

Assessment of Maternal Satisfaction with the Quality of Antenatal Care Rendered by Midwives at A Tertiary Health Institution in the Southeast Nigeria



Anieche John Emenike, OBI Chidinma Nkemdilim, Mandah Florence

Abstract: In this era of economic challenges health care consumers' desire quality of care that comes with value and satisfaction. This cross-sectional descriptive study assessed maternal satisfaction with the quality of antenatal care rendered by midwives at a tertiary health institution in the Southeast Nigeria. Three objectives guided the researchers in achieving the purpose of the study. Sample of 171 respondents was drawn from a population of 301 pregnant women using Taro Yameni formula for sample size calculation. Validated investigators' structured questionnaire with reliability index of 0.70 was used for data collection. Data generated from the study were analyzed through descriptive statistics using SPSS Version 21 IBM. Findings from the study revealed that the pregnant women attending Antenatal clinic at the state tertiary health institution are satisfied with the quality of physical and psychological care rendered by the midwives in the institution. Outstanding in their satisfaction were evidenced in their contentment with blood pressure monitoring (43.4%), weight monitoring (40.9%), directives on family planning (47.4%), reassurance by midwives (40.9%), and confidentiality of privileged information (42.7%). They saw the spacious nature of the ANC care arena as a satisfier too. Greater number of the women (77.8%) believes that they derived their satisfaction of care from the availability of essential drugs and necessary equipment. Finally in order to improve satisfaction with antenatal care, organizational aspects of antenatal care such as reducing waiting times and increasing accessibility to drugs and equipments need to be improved. The researchers recommended that the hospital management should recruit more midwives to reduce the work load on those working at the ANC unit and also provide comfortable environment for the pregnant women attending the ANC.

Keyword: Maternal Satisfaction, Pregnant Women, Midwives, Antenatal Care.

I. INTRODUCTION

Antenatal care is the planned care given to a pregnant woman throughout her period of conception till she delivers (Uwa, 2017). The support and care the woman receives during this period is critical and it is expected that she will be satisfied with such care. Patient satisfaction is being used worldwide for the assessment of quality of services rendered by health care providers and institutions (Bennet & Brown 2016). Antenatal care improves maternal and child health. At least one ANC visit was associated with a 1.04% points reduced probability of neonatal mortality and a 1.07% point lower probability of infant mortality (Kuhnt & Vollmer 2017) Maternal health on the other hand refers to the health of women during pregnancy, child birth and post-partum period (Bennet & Brown 2016). A good outcome should therefore be that every woman is satisfied with the care and support she receives during pregnancy, delivery and post-partum period such that she and her baby remains the centre of care. In accordance with international professional standards and guidelines, contemporary maternity care providers strive to create a childbirth experience that is safe for the childbearing woman (Marshall & Raynor, 2015). Antenatal care is the care given to a pregnant woman from the time conception is confirmed until the beginning of labour (Marshall & Raynor, 2019). The midwife facilitates woman-centered care by providing her with accessible and relevant information to help her make informed choices throughout pregnancy. The foundation of this process is the development of a trusting, relationship in which the midwife engages with the woman and listened to her story (Dhah et al 2015). It is necessary to get more information to establish protocols to support to all pregnant women (Castillo-Reyther, et al, 2017). This could be achieved through ensuring that they are satisfied with the antenatal they receive. Research has demonstrated that a positive experience during pregnancy helps a woman develop a positive attitude towards motherhood which helps to facilitate the transition into the maternal role (Bryatin, 2016). Nurses must be able to provide efficient care to pregnant mothers from different cultural back grounds on physiological and psychological concerns (Bennet & Brown 2016). A very important aspect on which patient/maternal satisfaction depends is "nursing care". Nursing care should be flexible and organized in collaboration with the woman in order to address her individual needs.

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* Correspondence Author

Dr. John Emenike Anieche*, Sabbatical at PAMO University of Medical Sciences, Port Harcourt, Rivers State, Nigeria. E-mail: je.anieche@unizik.edu.ng

OBI Chidinma Nkemdilim, Antenatal Clinic of Chulwumekwa Odumegwu Ojulwu University Teaching Hospital, Awka Anambra State, Nigeria. E-mail: obichidinma12@gmail.com

Mandah Florence, Teaches, Department of Nursing Science, PAMO University of Medical Sciences, Port Harcourt, Rivers State, Nigeria. E-mail: ucheche.florence@yahoo.com

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There must be a high percentage of Inter personal skills in the care of the woman in addition to being technically competent (Ghent & Callister, 2014). A nurse is one who translates information imparted by physicians technically and professionally with a human touch. (Marshall & Raynor, 2015). Maternal satisfaction is one of the most frequently reported outcome measure for quality of care. It needs to be addressed to improve the quality and efficiency of health care during pregnancy to provide quality maternal friendly services (WHO, 2016). Maternal satisfaction during pregnancy should be pursued at all levels including the localities as loss of a mother or a child tells so much about a health institutions. A woman's satisfaction with antenatal care service has immediate and long-term impacts on maternal and her baby's health and increases the possibility of further use of facility and services (Kebede, et al 2020). Satisfied client is more likely to comply with treatment and medical advice. Patient's satisfaction may be directly related to visible actions like compliance to instructions and antenatal visits (Chirdan, et al, 2009). According to WHO, (2017) the proportion of all women giving birth in a health facility who express satisfaction with their health while working on day to day basis is an important standard in improving maternal and child healthcare. The World Health Organization (WHO, 2019) reported that in 2017 around 810 women died every day from problems in pregnancy and childbirth. In the same report, the WHO Fragile States Index of "very high alert" or "high alert" included Nigeria. Study has shown that very preterm birth (VPTB) and very low birth weight (VLBW) were much more common for immigrants than locals (WHO, 2019). Satisfaction with different aspect of ante natal care services improves health outcome, continuity of care and adherence to treatment and relationship with health care providers (Matejk, et al, 2014). Patient satisfaction is an individual positive evaluation of distinct dimension of health care, it motivates pregnant women to seek and continue to use the services (Mansour, 2015). The magnitude of women's satisfaction varies from country to country. Factors associated with women's satisfaction with ANC are respectful maternity care, advice on danger signs in pregnancy and age of participant (Esmail & Essa, 2017).

Effective ANC package depend on competence of health care providers in a functioning health system with referral services and adequate supplies and laboratory support (Assefa & Moss, 2011). The psychology of pregnancy needs to be understood in terms of adjustments that all women have to make when they conceive, as pregnancy is also an adaptive process (Hildingsson, 2015). The challenge that faces her includes the acceptance of pregnancy by the family, development of an attachment to the baby and preparation for the birth and positive relationship with the father of the baby. Many women respond to this complex process with grief and anger, especially when pregnancy is unplanned and unacceptable.

Unmanaged grief or anger might ultimately lead to maternal dissatisfaction and depression (Baldo, 2010). While risks cannot be totally eliminated once pregnancy is established, they can be reduced through effective, accessible and affordable maternity health care (Mathibe-Neke & Masitenyane, 2018).. There are different factors that could be responsible for satisfaction among patients, they are demographic characteristics such as age, educational attainment and socio-economic status are some of the

factors considered to influence measured satisfaction ratings (Melese, et al, 2014). Sing (2016) stated that in spite of the growing interest and effort by government to make popular the use of ANC services as recommended by the WHO in Nigeria, a high level of infant and maternal mortality remains a major public health challenge facing the country, one of the major factors identified responsible for this situations is dissatisfaction with ANC services provided for pregnant women. Asif (2019) noted that pregnant women are satisfied with information and counseling and those with higher education and higher income expressing more satisfaction with the monitoring and observations by the nurses. Priscilla (2015) expressed that 98% of pregnant mothers were satisfied with regards to inquiry about concerns, the explanation given and examination done by the nurses. Maintenance of privacy, cleanness of the facility, and respect from providers are significant predictors of the satisfaction level (Kebede, et al 2020). Nwaeze & Enabor (2015) stressed that prompt responsiveness of the nurses and availability of medical equipment were seen as reasons for satisfaction among pregnant women. Birhanu (2017) concluded from a study that provider's politeness and respectfulness of care providers were among the components with the highest satisfaction score among pregnant women. Provision of satisfying maternal care during antenatal is issue of serious concern as it goes a long way in yielding maternal expected positive outcome pregnancy and delivery (Kuhnt & Vollmer 2017). The above notwithstanding, there seem to exist unwarranted attitude to antenatal visit among pregnant mothers in the study area. This therefore raises the need to assess the maternal satisfaction with the quality of antenatal care rendered by midwives at a tertiary health institution in the Southeast Nigeria as no known study of this nature has been conducted in the area.

A. Objectives

1. Determine maternal satisfaction with physical care rendered by midwives at the ANC state tertiary hospital in the Southeast Nigeria.
2. Determine maternal satisfaction with psychological care rendered by midwives at the ANC of state tertiary hospital in the Southeast Nigeria.
3. Determine the factors that influence maternal satisfaction with care rendered by midwives during antenatal visit at the state tertiary hospital the Southeast Nigeria.

II. MATERIALS AND METHOD

A. Research design

The research design for this study is cross sectional description survey design, which involves collection, analysis, interpretation and reporting of relevant data. This design was used by Akalif (2019) in a study to measure the perception of mothers' experience and satisfaction of maternity care at tertiary care hospitals in Nepal.

Area of the Study

The study was carried out among pregnant women attending antenatal clinic at Antenatal Clinic of Chukwuemeka Odumegwu Ojukwu University Teaching Hospital Awka, Anambra State.



The state owned tertiary health institution is located at the state capital and serves generality of the citizens of Anambra State and beyond receiving both primary and referral patients for quality care services including antenatal care services.

Population for the Study

Population for the study was pregnant women attending antenatal clinic in Chukwuemeka Odumegwu Ojukwu University Teaching Hospital Awka at the time of this study. The institutional Antenatal medical record revealed an estimation of 301 pregnant women at the time of the

Sample

A sample of 171 respondents was drawn from a total population of 300 women through Taro Yamene formula for sample size calculation.

Sampling Technique

Purposive sampling technique was applied in the selection of the participants for the study. Only pregnant women who have attended antenatal clinic in the institution for not less than four times at the time of this study were willing to continue their antenatal visit until delivery participated in the study.

Instrument for data collection

Data was generated for the study through researchers'-developed questionnaire which was validated by experts in

Maternal and Child Health, Measurement and Evaluation and Midwifery, and tested for internal consistency with reliability index of 0.70.

Ethical considerations

The study was conducted with approval by the institutional management with Ref. COOUTH/CMAC/ETHC/Vol.1/0056. The researchers maintained the anonymity of the respondents and confidentiality of their information. Consent was sought from each participant before data generation.

Procedure for data collection

Data for the study were generated through face to face administration of the questionnaire to the participants. The approval from the REC was used by the researchers for self introduction to the Head of Nursing Services and the nurse in charge of the antenatal clinic of the hospital. The researchers made use of the on-the-spot delivery approach in which the copies of the questionnaire were administered and retrieved on the spot. The administration of the instrument lasted for seven weeks. The respondents that did not understand the contents of the questionnaire had it explained to them before they gave their responses.

Method of data analysis

The data from the study were presented in tables and analyzed with descriptive statistics using SPSS Version 21.

III. RESULTS AND DISCUSSION

Results

Table 1: Demographic data of the respondents n=171

Items	No of respondents	Percentages (%)
Age(years)		
20 and below	50	29.2%
21-30	59	34.5%
31-40	47	27.5%
40 and above	15	8.8%
Parity		
Nuliparity	70	40.9%
Multiparity	101	59.1%
Highest level of education		
No formal education	11	6.5%
FSLC	31	18.0%
SSCE	46	26.9.0%
Undergraduate	50	29.3%
Graduate	33	19.3%
Marital status		
Married	150	87.7%
Single	21	12.3%
Ethnicity		
Igbo	152	88.9%
Hausa	10	5.8%
Yoruba	7	4.1%
Others	2	1.2%
Religion		
Christianity	155	90.6%
Muslim	13	7.6%
Traditionalist	3	1.8%



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The mean age of the respondents is +_28 years. Majority of the women 101(59.1%) are multiparous. Most of the women 50(29.3%) are undergraduate with majority 150(87.7%) married. Majority of them 152(88.9%) are Igbos just as Christians constituted majority of the respondents 155(90.6%).

Table 2: Level of maternal satisfaction with the physical care received from the midwives at state tertiary hospital in the Southeast Nigeria. n=171

Items	SS		S		U		D		SD	
	F	P(%)	F	P(%)	F	P(%)	F	P(%)	F	P(%)
<i>Blood pressure monitoring</i>	74	(43.3)	68	(39.8)	10	(5.8)	14	(8.2)	5	(2.9)
<i>Blood test such as blood group and PCV</i>	50	(29.2)	68	(39.8)	24	(14.0)	28	(16.4)	1	(0.6)
<i>Malaria prevention & health education</i>	46	(26.9)	72	(42.1)	42	(24.6)	7	(4.1)	4	(2.3)
<i>Weight monitoring</i>	70	(40.9)	48	(28.1)	40	(23.4)	9	(5.3)	4	(2.3)
<i>Physical observation such as measurement of abdominal gait</i>	40	(23.4)	68	(39.8)	6	(3.5)	30	(17.5)	27	(15.8)
<i>Response to questions and request for explanation</i>	28	(16.4)	32	(18.7)	60	(35.1)	24	(14.0)	27	(15.8)
<i>Guidance on self care activities</i>	12	(7.0)	38	(22.2)	14	(8.2)	59	(34.5)	48	(28.1)
<i>Monitoring of danger signs in pregnancy and after delivery</i>	59	(34.5)	36	(21.1)	46	(26.9)	0	(0.0)	30	(17.5)
<i>Directive on planning measures</i>	43	(25.1)	81	(47.4)	15	(8.8)	27	(15.8)	5	(2.9)
<i>Guidance on exercise and other physical activities</i>	52	(30.4)	67	(39.2)	0	(0.0)	32	(18.7)	20	(11.7)
<i>Provision of privacy during examination</i>	56	(32.7)	40	(23.4)	11	(6.4)	64	(37.4)	0	(0.0)
<i>Guidance on maintenance of personal hygiene</i>	50	(29.2)	60	(35.1)	10	(5.8)	36	(21.1)	15	(8.8)
<i>Observation of dressings such as clothing's and shoes</i>	74	(43.3)	65	(38.0)	0	(0.0)	20	(11.7)	12	(7.0)

Key: Strongly satisfied [SS]5, Satisfied [S]4, Undecided [U]3, Dissatisfied [D]2, Strongly dissatisfied [SD]1

Table 3: Level of maternal satisfaction with the psychological care received from the midwives n=171

Items	SS (5)		S(4)		U(4)		D(2)		SD(1)		Σf	Σfx	X
	F	P(%)	F	P(%)	F	P(%)	F	P(%)	F	P(%)			
<i>Reassurance by the nurses during the course of care</i>	55	(32)	70	(40.9)	2	(1.2)	30	(17.5)	14	(8.2)	171	635	3.7
<i>Maintenance of Sone's self esteem</i>	0	(0.00)	20	(11.7)	0	(0.00)	100	(58.6)	50	(29.2)	171	330	1.9
<i>Involvement in decision making about care/treatment plans</i>	38	(22.2)	50	(29.2)	15	(8.8)	47	(27.4)	21	(12.3)	171	550	3.2
<i>Maintenance of therapeutic relationship</i>	20	(11.7)	45	(26.3)	13	(7.6)	68	(39.8)	25	(14.6)	171	480	2.8
<i>Giving sense of direction and support</i>	39	(22.8)	68	(39.8)	5	(2.9)	38	(22.2)	21	(12.3)	171	579	3.4



<i>Attitude during care actions</i>	13(7.6)	37(21.6)	0(0.00)	52(30.4)	69(40.4)	171	403	2.4
<i>Maintenance of confidentiality privileged information</i>	20(11.7)	73(42.7)	15(8.8)	45(26.3)	18(10.5)	171	545	3.2
<i>Being supportive and display of empathy during care</i>	56(32.8)	45(26.3)	17(9.9)	32(18.7)	21(12.3)	171	596	3.5
<i>Allowing mothers to make informed choices regarding care actions</i>	45(26.3)	63(36.8)	12(7.0)	27(15.8)	24(14.0)	171	591	3.5
<i>Mental health counseling activities and support</i>	0(0.00)	29(17.0)	16(9.4)	55(32.1)	76(41.5)	171	350	2.0

Key: Strongly satisfied [SS]5, Satisfied [S]4, Undecided [U] Dissatisfied [D]2, Strongly dissatisfied [SD]1

Table 4: Factors that influence maternal satisfaction with care received from the midwives at the ANC of the state tertiary hospital in the Southeast Nigeria n=171

Items	SA (5) F P(%)	A(4) F P(%)	U(4) F P(%)	D(2) F P(%)	SD(1) F P(%)
<i>Quality time spent on health education</i>	30(17.5)	50(29.2)	23(13.5)	56(32.8)	12(7.0)
<i>The hours the facility are open are adequate to meet your need</i>	41(24.0)	28(16.4)	0(0.00)	70(40.9)	32(18.7)
<i>The amount of time spent waiting to be attended to by the nurses</i>	72(42.1)	37(21.6)	10(5.9)	22(12.9)	30(17.5)
<i>Availability of necessary equipment needed for care actions</i>	54(31.6)	70(40.9)	9(5.3)	18(10.5)	20(11.7)
<i>Availability of essential drugs in the clinic</i>	68(39.8)	65(38.0)	0(0.00)	30(17.5)	8(4.7)
<i>Responsiveness of nurses to the women's call</i>	18(10.5)	32(18.7)	15(8.8)	65(38.0)	41(24.0)
<i>Maintenance of environmental cleanliness</i>	20(11.7)	37(21.6)	0(0.00)	50(29.2)	64(37.4)
<i>Skill and abilities of the nurses in the facility</i>	70(40.9)	50(29.2)	10(5.9)	25(14.6)	16(9.4)
<i>Antenatal schedule and classes with no dull moment</i>	60(35.1)	49(28.7)	0(0.00)	38(22.2)	24(14.0)
<i>Attitude of nurses during care</i>	28(16.4)	70(40.9)	5(2.9)	41(24.0)	27(15.8)
<i>Adequate staffing in the facility to attend to pregnant mothers</i>	70(40.9)	49(28.7)	32(18.7)	20(11.7)	0(0.00)
<i>Spacious antenatal care arena</i>	62(36.2)	54(31.6)	15(8.8)	40(23.4)	0(0.00)

Key: Strongly agreed[SA]5, Agreed [A]4, Undecided [U]3 Disagreed [D]2, Strongly disagreed [SD]1

IV. DISCUSSION

Maternal satisfaction with physical care rendered by the midwives at state tertiary hospital in Anambra State, Nigeria. Findings from the study revealed that the women attending ANC at the state tertiary hospital have high level of satisfaction with the care received from the midwives. A good number of them (43.3%) are strongly satisfied with blood pressure observation done by the as well as

monitoring. This agrees with Akila (2019) where (73%) of their study population were satisfied with the monitoring and observations by the midwives. This study also revealed that the pregnant women were satisfied with directives on family planning measures by the nurses.



This finding is not consistent with the finding of Birhanu (2017) where the pregnant women studied were not satisfied with the explanation about the family planning services they received from the midwives.

Maternal satisfaction with psychological care rendered by the midwives among pregnant mothers attending ANC at the state tertiary hospital in the Southeast Nigeria

Findings from the study revealed that majority of the pregnant mothers attending ANC at the state tertiary health institution in the Southeast Nigeria were satisfied with the psychological care received from the midwives. This was evidenced in their strong agreement that the midwives reassure them during the course of care; involve them in decision making about their care/treatment plans, maintenance of confidentiality of privileged information and being supportive. This finding agrees with Ruby (2015) where majority of their study population (98%) expressed satisfaction with the overall care by the midwives as exemplified in of the mothers' satisfaction with inquiry about their concerns.

Factors influencing maternal satisfaction with care received from the midwives at the ANC the state tertiary hospital in the Southeast Nigeria

Study revealed that certain factors influence the pregnant mothers' satisfaction with care they receive from the midwives. Such factors include the amount of time spent waiting to be attending to by the nurses, availability of necessary equipment needed for their care actions, availability of essential drugs in the clinic (77.8%), abilities of the midwives in the facility, the attitude of the midwives and spacious antenatal care arena (61.8%).

This agrees with Kebede, et al (2020) that reported that physical facility, approaches to care and respect from the midwives were significantly associated with maternal satisfaction in his study area. This is not far from the conclusion of Knutsen, et al (2015) that good nurse patient relationship plays role in the satisfaction level of care recipient.

V. CONCLUSION

This study revealed that the pregnant mothers attending ANC at the state owned tertiary health institution are satisfied with the care they receive from the midwives. This notwithstanding, there were pockets of reported cases of poor communication and information dissemination among the midwives. This draws the need to step up communication skill among the midwives as ineffective communication can in one way or the other affect the expectations from the mothers which may result to mortality of either mothers or unborn children.

There is need also to harness the influencing factors to the women's satisfaction for continuity and more positive outcomes.

Implication of the study to Nursing

The outcome of this study is a pointer that nurses/midwives should at all times strive for the best in both attitude, care relationship and discharge of duty to ensure continual satisfaction of the clients which will yield quality care, high

patient turn over, and boost the image of nursing profession before the public.

Recommendations

The researchers recommend continuous supervision of the midwives and update of practice knowledge through mandatory professional training. The hospital management should recruit more nurses and midwives, to reduce the work load on the workforce.

Limitations of the Study

This study recruited participants through purposive sampling technique with may have introduced selection bias. The findings of the study cannot be generalized extensively due to its population coverage.

COVID-19 lock down was among the factors that affected the timely collection of data for the study as there were delay in the collection of data due to the lock down that followed the pandemic.

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Conflict of interest

The researchers declare that there was no conflict of interest among them in the course of the study.

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Nursing Science with Ph.D. in view..

AUTHOR PROFILE



Dr. John Emenike Anieche, is a Nigerian Registered Nurse (NRN), Nigerian Registered Nurse Educator (NRNE), Nurse Administrator and a Fellow of West African College of Nursing. He completed his Undergraduate studies in Nursing Science, MSc and PhD in Nursing Administration and Management. He is a Teacher per Excellence with Award as best Teacher

in two Nursing Training institutions in Nigeria. He worked with School of Nursing, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigerian. Dr. John is a Senior lecturer in the Department of Nursing Science, Nnamdi Azikiwe University, Nnewi Campus where he is a faculty member. Currently, he is on Sabbatical at PAMO University of Medical Sciences, Port Harcourt, Rivers State, Nigeria, where is functions as the Head, Department of Nursing Science. He is a researcher and have co-authored over twenty published works in area of Public Health, Nursing Administration and management, Nursing Education and practice. He is the author of the famous Book, "Step to Polyvalent Nursing".



OBI Chidinma Nkemdilim is a Nigerian Registered Nurse and Midwife. A Clinical Nurse per excellent with wealth of experience in maternal care. Chidinma, is BNSc. nurse with years of practice experiences. She has worked in divers health institutions and is currently works in the Antenatal Clinic of Chulwumeka Odumegwu Ojuluw University Teaching Hospital, Awka Anambra State, Nigeria.



Mandah Florence is a Nurse Educator, Public Health Nurse and Midwife. Florence joined the University as Clinical Nurse practitioner and has since then taught in the Department of Nursing Science, Madonna University, Elele, Nigeria and currently teaches in the Department of Nursing Science, PAMO University of Medical Sciences, Port Harcourt, Rivers State. In addition to the above, Florence holds BSc. and MSc. in