



## **Women and Providers' Perception, Attitude and Satisfaction with Focused Antenatal Care in Ondo State, Nigeria**

**O. A. Fatile<sup>1</sup>, O. A. Akpor<sup>1\*</sup>, F. A. Okanlawon<sup>2</sup> and E. O. Fatile<sup>1</sup>**

<sup>1</sup>*Department of Nursing Science, College of Medicine and Health Sciences, Afe Babalola University, Ado Ekiti, Nigeria.*

<sup>2</sup>*Department of Nursing, Faculty of Clinical Sciences, University of Ibadan, Nigeria.*

### **Authors' contributions**

*This work was carried out in collaboration between all authors. Author OAF did concept and design of the study, data gathering and interpretation. Author OAA also managed the data interpretation, assisted in literature searches and wrote the first draft of the article. Author FAO helped in concept design, wrote the protocol and assisted in data interpretation and author EOF managed literature searches and assisted in data gathering. All authors read and approved the final manuscript.*

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### **ABSTRACT**

**Aims:** The overall objective of the study is to evaluate women and providers' perception, attitude and satisfaction with antenatal care in Ondo State using the new Focused Antenatal care (FANC) model as this information will improve quality of ANC provided for women in Ondo state.

**Study Design:** A quantitative design was used.

**Place and Duration of Study:** This study was conducted in two selected hospitals in Ondo State, the State Specialist Hospital (SSH), Akure offering FANC as intervention site and Arakale Maternity Hospital (as comparison site), also located in Akure South Local Government Area of Ondo State Nigeria. The study was conducted between September and October 2011.

\*Corresponding author: Email: [akporoa@abuad.edu.ng](mailto:akporoa@abuad.edu.ng);

**Methodology:** A purposive sampling technique was used in the study. 200 women were selected using simple random sampling from the daily register and all the thirty nurses working in the maternal and child health clinics of the two hospitals participated. The instruments used were self-administered questionnaire for the nurses and interviewer administered questionnaire for the women. Data was analysed using the Statistical Package for Social Sciences (SPSS).

**Results:** Findings from the study revealed that the majority of the women 104 (55.9%) were aged 25 – 34 years and majority of the respondents 110 (56.7%) of women, had 4-6 children. 120 (60%) pregnant women and 18 (60.7%) providers still preferred the traditional ANC. Hypothesis 1 revealed that there is a significant relationship between perception and attitude towards FANC among Nurses  $r = 0.59$   $P \leq 0.01$ . Hypothesis 2 showed a significant difference in the perceived satisfaction among women in FANC and traditional ANC with  $t = 7.995$ ,  $P \leq 0.05$  this shows that women in FANC are more satisfied.

**Conclusion:** The benefits of quality maternal health service especially antenatal care cannot be overemphasized. Focused antenatal care practice can be enhanced by establishing link between the community and the health facility in order to increase utilization of the services offered by the new WHO package. Therefore, there is need for the implementation of focused ante natal care at all levels of healthcare delivery system in Nigeria.

*Keywords: Attitude; focused antenatal; perception; satisfaction.*

## 1. INTRODUCTION

Maternal mortality has continued to be a major health problem in the Africa and Nigeria has one of the highest maternal mortality rates in the world, 704 deaths per 100,000 live births compared to less than 10 deaths per 100,000, births in developed countries [1]. Deaths associated with pregnancy, delivery and first six weeks after delivery total approximately 600,000 women worldwide. Nearly half of these deaths occur in Africa, which constitutes only 12.0% of the total world population [1].

Maternal mortality in Nigeria is one of the highest globally. Every 10 minutes, one woman dies on account of complications of pregnancy or childbirth in Nigeria, giving a total of 53,000 per year. This means that about 700 women die in every 100,000 live births. Many people do not readily appreciate this disaster because the deaths do not occur together in one place, as they occurred silently in many different communities in Nigeria [1,2]. Antenatal care aims to promote better health, maternal education, screening and management of illnesses/ complications during pregnancy to ensure the delivery of a healthy baby to a healthy mother [3].

Villar [4], reported that the World Health Organisation (WHO) has issued guidance on a new model of antenatal care (ANC) called Goal-oriented or Focused Antenatal Care (FANC) for implementation in developing countries. The new model reduces the number of required antenatal visits to four, and provides focused services shown to improve maternal outcomes. FANC emphasizes the need of helping women to

maintain normal pregnancies by identifying existing health conditions, detecting emerging complications, promoting health, preparing for a healthy birth, and educating clients on post-partum care including nutrition, breastfeeding and family planning. Trials conducted in Argentina, Cuba, Saudi Arabia, and Thailand proved that FANC was safe and was a more sustainable, comprehensive and effective ANC model.

The antenatal care policy practiced in many developing countries, including Nigeria, has been fashioned along the lines developed in the western countries in the early decades of the last century, that is, involving repeated ritualistic visits without distinction between high- and low-risk pregnancies [5]. These programmes are often poorly implemented, with irregular clinical visits, long waiting times and a poor feedback to the mothers [6].

Poverty and financial constraints has been identified as the major reasons for the poor utilization of antenatal care services in Nigeria, especially in the rural areas. Delay in service purchase is another reason, especially in centers where there is acute understaffing and a large number of clients [7].

The WHO focused ANC package was introduced and adapted in Nigeria in 2002 with targeted assessments of pregnant women to ensure a normal child bearing cycle, individualized care to help maintain the normal progress of pregnancies [2]. For women whose pregnancies are progressing normally, WHO recommends

four ANC visits but despite the benefit of FANC over traditional ANC many Federal and State facilities have not implemented it [8].

The WHO focused ANC package was introduced and adapted in Nigeria in 2002. This package seeks to promote the health and survival of mothers and babies through: Targeted assessments of pregnant women to ensure a normal child bearing cycle and newborn period and to facilitate the early detection of complications, chronic conditions, and other potential problems that could affect the pregnancy. To individualized the care so as to maintain the normal progress of pregnancies, including preventive measures, supportive care, health messages and counseling of women and families for effective self-care, and birth preparedness and planning for complications [2]. For women whose pregnancies are progressing normally, WHO recommends four ANC visits, ideally at less than 16 weeks, 26 weeks, 32 weeks and 36 weeks [8].

Despite the benefit of FANC over traditional ANC many Federal and State facilities have not implemented it. The aim of this study was to determine the perceived quality of the new WHO-FANC model in health facilities in Ondo State over the traditional ANC among women and providers. The researcher explored the perception of pregnant women and providers on the quality of care in FANC in two selected hospitals in Ondo State in comparison with the traditional ANC. Findings from the study can promote better policy development and utilization of FANC health facilities by pregnant women for institutional deliveries.

The theoretical framework for the study is the Health Belief Model, a modification of Becker and Maiman [9] and Rosenstock [10]. The model was adopted in this study to explain the concepts pinned in the study, the model emanated from a foundation of cognitive theories of behavior. Theorists of cognitive belief ascertained that behavior is dependent upon the value that an individual place on a desired outcome and the certainty that a behavior, if well performed will result in the desired outcome. Furthermore, the model explains that a range of health behaviors can be predicted based on information from determinants such as perceived susceptibility, perceived severity, perceived benefits/barriers and modifying factors associated with engaging in a behavior. The application of the model in this study is as follows:

Perceived susceptibility refers to an individual's judgment of their risk of contracting a health problem. The likelihood of the pregnant woman having pregnancy complication will influence the midwife attitude towards focused antenatal care services [10]. For instance, the midwife would be more likely to carry out evidenced based practice in providing antenatal service at is best to a woman depending on whether the woman is prone to having complication. And the pregnant client knowing the likely complications associated with pregnancy will influence her adherence to regular antenatal visits while pregnant.

Also, perceived severity refers to the personal assessment of the likelihood that a problem/illness or disability if contracted or left untreated will have severe consequences such as pain, death, disability, or reduced quality of life [9]. In the context of this study, willingness of the pregnant woman and the midwife to accept and utilize FANC would depend also on personal evaluation of the seriousness of the consequences associated with pregnancy complications for example, death of the fetus.

An individual's choice of behavioral decisions is dependent on the perception of benefits and barriers. Therefore, a cost benefit analysis allows an individual to assess the outcome expectations and evaluate whether the expected benefit of a behavior overshadow the perceived expenditure incurred by engaging in the behavior [9]. Compliance with recommended FANC is impeded to the extent that perceived barriers outweigh perceived benefits that would result from engaging in the health behavior [9]. For instance, inconveniences such as long waiting time at antenatal clinic, distance to the health facility would act as barriers to utilization of FANC. A midwife may not follow the FANC guidelines if she sees no benefit in doing so. The modifying factors may include socio-cultural factors as well as demographic aspects such as age, parity, religion, educational status, social values, beliefs and practices of pregnant woman in relation to utilization of FANC [11]. The Health Belief Model was adopted in this study to illustrate the concepts related to the utilization of FANC in developing countries like Nigeria.

## **2. MATERIALS AND METHODS**

### **2.1 Design and Study Site**

A comparative study designed was used to examine the women and providers' perception of care and acceptability of FANC at the hospital

level between an intervention site (hospital offering FANC) and a comparison site (not offering FANC) in Ondo State, Nigeria. The two hospitals selected for the study were located in Akure South Local Government Area and are easily accessible to the women due to their locations. Quantitative research design was used as well as cross-sectional survey method. This ensured that there were comparisons that determined the level of effect as a result of the intervention. The respondent in the groups are comparable as they are all women within child bearing age utilizing maternal health services and are from similar social and geopolitical location.

## 2.2 Population

The target population consisted of all nurses working in various maternal and child health units and women utilizing the services in the selected health facilities. Each of the facilities has a weekly attendance of about 100 women using various services. The weekly ante natal attendance was not consistent, it ranges between 95 and 120 at the State Specialist Hospital, Akure and between 85 and 100 in at Arakale Maternity hospital, Akure. The population is approximately 185 to 220 weekly.

The sample size was determined using the formula developed by Frounkfort – Nachmias (1996) as follows:

$$N = S^2 / (S.E)^2$$

N = the desired sample size  
S (standard deviations of the variables under study) = 0.52  
S.E (standard error/error margin) = 4%

The sample size is therefore computed as follows:

$$N = (0.52)^2 / (0.04)^2$$

Sample size = 169 approximately 200

The recruiting period was two weeks, thus the total weekly attendance for the two settings was approximately 200. The total population of all nurses in the settings was 30, this included nurses working in various maternal and child health units in the selected health facilities in Akure, Ondo State.

## 2.3 Instrument

The study employed a purposive sampling technique. The selection of the region for study

was also purposive, done in consultation with the Reproductive and Child Health Unit of the Ondo State Ministry of Health, and was based on the type and patient load.

The instrument used was structured questionnaire designed from literature review with open and closed ended questions and Likert Scale Format was used to elicit information on women and providers' perception of quality of care in FANC. The questionnaire for women was self-administered based on the ability of the women to read or write. It has five sections, which were demographic data, knowledge of focused ANC, attitude of women to the new schedule of four visits, quality care on focused ANC and clients' satisfaction or acceptance. A total of two hundred and thirty (230) questionnaires were distributed and retrieved, out of which two hundred (200) were correctly filled.

Similarly, the questionnaire for the nurses was self-administered and consisted of five sections, which were demographic data, knowledge of focused ANC, attitude of women to the new schedule of four visits, quality care on focused ANC and provider's satisfaction.

Data was analysed using the Statistical Package for Social Sciences (SPSS). The Student T-test was used for comparison of mean values between the two groups.

## 2.4 Validity, Reliability and Ethical Consideration

For validity and reliability, prepared questionnaire was given to the project supervisor for vetting while experts in the field were allowed to review the instrument to ensure face and content validity. The tool was pilot tested using a group of ten women similar to the study population at Mother and Child Hospital, Akure, the result was used to modify the questionnaire before the actual study. Content validity of the instrument covered all essential areas and was shown to experts for comments and further review. The final tool was translated by the interviewer to local dialect for better understanding of those who may not understand English and to ensure the reliability of the instrument, Test- retest method was used.

For ethical consideration, letter of introduction from the department of nursing was submitted to the various health institutions and departments

in order to obtain permission. Official permission was obtained from the authorities of the hospitals and clinics used for the study. The proposal was submitted to the institutional Chief Medical Directors (CMDs), the Chairman of Medical Advisory Committee (C.M.A.C) for scrutiny and approvals were obtained. On each clinic day, the WHO Classifying form was used to determine eligibility and participant were informed about the study, after which consent was obtained. Only women consenting to be in the study were included. Issues discussed with respondents and data collected was treated in absolute confidence.

### 3. RESULTS

#### 3.1 Demographic Data

As shown in Table 1, the ages of respondents were between 15 and 54 years. The majority (55.9%) of the respondents are between ages of 25 – 34 years, followed by those between the ages of 35 and 40 years (24.7%). The marital status of the participants indicated that the majority (76.5%) are married while 15.3% are never married. Most 75.8% of the participants are Christians and the educational qualification distribution pattern of the participants indicated that the majority 72.4% had Diploma. Most (56.7%) of the respondents have had 4-6

pregnancy while 23.7% had between 7-9 children.

For the nurses, their ages were between 25 and 64 years. On marital status, 25 (96.2%) are married while 3.8% are single. The majority (76.9%) of the participants are Christians. Result on professional qualification of respondents indicated that most (73.4%) of the respondents are Registered Nurse/Midwife and the many of the respondents has 20 to 29 years post qualification experience (Table 2).

#### 3.2 Client’s Awareness and Perception of FANC

Participants’ awareness of FANC shows that only 57.5% of the women attending antenatal clinic were aware while the remaining 42.5% were not aware of the new antenatal care program (Table 3). Regarding participants’ perception of FANC, the majority (68.8%) of the participants alleged that FANC is to ease nurses’ work and not to offer quality service.

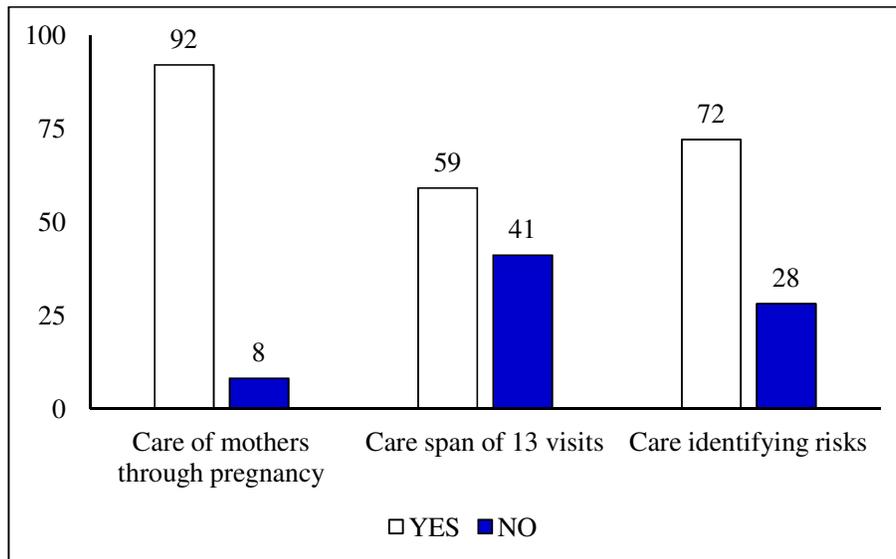
When asked about their opinion on the definition of ANC, most (92%) of the participants knew that ANC is the care given to women throughout pregnancy. The majority (95.9%) also agreed that it is 13 or more visits while 72% of the participants believed that it helps to identify problems early in pregnancy (Fig. 1).

**Table 1. Respondents demographic data at intervention and control clinics**

		Intervention	%	Control	%	Total	%
Age	15 – 24	18	19.1	16	17.4	34	18.3
	25 – 34	51	54.3	53	57.6	104	55.9
	35 – 44	23	24.5	23	25.0	46	24.7
	45 – 54	02	2.1	-	-	2	2.2
Marital status	Never married	17	16.5	15	16.1	32	16.3
	Married	79	76.6	71	76.3	150	76.5
	Separated	05	4.9	5	5.4	10	5.1
	Divorced	02	2.0	2	2.2	4	2.1
	Widowed	-	-	-	-	-	-
Religion	Christianity	71	77.2	73	74.5	144	75.7
	Islam	19	20.6	25	25.5	44	23.2
	Others	02	2.2	-	-	2	1.1
Education	O’Level	33	35.233	35	37.2	68	36.2
	Diploma	31	26.64.2	37	39.4	68	36.2
	First degree	25	1	10	20.2	44	28.4
	Postgraduate	4		2	2.1	6	3.2
	Others-----	1		1	1.1	2	1.0
No of children	0 – 3	19	20.4	17	17.3	36	19.6
	4 – 6	55	59.1	55	55.5	110	56.7
	7 and above	19	20.5	27	27.2	46	23.7

**Table 2. Demographic data for the nurses**

		Frequency	Percentage %
Age	25 – 34	4	15.4
	35 – 44	10	30.8
	45 – 54	15	50.0
	55 - 64	1	3.0
	<b>Total</b>	<b>30</b>	
Marital status	Single	5	3.8
	Married	25	96.2
	<b>Total</b>	<b>30</b>	
Religion	Christianity	22	76.9
	Islam	8	23.1
	Others	-	-
	<b>Total</b>	<b>30</b>	
Current designation	CNO	15	53.8
	Asst CNO	5	15.4
	PNO	3	11.5
	SNO	4	15.4
	Others	3	3.9
	<b>Total</b>	<b>30</b>	
Professional qualification	RN	3	11.5
	RM/RN	22	73.1
	R. Public Health	5	15.4
	Others	-	-
<b>Total</b>	<b>30</b>		
Post - qualification experience	1 – 9	4	7.7
	11 – 19	8	30.7
	20 – 29	12	46.2
	30 - 39	6	15.4
	<b>Total</b>	<b>30</b>	

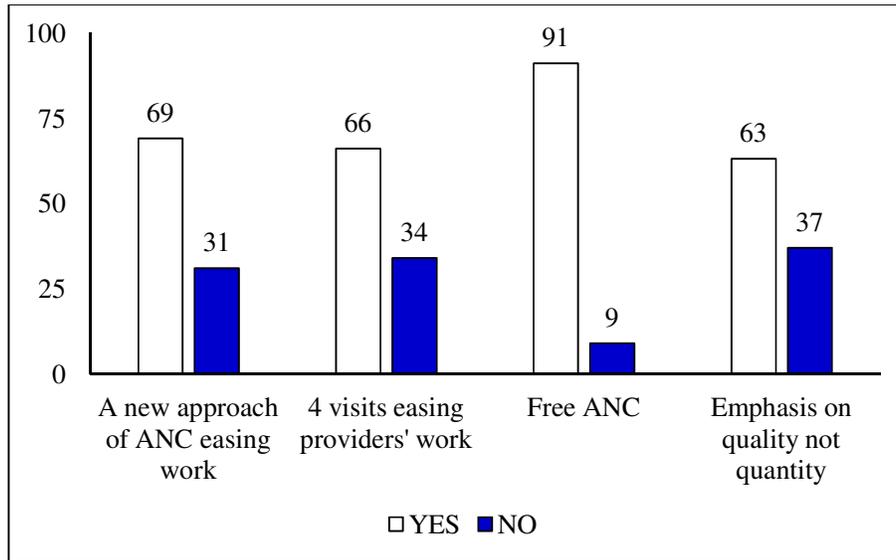


**Fig. 1. Participants' definition of ANC**

With regards to the definition of FANC, almost two third (69.0%) of the participants assumed that FANC is to ease nurses' work. The majority (91.0%) believed that FANC is free ANC, whereas 63% perceived it as quality care in just 4 visits (Fig. 2).

**Table 3. Client’s awareness and perception of FANC**

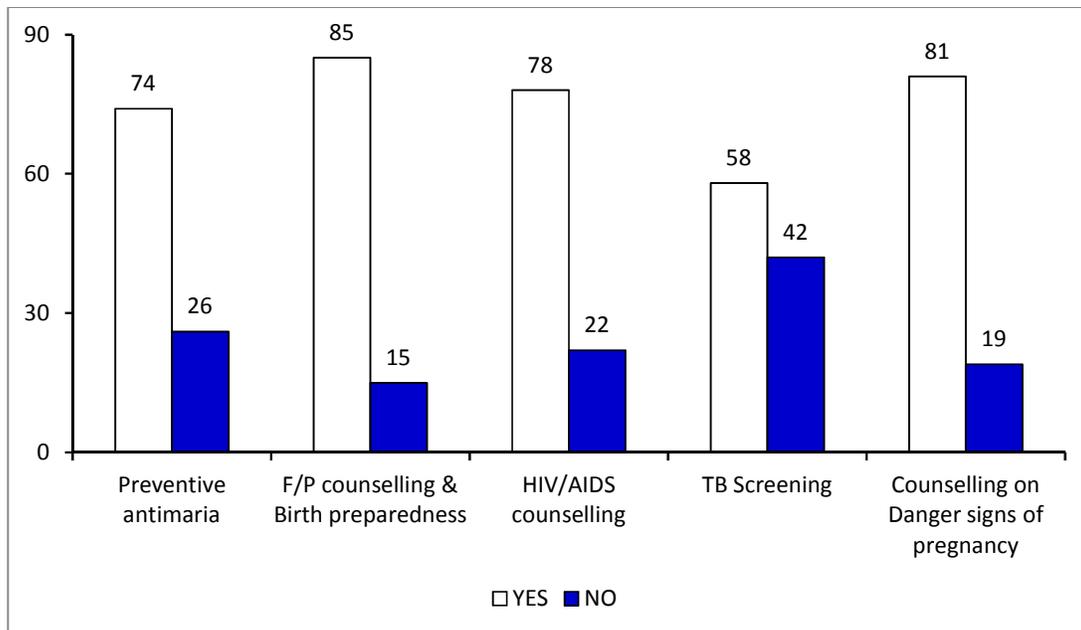
	Intervention	%	Control	%	Total	%
Aware of FANC	82	77.4	33	35.1	115	57.5
Not aware of FANC	24	22.6	61	64.9	85	42.5
Total	106	100	94	100	200	100



**Fig. 2. Respondents' definition of FANC**

When asked about the components of FANC, a large proportion (72%) of the participants received anti-malaria, also, 83% had counseling on Family planning and birth preparedness, while

78% were counseled on HIV/AIDS, 58% had TB screening done and 82% have received counseling on the danger signs of pregnancy (Fig. 3).



**Fig. 3. Respondents' use of components of FANC**

Perception of the participants regarding the quality of ANC services revealed that many (59.6%) of the participants were not tested for Syphilis while 54% indicated that there was no hotline telephone numbers for emergencies however 73.9% identified effective privacy during consultation with provider (Table 4).

As shown in Table 5, the majority (81%) of respondents agreed that FANC is good and will encourage compliance while 71.1% respondents feels there was no need to reduce ANC visits however 64.6% believed that FANC can result in quality care.

On the perception of respondents on waiting time satisfaction, a large proportion (65%) was not satisfied with the waiting time while only 13% indicated that they are satisfied (Fig. 4). When asked about their satisfaction with regards to problem discussion, most (72%) of the respondents indicated that they are satisfied and

only 9% were dissatisfied (Fig. 4). With respect to quality of examination and treatment received, the majority (64%) of the respondents is not satisfied with the quality of examination and treatment received while 32% are fairly satisfied (Fig. 4). With regards to respondents level of satisfaction with next appointment, a large proportion (81%) are satisfied with the date for their next appointment, 24% are fairly satisfied and only 5% are not satisfied (Fig. 4).

As revealed in Table 6, the majority (80.8%) of the care providers supports thirteen or more visits throughout pregnancy which is the traditional ANC. Many (73.1%) of the care providers also support the view that FANC reduced number of visits was only to ease their work, which may not necessary yield the needed quality care. Almost two thirds (65.4) of the nurses were satisfied with FANC services and 50.3% were also pleased with the clinic waiting time (Table 6).

**Table 4. Respondents perceived quality of ANC services**

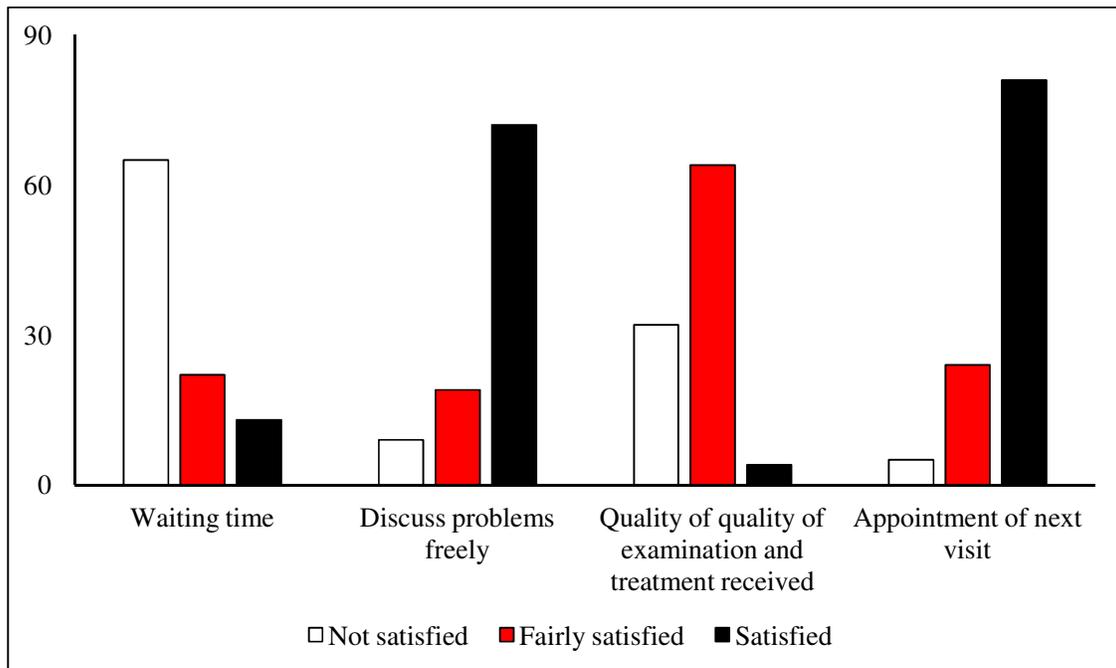
		Frequency	Percentage
Syphilis test	Yes	72	40.4
	No	106	59.6
Specific care (TB screening)	Yes	82	43.6
	No	106	56.4
Hotline for emergencies	Yes	136	73.9
	No	48	26.1

**Table 5. Respondents' attitudes towards FANC**

S/No	Statements	Agreed		Disagreed		Total %
		N	%	N	%	
1.	FANC is good and encourages compliance	162	81	38	19	100
2.	Reducing visits is not necessary	128	71.1	52	28.9	100
3.	FANC may lead to complications	98	53.8	84	46.2	100
4.	FANC reduces waiting time	64	87.6	106	62.4	100
5.	FANC results in quality care	128	64.6	56	30.4	100

**Table 6. Perception of care providers (Nurses) on FANC and attitude of Nurses towards FANC**

		Frequency	Percentage
<b>Perception of care providers (Nurses) on FANC</b>			
Support for 13 or more visits (ANC)	Yes	21	80.8
	No	9	19.2
Reduced number of visits ease nurses' work	Yes	19	73.1
	No	11	26.9
Knowledge of FANC	Yes	14	47
	No	16	53
<b>Attitude of Nurses towards FANC</b>			
Satisfaction with FANC	Yes	19	65.4
	No	11	34.6
Waiting time	Yes	16	50.3
	No	14	49.7



**Fig. 4. Respondents' levels of satisfaction with waiting time, ability to discuss their problems freely, quality of examination and treatment received and appointment of next visit**

### 3.3 Hypotheses Testing

As shown in Table 7 since the perceived satisfaction among women in FANC and traditional ANC revealed a significant difference, the Null hypothesis is rejected and the alternative retained. Although the comparison of the attitude of the women in FANC and traditional ANC revealed no significance difference. Since no significant difference was observed, the Null hypothesis was retained (Table 7). There is a need for more awareness programmes for the pregnant women to have a change of attitude and begin to enjoy what WHO FANC has to offer.

With respect to the quality of care among women in FANC and traditional ANC, significant difference was observed between the two groups, hence the Null hypothesis was rejected and the alternative retained (Table 7). A comparison of the knowledge of nurses that had training on FANC and those who did not, no significant difference was observed between the means of the care providers of the FANC and ANC, hence the Null hypothesis was retained (Table 7). The result reveals that most of the care providers did not have formal training but relied only on basic training for the service

provided. When comparing the attitude of the nurses in the FANC and traditional ANC, the result revealed no significant difference between the two care givers (Table 7). The result reveals that the attitude of the nurses in FANC and traditional ANC is the same as many of the providers still prefer many ANC visits. Therefore, the Null hypothesis is retained.

### 4. DISCUSSION

The present study revealed a low FANC awareness among the participants. FANC became the recommended type of antenatal care after a trial on antenatal care by WHO, where it was revealed that additional repeated visits (of the traditional antenatal care approach) do not necessarily improve pregnancy outcomes and a reduced visit to a minimum of four was recommended for pregnancies without complications [12]. There is need for more awareness on FANC among the women attending antenatal clinic [12]. The goal of focused antenatal care is to prepare for birth and parenthood as well as prevent, detect, alleviate, or manage the three types of health problems during pregnancy that affect mother and newborn [13].

**Table 7. Independent T-test of hypotheses between the women in FANC and traditional ANC**

Variable	Number of cases	Df	Mean	S.D	T-value	P ≤ 0.05	Remark
<b>Hypothesis 1: There is no significant difference in the perceived satisfaction among women in FANC and traditional ANC</b>							
Group 1 (ANC)	94	196	7.1429	2.05142	-7.995	.000	Significant
Group 2 (FANC)	106		11.1400	2.85006			
<b>Hypothesis 2: here is no significant difference in the attitude of the women in FANC and traditional ANC</b>							
Group 1 (ANC)	94	198	14.5200	3.86634	-1.571	.119	Not significant
Group 2 (FANC)	106		15.6600	3.37222			
<b>Hypothesis 3: There is no significant difference in the quality of care among women in FANC and traditional ANC</b>							
Group 1 (ANC)	104	198	16.0800	3.78957	-3.547	.001	Not significant
Group 2 (FANC)	100		18.9000	4.15147			
<b>Hypothesis 4: There is no significant difference in the knowledge of the nurses that had training on FANC and those who did not</b>							
Group 1 (ANC)	13	24	5,0000	0.91287	-1.873	0.73	Not significant
Group 2 (FANC)	13		5,7692	1.16575			
<b>Hypothesis 5: There is no significant difference in the attitude of the nurses in FANC and traditional ANC</b>							
Group 1 (ANC)	94	24	14.1538	2.96778	-.477	0.638	Not significant
Group 2 (FANC)	106		14.7602	3.58594			

*P* ≤ 0.05 (2 – tailed)

As indicated in the results, although almost all the participants were able to define the traditional ANC, only a limited number could define FANC as quality care in four visits. Antenatal care is the care given to a woman throughout her pregnancy so as to ensure that she and her new baby survive pregnancy and childbirth [13]. While FANC recognises that every pregnant woman is at risk of possible pregnancy complications, and therefore promotes that all pregnant women should receive the same basic care as well as proper monitoring for complications [12].

The recommended standard content of FANC involves only examinations and tests that serve an immediate purpose and that have been proven to be beneficial; these examinations include measurement of blood pressure, testing of urine for proteinuria, and blood tests to detect syphilis, severe anaemia and HIV [12]. In this study, the result shows that not all of the women attending the antenatal care have access to some specific care such as the rapid syphilis test which is essential for the detection of symptomatic STIs, the response was low and ought not to be. Also only 54% of the participants have access to hotline number in case of emergencies. There is need for proper care of the pregnant women attending focused Antenatal clinic in case of any emergency, adequate contact should be put in place. According to

Caroli and Villar [14], effective FANC will prevent maternal mortality and consequent serious morbidity, on the whole the participants conveyed good general quality of care. There is a broad agreement that the FANC interventions should be on improving maternal health, this being both an end in itself and necessary for improving the health and survival of infants.

The findings from the study regarding the perception of care providers about FANC was poor. This finding is not inconsistent with the findings of Ajayi et al. [12], a study done in Nigeria which indicated that the FANC service was well accepted among health care providers and women in general. The basic contents of FANC in Ekiti State were received by a small proportion of the respondents, suggesting that program had not fully translated into quality service [12].

As indicated in the study, the majority of the women and care providers were not in support of FANC reduced visits. This observation was supported by the report of Birungi [15], who when investigating the acceptability and sustainability of WHO FANC in Nigeria, revealed that attitude of clients and care providers regarding FANC remain same and that many believe that reduced visits may lead to complication. Antenatal care contributes to good pregnancy outcomes and

often times benefits of antenatal care are dependent on the timing and quality of the care provided [16]. This shows that the attitude of both the client and care providers is yet to be changed from old ANC routine.

Findings from the study also show that the level of satisfaction of the women and care providers in FANC in comparison to traditional ANC is satisfactory. With more effort put in place the waiting time, treatment and appointment can be improved upon to yield a better result.

## 5. CONCLUSION AND RECOMMENDATIONS

Antenatal care services were provided in both the intervention clinic (FANC) and the control clinic. Although the awareness and perception of the women was low, it was observed that the FANC is acceptable to the majority of the healthcare providers in the study. The benefits of quality maternal health service especially antenatal care cannot be overemphasized. FANC is the adopted antenatal care model in Nigeria as evident in the training and orientation package of the Federal Ministry of Health and malaria action. Focused antenatal care practice can be enhanced by establishing link between the community and the health facility in order to increase utilization of the services offered by the new W.H.O package. Therefore, there is need for the implementation of focused ante natal care at all levels of healthcare delivery system in Nigeria. The utilization of focused ante-natal care may require updating national clinical standards, guidelines for antenatal care and education for nurse midwives. Modification of pre-service and in-service curricula in ante-natal care will be needed. In-service training for ante-natal care providers, their supervisors and teachers for nurses needs to be considered. Community mobilization is still essential to create more awareness about FANC timing and the need to co-opt other critical actors, especially male partners, in preparation for birth and complications. A national educational campaign may help in this regard. Although FANC is acceptable to both clients and providers, for the approach has received tremendous support from the government and health development partners, to ensure its sustainability, it is vital to train providers so as to improve their competency. Also, there is the need to ensure that supervisors are able to support and enable providers to deliver integrated, comprehensive FANC services and to ensure effective client flow

so as to reduce client-waiting time. In addition, it is also important to communicate the new regimen of services and their timing to the general public so that FANC attendance is encouraged according to the required visit schedule.

## 6. LIMITATION

The study was restricted to only pregnant women attending antenatal clinics and providers working at the selected hospitals in Akure, namely the State Specialist Hospital and Arakale Maternity Hospital, Ondo State.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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