided by I	Midwives		

					n=1500			
/N	Access/Availability/ Convenience	SD f (%)	D f (%)	U f (%)	A f (%)	SA f (%)	Mean	Std Dev.
9.	Get antenatal care without trouble	164 (10.93)	73 (4.87)	145 (9.67)	1009 (67.27)	109 (7.27)		
0.	Easy to get care on short notice	399 (26.60)	464 (30.93)	284 (18.93)	141 (9.4)	212 (14.13)		
l .	Easy to get care in an emergency	384 (25.60)	933 (62.20)	36 (2.40)	56 (3.73)	91 (6.07)		
2.	Antenatal clinic is open for the whole day	0 (0)	332 (22.13)	934 (62.27)	234 (15.60)	0 (0)		
3.	Care conveniently located	407 (27.13)	278 (18.53)	207 (13.8)	416 (27.73)	192 (12.8)		
1.	Do not wait too long for emergency treatment	384 (25.60)	933 (62.20)	36 (2.40)	56 (3.73)	91 (6.07)		
5.	Can reach midwife for help with pregnancy related questions	120 (8)	139 (9.27)	217 (14.47)	404 (26.93)	620 (41.33)		
•	Easy to get appointment right away	399 (26.60)	464 (30.93)	284 (18.93)	141 (9.4)	212 (14.13)		
•	Antenatal clinic hours are convenient	191 (12.73)	206 (13.73)	297 (19.80)	564 (37.60)	242 (16.13)		
5.	Not kept waiting for midwife's services	0 (0)	626 (41.73)	0 (0)	686 (45.73)	188 (12.53)		
).	Easy to access specialists	621 (41.40)	206 (13.73)	22 (1.47)	354 (23.60)	297 (19.80)		
).	Get antenatal care whenever I need it	159 (10.60)	84 (5.60)	133 (8.87)	999 (66.60)	125 (8.33)		
	Mean Score						59.86	7.62

Table 5 shows that the mean score for pregnant women's satisfaction with access/availability/convenience of antenatal services provided by midwives = 59.86.

Test of Hypotheses

Table 6: ANOVA result of association between pregnant women's demographic characteristics and their satisfaction with the quality of antenatal services provided by midwives

S/N	Independent	Dependent	F-ratio	Adjusted	Sig.	Mean
	Variable	Variable		R Square		Square
1.	Level of education	Satisfaction	0.714	0.512	0.535	8.558
2.	Parity	Satisfaction	1.564	0.509	0.198	20.113
3.	Age	Satisfaction	0.374	0.506	0.835	4.994
4.	Occupation	Satisfaction	3.088	0.501	0.027*	40.711
5.	Gestational age	Satisfaction	0.139	0.525	0.889	1.659
6.	Religion	Satisfaction	5.469	0.514	0.016*	62.124

*The mean difference is significant at the 0.05 level.

Table 6 shows that there were significant associations between pregnant women's occupation and religion and their satisfaction with the quality of antenatal services provided by midwives: F = 3.088, p-value = 0.027; F=5.469, p-value=0.016 respectively. There was no significant association between the pregnant women's level of education, parity, age and gestational age and their satisfaction with the antenatal services provided by the midwives.

DISCUSSION

Satisfaction of pregnant women with the antenatal services provided by midwives

The mean score of 56.12 (Table 2) indicated that pregnant women were generally satisfied with the quality of antenatal services provided by midwives. However, in the opinion of the pregnant women, some aspects of antenatal care were satisfactory but needed improvement. This finding contradicted the observations of some researchers in the studies conducted in Lao PDR [10] and Southern Ethiopia [11] respectively which showed that the antenatal services provided were generally dissatisfactory because of long waiting time, poor consultation and poor laboratory investigations. Studies have also shown that even when pregnant women express general satisfaction with the quality of antenatal services, there are lots of inconsistencies between received care and their expectations of the facilities [12].

The mean score of 65.04 (Table 2) indicated that pregnant women were satisfied with the technical quality of antenatal services provided by midwives. According to the pregnant women, midwives made correct diagnoses, were very thorough, competent and well-trained. Similarly, it was noted that pregnant women in Jimma Town South-West Ethiopia were satisfied with the quality of the technical aspect of antenatal care because midwives exhibited good knowledge in the care of pregnant women [8].

The mean score for pregnant women's satisfaction with the interpersonal aspect of antenatal services provided by midwives was 71.07 (Table 3) indicating that pregnant women



were satisfied. In the opinion of the pregnant women, midwives treated pregnant women with genuine interest, dignity, respect, courtesy and in a friendly manner. Previous studies have also shown that majority of pregnant women in Jimma Town South-West Ethiopia were satisfied with the quality of the interpersonal care demonstrated by the midwives [8].

The mean score for pregnant women's satisfaction with the communication aspect of antenatal services provided by midwives was 63.07 (Table 3) indicating that pregnant women were satisfied. In the opinion of the pregnant women, midwives were both attentive and detailed in the care they provided. Similarly, researchers have reported that majority of respondents in Nepal indicated satisfaction with antenatal care staff regarding communication which covered receiving clear information [13].

The mean score of 59.75 (Table 4) indicated that pregnant women were satisfied with the financial aspect of antenatal services provided by midwives. The pregnant women, indicated that the cost of antenatal care was affordable, although it accumulated to large bills. The cost of antenatal care in Ibadan was expensive even though pregnant women could afford it [14]. In the opinion of the researchers, the midwife care provider may not be responsible for the high cost because the institutional service charge could be part of the hospital policy which the midwife, being an employee, would be obliged to implement.

The mean score of 73.33 (Table 4) indicated that pregnant women were satisfied with the time spent with midwife. In the opinion of the pregnant women, midwives gave prompt attention to pregnant women. Studies have shown that pregnant women in Northern Nigeria received responsive antenatal service indicating that the time spent with the midwife was worthwhile [15]. In addition, this finding is commendable on the part of the midwife care providers because it is an indication that they value the time of their clients.

The mean score of 59.86 (Table 5) indicated that pregnant women were satisfied with the access/availability/convenience aspects of antenatal services provided by midwives. In the opinion of the pregnant women, antenatal clinic hours were convenient and midwives were accessible. Majority of pregnant women in Northwest Tanzania were satisfied with the antenatal clinic hours [16]. However, barriers to utilizing antenatal services were frequent shortages of health providers and drug supply, as well as far distance of health facility from homes of the clients because some pregnant women could neither afford transport fare nor trek the long distances resulting in missed antenatal clinic appointments or late registration for antenatal care [16].

Association between demographic characteristics of pregnant women and satisfaction with the quality of antenatal services provided by midwives

The p-value of 0.535 (Table 6) indicated that there was no significant association between the level of education of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. The findings of this study contradicted the findings of other researchers who observed that educational status significantly influenced pregnant women's satisfaction with antenatal care in Ile-Ife [17]. Also it was noted that respondents with at least secondary level of education were less likely to be satisfied with antenatal care in Southern Ethiopia [11]. In addition, reports have shown that high educational level (high school and university) was significantly



associated with poor satisfaction with quality of antenatal care in South West Ethiopia and Cameroon respectively [8][18].

The p-value of 0.198 (Table 6) indicated that there was no significant association between the parity of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. This finding is consistent with the finding that there was no significant relationship between satisfaction with care and parity of mothers in South India [19]. First time pregnancy was found to be significantly associated with poor satisfaction with quality of antenatal care in Cameroon [18]. It was also observed that satisfaction with antenatal care in Nepal and pregnancy history (first pregnancy or subsequent pregnancy) were not statistically significant [20].

The p-value of 0.835 (Table 6) indicated that there was no significant association between the age of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. Previous studies have also shown non-significant associations between clients' age and satisfaction with antenatal care in Nepal [20] and Ibadan Nigeria [14].

The p-value of 0.027 (Table 6) indicated that there was significant association between the occupation of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. Occupational status significantly influenced pregnant women's satisfaction with antenatal care in Ile-Ife [17]. However, Nwaeze *et al.* (2013) reported that there was no significant association between pregnant women's occupation and their satisfaction with antenatal care in Ibadan [14].

The p-value of 0.889 (Table 6) indicated that there was no significant association between the gestational age of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. On the contrary, pregnant women in all trimesters reported good satisfaction with the quality of antenatal care in Ethiopia [21]. However, studies have also shown that there was no significant association between pregnant women's gestational age and their satisfaction with antenatal care in Ibadan [14].

The p-value of 0.016 (Table 6) indicated that there was significant association between the religion of the pregnant women and the satisfaction they expressed over the quality of antenatal services provided by midwives in South-South, Nigeria. Reports have shown that religion increases the likelihood of satisfaction with antenatal care quality in Sagamu Local Government Area of Ogun State of Nigeria [12]. In the opinion of the researchers, the impact of religion on pregnant women's satisfaction with the quality of care provided by midwives in this study could be due to the fact that the study was conducted in Southern Nigeria which is Christian-dominated. Researchers have also observed that the extent to which religious laws and teaching influence health seeking behavior determine maternal service uptake and outcomes [22].



Pregnant women in South-South Nigeria were generally satisfied with the antenatal services provided by midwives in Government-owned health care facilities. Also occupation and religion had significant impact on pregnant women's satisfaction with the quality of antenatal services provided by the midwives.

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