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# Women's Utilization of Delivery Facilities and Their Satisfaction with Care: An Observational Study in Ondo State, South West Nigeria

Theresa Azonima Irinyenikan a,b\*, Bamidele Jimoh Folarin a,b, Ismaila Sani b, Matthew Adeyemo a,c and Michael Olumide Gbala a,c

- <sup>a</sup> Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, University of Medical Sciences, Ondo State, Nigeria.
- <sup>b</sup> Department of Obstetrics and Gynaecology, University of Medical Sciences Teaching Hospital Complex, Akure, Ondo State, Nigeria.
- <sup>c</sup> Department of Obstetrics and Gynaecology, University of Medical Sciences Teaching Hospital Complex, Ondo, Ondo State, Nigeria.

### Authors' contributions

This work was carried out in collaboration among all authors. Author TAI conceptualized the study. Authors TAI, BJF, IS, MA and MOG collected the data. Author TAI prepared the original draft of the manuscript. All authors read and approved the final manuscript.

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\*Corresponding author: E-mail: tirinyenikan@unimed.edu.ng;

### **ABSTRACT**

**Introduction:** Women patronize different delivery outlets for various reasons putting them at risk of complications. It is important to assess their satisfaction with the care they receive when visiting any of these delivery outlets to further help programming that will enhance health facility utilization, which is the aim of this study.

**Materials and Methods:** This study used a cross-sectional design to recruit 423 women from the two complexes of the University of Medical Sciences Teaching Hospital and some selected Communities in Ondo State between July and December 2023. Information on the participants' socio-demographic characteristics, obstetrics characteristics among others were obtained through semi-structured questionnaires administered by trained research assistants. Data obtained was analysed using Statistical Package for Social Sciences version 22. Chi-Square test (X²) was used to find the associations between the participants characteristics and their satisfaction with the care they received and their willingness to recommend the facilities for delivery. Multi-variable Logistic regression was used to determine variables that can predict their satisfaction with care and the level of significance set at p< 0.05.

**Results:** Out of the 423 participants, a total of 392 (92.7%) were satisfied with the care they received irrespective of where they delivered, 4 (0.9%) were not satisfied and 27 (6.4%) preferred to be neutral. Among the participants, 398(94.1%) were willing to recommend health facilities for delivery. The obstetrics characteristics significantly associated with being satisfied with care were prior antenatal clinic attendance ( $X^2=55.701$ , p=0.000), mode of previous delivery ( $X^2=19.262$ , p=0.004), complications following delivery ( $X^2=23.968$ , p=0.001), and having had up to two delivery at the facility ( $X^2=20.943$ , p=0.002).

**Conclusion:** There is a high satisfaction with care and willingness to recommend health facilities for delivery among the participants. This is probably due to the efforts of government to enhance health facility utilization through the exemption of users' fees for maternity in a bid to reducing maternal mortality in Ondo State. However, efforts still need to be put in place for continuous assessment of the quality of care provided in our health facilities.

Keywords: Utilization; delivery facilities; satisfaction; recommendation; Ondo State.

## 1. INTRODUCTION

Childbirth is a vulnerable time for women and the need for attention and care during this period is of great importance [1]. It is often natural for women to attach great value to the care they receive during childbirth as their satisfaction with care can hinge upon timely and quality care [1]. Women's utilization of delivery facilities for care and satisfaction are intrinsically linked as a user's experience of care may directly impact satisfaction or indirectly impact a user's expectations and values [2]. Both experiences of care and satisfaction are important to measure so that quality can be monitored and improved upon [2].

Women's satisfaction with the services provided during childbirth has been recognized as a critical indicator of the quality of a healthcare system. It has been reported that women who are satisfied with the services they receive during childbirth at a particular facility have the tendency to return to the facility in the future for another delivery and equally recommend the facility to

their friends and relatives [3,4]. Similarly, a mother who is not satisfied with the delivery services in a health facility will avoid hospital delivery for her next pregnancy and may prefer home delivery with traditional birth attendants exposing them to complications of sepsis and postpartum haemorrhage [5]. According to the Nigeria Demographic Health Survey of 2018, only 39% of Nigeria women give birth in health facilities which may explain the reason why maternal mortality has remained high in Nigeria [6].

Maternal mortality has been linked to delays in receiving care, inadequate skilled personnel in emergency obstetric care, inadequate supplies of equipment and poor quality of services [7]. Perceived quality of care is a key factor affecting service utilization in health facilities, understanding women's perception of care and satisfaction with care received at the delivery facility is key to increasing utilization [8]. At a time when global efforts to reduce maternal mortality have been stepped up, it is important to look at women's utilization of delivery facilities

and their satisfaction with the care they receive. Evidence showed that maternal perception of satisfaction with the quality of maternal care can help determine other aspects of care that would need strengthening in developing country contexts to support long-term demand, generate significant changes in maternal care-seeking, and identify barriers that can and should be removed [9].

Studies have been conducted to determine factors associated with the satisfaction of care among women attending health facilities without considering the factors that contributed to visiting other delivery outlets [10,11]. This study is aimed to bridge this knowledge gap on women satisfaction of care at all delivery outlets in Ondo State. This will further help in the programming that will enhance facility- based utilization by pregnant women and consequently reduce maternal mortality in the state. This formed the basis for this study.

# 2. MATERIALS AND METHODS

**Study Setting:** This study was conducted at the University of Medical Sciences Teaching Hospital Complex located in Akure and Ondo town, Isikan Community, Aponmu Community and Bagbe Community located in Akure South and Ondo West Local Government Areas of Ondo State.

**Study Design:** The study used a cross-sectional design to recruit 423 participants from the two complexes of the teaching hospital and from the selected communities between July and December 2023.

**Study Population**: The participants recruited from the teaching hospital were pregnant mothers accessing care at the two complexes of the teaching hospital and women in the reproductive age group who have had a child and residing in the selected communities.

**Sample Size Estimation**: The sample size was calculated using Kish Leslie formula for cross-sectional studies,  $(n = z^2pq/d^2)$ , with a standard normal deviate (z) of 1.96 at 95% confidence level, P of 39% (prevalence of facility delivery from Nigeria Demographic Health Survey), q being 61% (1 - p) and degree of accuracy (statistical assumption of a type 1 error rate) of 0.05, this gave a sample size of approximately 366, adding an attrition rate of 15% for non-response, the sample size was increased to 423.

Inclusion Criteria: Pregnant mothers accessing care at the two complexes of the teaching hospital, non-pregnant women in the selected communities who have had at least a child and who gave their consent to participate in the study.

**Exclusion Criteria:** Women who have never had a child and those who did not give their consent to participate were all excluded.

Data Collection: Women were recruited using semi-structured questionnaires which were administered by trained research assistants after the questionnaires had been pre-tested on 20 women and some information which were not initially captured in the questionnaires were then included. Information on the socio-demographic characteristics of the participants, their obstetric characteristics, their previous delivery locations, mode of delivery, complications following their last delivery, reasons for their choice of delivery place, their satisfaction with the care they received, their willingness to recommend their delivery locations were obtained among others. A total of 205 women were recruited from the teaching hospital and 218 women were recruited from the communities. Data collection continued until the sample size was reached and the data obtained was analysed using Statistical Package Social Sciences (SPSS version Descriptive statistics were computed for all relevant variables and the Chi-Square test (X2) was used to find the associations between the participants characteristics and their satisfaction with the care they received and their willingness to recommend the facilities for delivery. Multivariable Logistic regression was used to determine variables that can predict their satisfaction with care and the level of significance set at p< 0.05.

### 3. RESULTS

A total of 423 women were recruited into this study, out of which 334(79%) delivered in a health facility, 40 (9.5%) had home delivery, 22 (5.2%) delivered at a traditional birth attendants' home, 6 (1.4%) delivered on their way to the hospital and 21 (4.9%) delivered at missionary outlets. Out of the 423 participants, a total of 392 (92.7%) were satisfied with the care they received irrespective of where they delivered, 4 (0.9%) were not satisfied and 27 (6.4%) preferred to be neutral. Among the 334 who delivered in the health facilities, 323 (82.4%) were satisfied with the care they received, only 2

were not satisfied while 9 remained neutral. This is shown in Table 1.

Table 2 showed the Socio-demographic Characteristics of the participants with their level of satisfaction with the care they received. Those in the age range of 25-34 years were more satisfied with their care (180, 45.9%). Similarly, traders (199, 50.8%), those who were married (367, 93.6%), those with tertiary level of education (157, 40.1%), those living in the urban areas (198, 50.5%), those who were Christians (315, 80.4%) and those who were Yoruba (358, 91.3%) reported to be more satisfied with the care they received.

The obstetrics characteristics significantly associated with being satisfied with care among the participants were prior antenatal clinic attendance ( $X^2=55.701$ , p=0.000), mode of previous delivery ( $X^2=19.262$ , p=0.004), complications following delivery ( $X^2=23.968$ , p=0.001), and having had up to two delivery at the facility ( $X^2=20.943$ , p=0.002). This is shown in Table 3.

Younger women who are self- employed, married, with tertiary level of education and residing in the urban areas have more willingness to recommend the use of health

facilities for delivery as p was <0.05 on Chi-Square test. Also, women who have had previous antenatal clinic attendance at the health facilities that resulted in spontaneous vaginal delivery of one to two children without any complications have more willingness to recommend health facilities for delivery, as p was <0.05 on Chi-Square test. This is shown in Table 4.

Using a multi-variable logistic regression to predict factors associated with the satisfaction of care among the respondents, younger women between the ages of 15-24 years were more likely to be satisfied with their care (OR=43.568, 95% CI 3.177-59.744, p=0.005); those who had a labour companion were more likely to be satisfied with their care ( OR=29.347, 95%CI=17.368-49.209, p=0.000); those who had no complication during delivery were more likely to be satisfied with their care ( OR=0.065, 95%CI=0.013-0.313, p=0.001); likewise those who attended antenatal clinic at the delivery facility were more likely to be satisfied with their care (OR=0.047, 95%CI=0.016-0.657, p=0.03); and those who delivered in a place where the health workers were friendly were more likely to be satisfied with their care (OR=0.015, 95%CI=0.001-0.642, p=0.028). This is shown in Table 5.

Table 1. Showing the Participants Delivery Locations and their Satisfaction with care

Delivery Locations	Frequency, n (%)	Satisfaction with care received			
	Total=423 (100%)	Satisfied, n (%) N=392(92.7%)	Not Satisfied, n (%) N=4(0.9%)	Neutral, n (%) N=27(6.4%)	
Health Facilities (public hosp., private hosp., & health centres)	334 (79.0%)	323 (82.4%)	2 (50.0%)	9 (33.3%)	
Home delivery	40 (9.5%)	26 (6.6%)	1 (25.0%)	13 (48.1%)	
Traditional birth attendants' home	22 (5.2%)	19 (4.8%)	1 (25.0%)	2 (7.4%)	
On the way to the health facility	6 (1.4%)	6 (1.5%)	0(0.0%)	0 (0.0%)	
Missionary outlets	21(4.9%)	18 (4.7%)	0(0.0%)	3 (11.2%)	

Table 2. Socio-demographic Characteristics of the Participants with their Satisfaction with care

Characteristics	Sati	Satisfaction with care received				
	Satisfied, n (%) Total=392(92.7%)	Not Satisfied, n (%)Total=4(0.9%)	Neutral, n (%) Total=27(6.4%)	(100%)		
Age						
15-24	22 (5.6%)	3(75.0%)	2 (7.4%)	27(6.4%)		
25-34	180 (45.9%)	0(0.0%)	7 (25.9%)	187(44.2%)		
35-44	125 (31.9%)	0(0.0%)	7(25.9%)	132(31.2%)		
≥45	65 (16.6%)	1(25.0%)	11(40.8%)	77(18.2%)		
Occupation	, ,	,	, ,	` '		
Artisan	56 (14.3%)	2 (50.0%)	5(18.5%)	63(14.9%)		
Civil Servant	50 (12.8%)	1(25.0%)	2(7.4%)	53(12.5%)		
Farmers	42 (10.7%)	0 (0.0%)	12(44.4%)	54(12.8%)		

Characteristics	Sati	Satisfaction with care received				
	Satisfied, n (%) Total=392(92.7%)	Not Satisfied, n (%)Total=4(0.9%)	Neutral, n (%) Total=27(6.4%)	(100%)		
Traders/Hawker	199(50.8%)	1 (25.0%)	8(29.6%)	208(49.2%)		
Housewife	8 (2.0%)	0 (0.0%)	0(0.0%)	8(1.9%)		
Others	37 (9.4%)	0 (0.0%)	0(0.0%)	37(8.7%)		
Marital Status						
Single	4 (1.0%)	1(25.0%)	1(3.7%)	6(1.4%)		
Married	367(93.6%)	3(75.0%)	20(74.1%)	390(92.2%)		
Divorced	3(0.8%)	0(0.0%)	1(3.7%)	4(0.9%)		
Widowed	18(4.6%)	0(0.0%)	5(18.5%)	23(5.5%)		
Level of						
Education						
None	22(5.6%)	0(0.0%)	6(22.2%)	28(6.6%)		
Primary	68(17.3%)	2(50.0%)	7(25.9%)	77(18.2%)		
Secondary	145(37.0%)	2(50.0%)	13(48.2%)	160(37.8%)		
Tertiary	157(40.1%)	0(0.0%)	1(3.7%)	158(37.4%)		
Place of						
Residence						
Urban	198(50.5%)	3(75.0%)	0(0.0%)	201(47.5%)		
Semi-Urban	62(15.8%)	0(0.0%)	1(3.7%)	63(14.9%)		
Rural	132(33.7%)	1(25.0%)	26(96.3%)	159(37.6%)		
Religion						
Christianity	315(80.4%)	3(75.0%)	24(88.9%)	342(80.9%)		
Islam	70(17.9%)	1(25.0%)	3(11.1%)	74(17.5%)		
Traditional	2(0.5%)	0(0.0%)	0(0.0%)	2(0.5%)		
Others	5(1.2%)	0(0.0%)	0(0.0%)	5(1.1%)		
Ethnic Group						
Yoruba	358(91.3%)	4(100.0%)	25(92.6%)	387(91.5%)		
Hausa	4(1.0%)	0(0.0%)	0(0.0%)	4(0.9%)		
Igbo	30(7.7%)	0(0.0%)	2(7.4%)	32(7.6%)		

Table 3. Association between the Obstetrics Characteristics of the Participants and their Satisfaction with care

Characteristics	Satisfa	action with care r	eceived	X <sup>2</sup>	P value
	Satisfied, n (%), Total=392	Not Satisfied, n (%) Total=4	Neutral n (%), Total =27	_	
Antenatal clinic attendance				55.701	0.000*
Yes					
No	346(88.3%) 46(11.7%)	1(25.0%) 3(75.0%)	8(29.6%) 19(70.4%)		
Mode of previous Delivery				19.262	0.004*
SVD Caesarean(C/S)	329(83.9%) 63(16.1%)	4(100.0%) 0(0.0%)	17(63.0%) 10(37.0%)		
Any complications following previous delivery				23.968	0.001*
Yes No	51(13.0%) 341(87.0%)	1(25.0%) 3(75.0%)	0(0.0%) 27(100.0%)		
Number of Children	, ,	, ,		20.943	0.002*

Characteristics	Satisfa	action with care r	eceived	P value	
	Satisfied, n (%), Total=392	Not Satisfied, n (%) Total=4	Neutral n (%), Total =27	_	
1-2	185(47.2%)	1(25.0%)	7(25.9%)		
3-4	124(31.6%)	1(25.0%)	9(33.3%)		
≥5	83(21.2%)	2(50.0%)	11(40.8%)		

SVD= Spontaneous Vaginal Delivery
\*Significant at p<0.05

Table 4. Association between the Willingness of the Participants to Recommend Health Facility Delivery with their Characteristics

Characteristics	Frequency n (%)		ss to Recomr acility for deli		X <sup>2</sup> P valı —	P value
	Total N=	Yes n (%)	No n (%)	Neutral n (%)		
	423(100%)	398(94.1%)	4(0.9%)	21(5.0%)	0.4.0.40	0.000#
Age	07(0,40()	00 (5 50()	0(750()	0/0 =0/)	24.949	0.000*
15-24	27(6.4%)	22 (5.5%)	3(75%)	2(9.5%)		
25-34	187(44.2%)	186(46.7%)	0(0%)	1(4.7%)		
35-44	132(31.2%)	125(31.5%)	0(0%)	7(33.3%)		
>=45	77(18.2%)	65(16.3%)	1(25%)	11(52.5%)		
Occupation			_ ,		29.399	0.003*
Artisan	63(14.9%)	56(14.1%)	2(50%)	5(23.8%)		
Civil Servant	53(12.5%)	50(12.5%)	1(25%)	2(9.5%)		
Farmers	54(12.8%)	48(12.1%)	0(0%)	6(28.6%)		
Traders/Hawker	208(49.2%)	199(50.0%)	1(25%)	8(38.1%)		
Housewife	8(1.9%)	8(2.0%)	0(0%)	0(0%)		
Others	37(8.7%)	37(9.3%)	0(0%)	0(0%)		
Marital Status				<u> </u>	17.133	0.029*
Sngle	6(1.4%)	4(11.0%)	1(25%)	1(4.8%)		
Married	390(92.2%)	373(93.7%)	3(75%)	14(66.7%)		
Divorced	4(0.9%)	3(0.8%)	0(0%)	1(4.7%) ´		
Widowed	23(5.5%)	18(4.5%)	0(0%)	5(23.8%)		
Level of	, ,	, ,	,	7	25.147	0.000*
Education						
None	28(6.6%)	22(5.5%)	0(0%)	6(28.6%)		
Primary	77(18.2%)	68(17.1%)	2(50%)	7(33.3%)		
Secondary	160(37.8%)	151(37.9%)	1(25%)	7(33.3%)		
Tertiary	158(37.4%)	157(39.5%)	1(25%)	1(4.8%)		
Place of	100(011170)	101 (001070)	1(=575)	1 (110,10)	50.658	0.000*
Residence						
Urban	201(47.5%)	198(49.7%)	3(75%)	0(0%)		
Semi-Urban	63(14.9%)	62(15.6%)	0(0%)	1(4.8%)		
Rural	159(37.6%)	138(34.7%)	1(25%)	20(95.2%)		
Ethnic Group	100(01.070)	100(011170)	1(2070)	20(00:270)	7.805	0.253
Yoruba	387(91.5%)	364(91.5%)	4(100%)	19(90.5%)	7.000	0.200
Hausa	4(0.9%)	4(1.0%)	0(0%)	0(0%)		
Igbo	32(7.6%)	30(7.5%)	0(0%)	2(9.5%)		
Religion	32(7.070)	30(1.370)	0(070)	2(3.370)	2.170	0.903
Christianity	342(80.9%)	321(80.7%)	3(75%)	18(85.7%)	2.170	0.903
Islam	74(17.5%)	70(17.6%)	1(25%)	3(14.3%)		
Traditional	2(0.5%)	2(0.5%)	0(0%)	0(0%)		
Others	5(1.1%)	5(1.2%)	0(0%)	0(0%)		
	3(1.170)	3(1.270)	0(0 %)	0(078)	20.042	0.000*
Number of					20.943	0.002*
Children	102/45 60/\	105/46 50/\	1/250/\	7/22 20/\		
1-2	193(45.6%)	185(46.5%)	1(25%)	7(33.3%)		
3-4 >-	147(34.8%)	137(34.4%)	1(25%)	9(42.3%)		
≥5	83(19.6%)	76(19.1%)	2(50%)	5(23.8%)	FF 704	0.000*
Antenatal clinic					55.701	0.000*
attendance						
Yes						

Characteristics	Frequency n (%)	Willingness to Recommend Health Facility for delivery			X <sup>2</sup>	P value
	Total N= 423(100%)	Yes n (%) 398(94.1%)	No n (%) 4(0.9%)	Neutral n (%) 21(5.0%)	_	
No	375(88.7%) 48(11.3%)	365(91.7%) 33(8.3%)	1(25%) 3(75%)	9(42.9%) 12(57.1%)		
Mode of previous Delivery SVD					19.262	0.004*
Caesarean section (C/S)	357(84.4%) 66(15.6%)	332(83.4%) 66(16.6%)	4(100%) 0(0%)	21(100%) 0(0%)		

SVD= Spontaneous Vaginal Delivery
\*Significant at p<0.05

Table 5. Multi-variable Logistic Regression to Predict Factors that can determine Participants
Satisfaction with Care

Factors	OR	95% CI	P value
Age			
15-24	43.568	3.177-59.744	0.005*
25-34	0.531	0.051-5.540	0.596
35-44	0.447	0.041-4.917	0.596
≥ 45	Reference	Reference	Reference
Presence of Labour			
Companion			
Yes	29.347	17.368-49.209	0.000*
No	Reference	Reference	Reference
Complications durin	g		
delivery	_		
Yes	Reference	Reference	Reference
No	0.065	0.013-0.313	0.001*
Antenatal clinic			
attendance			
Yes	0.047	0.016-0.657	0.003*
No	Reference	Reference	
Unfriendly attitude o	f		
Health workers			
Yes	Reference	Reference	Reference
No	0.015	0.001-0.642	0.028*

\*Significant at p<0.05

# 4. DISCUSSION

Women's perception of satisfaction of care during childbirth is key to utilization of the facility for further deliveries [12]. Its evaluation will continue to be used to assess the quality of care women received during childbirth and this will in turn lead to reduction in maternal morbidity and mortality. This study was carried out to evaluate the use of delivery facilities especially in the context of elimination of users' fees in the health facilities of Ondo State. The government owned health facilities in Ondo State are involved in antenatal, delivery and post-natal services largely at no cost to the pregnant women to encourage health facilities utilization which was an initiative of government to help reduce maternal morbidity and mortality in the state while the other delivery outlets provide only delivery services to the women with minimal cost.

This study showed that a larger proportion of the women were satisfied with the care they received at the health facilities (82.4%) which is in keeping with other studies [11,13,14]. This is in contrast to a similar study carried out in Ondo State where only 48.8% reported they were satisfied with the services they received [10]. The reason for this difference may be due to the fact that the latter study was carried out among women who visited only the health facilities without considering the perception of those who had delivered in the past and living in the communities, the proportion of women recruited into their study could have been those who were already biased concerning their care.

A larger proportion of the women were married. educated, gainfully employed and living in the urban areas of Ondo State. All these contributed to their being able to assess the quality of care they received at the facilities which further showed in this study that they were satisfied with their care. Also, it is possible that these factors could have increased their access to information about the dangers and the risk of not delivering in health facilities, thereby increasing their utilization of health facilities and antenatal care services. Being educated has been reported to increase a woman's utilization of health care facilities and satisfaction with care since they are in a better position to understand reasons why they receive a care than their counterparts who are not educated [11,15]. Women empowerment can increase the rights of women to quality care and satisfaction with care, which can then be used to assess the quality of care in our health facilities, the utilization of the health facilities and also reduction in maternal morbidities and mortalities.

This study showed that women who attended antenatal clinic are likely to be more satisfied with the care they received, this is in keeping with other studies done in Nigeria [16,17,18]. Antenatal care affords women the opportunity to be educated on the complications associated with pregnancy and how to identify danger signs. It is also an opportunity for women to interact with their health care providers. It is therefore not surprising that women who attended antenatal care in this study were more satisfied with the care they received as this period created an enabling ground for them to be familiar with the delivery environment which probably boosted their confidence in the facility. Also, women who had spontaneous vaginal delivery without any complications were satisfied with the care they received. This is not surprising considering the aversion women have for caesarean delivery in our environment, they will rather prefer vaginal delivery irrespective of the outcome so as not to be seen to have failed in their reproductive career [19]. Also, not having complications during childbirth is perceived by women to be a positive childbirth experience and will also lead to satisfaction of care.

Most of the women, 398 (94.1%) who were satisfied with the care they received agreed to recommend the health facilities for future delivery which is in keeping with the study of Oluwole et al., in Lagos where 335 (94.4%) and 332 (93.5%) were willing to recommend same health facility to others for antenatal and delivery respectively

[20]. This willingness to recommend the health facilities for delivery was found to be highest among women in the younger age group, those who were gainfully employed, educated, living in the urban areas of the state, who have attended antenatal clinic and who have had at least one to two deliveries at the health facilities. These factors were no doubt in favour of the women to approach the right delivery outlet and contributed to them being able to assess the quality of care they received which could have led to their satisfaction and their willingness to recommend health facilities for delivery.

Factors that actually predicted the women's satisfaction with the care they received were being in a younger age group, prior antenatal clinic attendance, allowing a labour companion and a friendly attitude of health workers. These factors also form part of the components of the intra-partum care for a positive pregnancy experience [21,22]. Satisfaction with the care a woman receives during childbirth is one of the measures of confidence in the health system high-guality health proposed bv framework components of the Sustainable Development Goals [23]. It is therefore important to address every factor that can increase women's satisfaction with care which is critical in assessing the quality of care and for actionable evidence for improvement across the continuum of maternity care services.

# 5. CONCLUSION

This study showed a high satisfaction with maternity services among women in Ondo State and the willingness to recommend health facilities for delivery. This has been possible probably due to the efforts of government to enhance health facility utilization through the exemption of users' fees for maternity and the provision of equipment to complications. This is encouraging and a positive trend to reducing maternal mortality in Ondo State and by extension in Nigeria. However, efforts still need to be put in place to ensure the continuity of this trend through periodic assessment of the quality of care provided in our health facilities.

# **DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Authors hereby declare that NO generative Al technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during the writing or editing of this manuscript.

# ETHICAL APPROVAL AND CONSENT

The ethical approval for this study was obtained from the ethics committee of the University of Medical Sciences Teaching Hospital Complex, Ondo State. Informed Consent to participate in the study was obtained from all the recruited participants.

### **ACKNOWLEDGEMENT**

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### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

### **REFERENCES**

- Changole J, Bandawe C, Makanani B, Nkanaunena K, Taulo F, Malunga E, et al. Patients' satisfaction with reproductive health services at Gogo Chatinkha Maternity Unit, Queen Elizabeth Central Hospital, Blantyre, Malawi. Malawi Med J. 2010;22:5–9.
- 2. Larson E, Sharma J, Bohren MA, et al. When the patient is the expert: measuring patient experience and satisfaction with care. Bull World Health Organ. 2019; 97:563–9
- Paudel YR, Mehata S, Paudel D, et al. Women's satisfaction of maternity care in Nepal and its correlation with intended future utilization. Int J Reprod Med. 2015; 2015:783050.
- Osiya DA, Ogaji DS, Onotai L. Patients' satisfaction with healthcare: comparing general practice services in a tertiary and primary healthcare settings. Niger Heal J. 2017; 17.
- 5. Quintana JM, González N, Bilbao A, et al. Predictors of patient satisfaction with hospital health care. BMC Health Serv Res.. 2006; 6:102.
- National Population Commission (NPC) [Nigeria] and ICF. Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF: 2019.

- 7. Jahan S, Chowdhury MMH. mHealth: A sustainable healthcare model for developing world. Am J Model Optim. 2014;2(3):73–6.
- 8. Coeytaux F, Bingham D, Langer A. Reducing maternal mortality: a global imperative. Contraception. 2011;83:95–8.
- 9. Andaleeb SS. Service quality perceptions and patient satisfaction: A study of hospitals in a developing country. Soc Sci Med.. 2001; 52:1359–70.
- Babatola OH, Popoola RO, Olatubi MI, Adewoyin FR. Patients' satisfaction with health care services in selected secondary health care facilities in Ondo State, Nigeria. J Fam Med Dis Prev. 2022;8:145. DOI: doi.org/10.23937/2469-5793/1510145
- Esan DT, Sokan-Adeaga AA, Rasaq NO. Assessment of satisfaction with delivery care among mothers in selected health care facilities in Ekiti state, Nigeria Journal of Public Health Research. 2022;11(4): 1– 10
- Goyal P, Kumar D, Dixit S, Srivastav S, Singh A. Essential criteria for quality OPD services as perceived by patients in a tertiary care hospital in Faridabad City. Int J Res Med Sci. 2016; 4: 441-445.
- Mekonnen ME, Yalew WA, Anteneh ZA. Women's satisfaction with childbirth care in Felege Hiwot Referral Hospital, Bahir Dar city, Northwest Ethiopia, 2014: cross sectional study. BMC Res Notes. 2015;8.
- Tayelgn A, Zegeye DT, Kebede Y. Mothers' satisfaction with referral hospital delivery service in Amhara region, Ethiopia. BMC Pregnancy Childbirth. 2011; 11:78.
- 15. Abodunrin OL, Adeomi AA, Adeoye OA. Clients' satisfaction with quality healthcare received: Study among mothers attending infant welfare clinics in a semi-urban community in South-Western Nigeria. Sky Journal of Medicine and Medical Sciences. 2014;2(7):045 -051.
  - Available:http://www.skyjournals.org/SJMM S
- 16. Nwaeze IL, Enabor OO, Oluwasola TA, Aimakhu CO. Perception and satisfaction with quality of antenatal care services pregnant women university college hospital, Ibadan, Nigeria. Annals of Ibadan Postgraduate Medicine. 2013; 11(1):22-28. PMID: 25161419

- Ibrahim S, Bakari M, Abdullahi H, Bukar M. Clients' perception of antenatal care services in a tertiary hospital in North Eastern Nigeria. Int J Reprod Contraception, Obstet Gynecol. 2017;6 (10):4217-4223. DOI:http://dx.doi.org/10.18203/2320-1770.ijrcog20174397
- Odetola TD, Fakorede EO. Assessment of perinatal care satisfaction amongst mothers attending postnatal care in Ibadan, Nigeria. Global Health. 2018; 30;84(1):36-46. DOI: 10.29024/aogh.10
- 19. Ezechi OC, Fasuba OB, Kalu BE et al. Caesarean delivery: why the aversion? Tropical Journal of Obstetrics and Gynecology. 2004;21:164-167.
- 20. Oluwole EO, Awoga OF, Roberts AA, Bakare QO. Choice of healthcare

- facilities for antenatal care, delivery services and satisfaction received by mothers of infants in Lagos, Nigeria. African Journal of Health Sciences. 2023; 36: 4.
- 21. Who recommendations: Intrapartum care for a positive childbirth experience. Geneva, Switzerland: World Health Organization; 2018.
- 22. Were WM, MacLennan C, et al. Quality of care for pregnant women and newborns—the who vision. BJOG Int J Obstet Gynaecol. 2015;122: 1045–9.
- Kruk ME, Gage AD, Arsenault C, High-Quality health systems al. development the sustainable revolution. time for goals era: а 2018:6:e1196-Lancet Glob Health. 252.

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