

## Original Article

## Satisfaction of Patients to Care Received during Childbirth by Mothers of Infants in Ibadan North Local Government Area, Oyo State, Nigeria

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### Abstract

**Background:** Women's satisfaction with maternity services especially during childbirth has become more and more important to healthcare providers, administrators and policy makers. The study was design to investigate patients' satisfaction of the care received by mothers of infants during childbirth in Ibadan North Local Government Area (IBNLGA), Oyo State, Nigeria.

**Methods:** The study was a descriptive facility-based cross-sectional survey with women who have infants that is babies within the age of 0-12 months were interviewed for the survey. A Three-stage sampling techniques was used to select 270 women with infants in Ibadan North local Government Area, Oyo State, Nigeria. A semi-structured, interviewer-administered questionnaire was used for data collection and analysed using descriptive and inferential statistics at 0.05 level of statistical significance.

**Results:** The average age of the respondents was  $30.5 \pm 5.7$  years, 97.0% were married, 52.6% had their antenatal care at a Primary Health Care, about half (48.9%) had below tertiary education, most of the women were artisans (27.4%). Overall, it was deduced that majority of the respondents (93.0%) had high expectations towards care they envisage to receive from nurses during delivery. Less than 50.0% reported satisfaction with the health-workers' attitude towards them during the course of their delivery at the various facilities. Respondents age, occupation, monthly income and type of facility used, were not significantly associated with their level of expectation ( $p > 0.05$ ).

**Conclusion:** This study provides information on the maternal expectation to care, maternal level of satisfaction to care received during delivery, enabling factors contributing to quality of care and also factors promoting satisfaction of patients to care.

**Key words:** Patients' Satisfaction, Quality of care, Level of expectation

### Introduction

Satisfaction of patients is the most frequently reported result measures for quality of care. (Goodman, Mackey and Tavakoli, 2004). Better-quality satisfaction has been identified as a goal for enhancement in health care (Department of Health, 2010). Health system factors, processes of care as well as mothers' characteristics influence the extent to which care meets the perceived expectations of mothers and their babies. Women's satisfaction with maternity services especially during childbirth has become more and more important to healthcare providers,

administrators and policy makers (Redshaw, 2008). Research shows that women's satisfaction with childbirth is partly associated to the health and well-being of the mother and her baby. For example, dissatisfaction is associated with poorer postnatal psychological adjustment, a higher rate of future abortions, preference for a caesarean section, more negative feelings towards the infant and breast-feeding problems (Goodman et al, 2004).

The concept of satisfaction is complex and it has been defined by so many researchers. A definition by Ware, Snyder, Wright and Davies

(1983) is that an individual's satisfaction with healthcare is a 'personal evaluation of healthcare services and providers'. These assessments redirect the personal preferences of the individual's expectations and the realities of the care they received from the health workers. Linder-Pelz (1982) provided a similar definition which states that satisfaction comprises of 'multiple evaluations of distinct aspects of healthcare which are determined (in some way) by the individual's expectation, attitudes and comparison processes.

Improving quality of care is fundamental to achieving Universal Health Coverage by 2030. (World Health Organization, 2016). The Universal Health Coverage (UHC) goal emphasizes that health care systems should not only be designed to reduce the unacceptable burden of poor obstetric outcomes but also to offer care which meets the needs of the women, and is equitable and affordable. According to World Health Organization (WHO) in 2016, the best way to reduce the unacceptable burden of poor obstetric outcomes that prevail in low and middle-income countries is to achieve the goals of the Universal Health Coverage (UHC), To achieve this the quality of healthcare services delivered to the patients at the three tiers of health service delivery must be acceptable, affordable and satisfactory to the patients (WHO, UNICEF, UNFPA, World Bank Group and United Nations, 2015; WHO, 2016).

Patient satisfaction is a crucial part of quality of care and accordingly, the multidimensional aspects of quality of care provision are increasingly highlighted, as indicated in the World health organization's (WHO) quality of care framework which builds on the landmark article written by Donabedian, (2005). These aspects include the need to address several of the underlying reasons for poor obstetric outcomes which explains the prevalent unsatisfactory outcomes despite increases in uptake of care (Tuncalp, Were, MacLennan, Oladapo, Gulmezoglu, 2015).

## Methods

**Study Area:** The study site for this research was Ibadan North Local Government. Ibadan Local Government Area is located approximately on longitude 8°5' East of the Greenwich meridian and latitude 7°23' North of equators. According to the 2006 population census (provision result); it has a proportion of 306,763, with the female

population as 153,756 (National Bureau of Statistics). Ibadan North Local Government Area comprises 12 wards and each ward has different health facilities.

**Sample Size determination:** The sample size (n) for this study was estimated using the Leslie Kish (1965) formula for estimating sample size ( $n = z^2pq/d^2$ ) based on the prevalence of perception and satisfaction with quality of antenatal care services among pregnant women in UCH (Enabor et al, 2013) at 95% confidence level. The minimum sample size was 236 and this was increased to 270.

**Sampling Technique:** A-three stage sampling procedure was used to select 270 respondents with a response rate of 96%. The first stage involved selection of 6 wards out of the 12 wards (wards 2, 5, 6, 8, 9 and 10) of Ibadan North Local Government by balloting. The second stage involved selection of two health facility each from the selected wards by balloting while the third stage involved selection of mothers in each of the selected health facility using the simple random sampling method.

**Tool:** A 59-item, interviewer-administered questionnaire was developed from the themes from the specific objectives and prepared in English and later translated to Yoruba, the common local language was used for data collection. The questionnaire was pretested in a similar community and administered by trained research assistants.

**Data Management and Analysis:** Data collected were sorted, coded and entered using IBM Statistical Package for the Social Sciences (IBM) version 25 software. It was analysed using descriptive statistics and presented using percentages and means with standard deviation. Chi-square (Fishers exact test) was used to test for association between the categorical variables. Patients' perceived care expectation was categorised as high expectation (8-14), low expectation (1-7) and level of satisfaction was categorised as 1-7 for not satisfied, 8-14 for little satisfied, 15-21 for satisfied and 22-30 for very satisfied.

**Ethical Approval:** The Research Ethical Review Board of Oyo State Ministry of Health provided ethical approval for the study with reference number AD 13/ 479/4137B. Permission to conduct the study was also obtained from the administrative department of the selected health facilities. Written informed consent was obtained from all respondents included in the study.

## Results

270 respondents were interviewed and their ages ranged from 18 to 55 with a mean age of  $30.5 \pm 5.7$ . More than half of the women had female babies (57.4%). Majority of the women practiced the Christianity religion (61.5%). A small fraction (9.6%) had no formal education, about half (48.9%) had below tertiary education. Most of the women were artisans (27.4%), some were into trading (23.3%) or other forms of self-employment (18.1%), some were civil servants (18.1%), and few of them were either students or unemployed (10.0%). Most of the women (97.0%) were married (Table 1). More than half of the women had their antenatal care at Primary Health Centres (52.6%), a few number (24.4%) had their ANC in a state hospital, a few (15.2%) used private facilities for their ANC, and others used federal hospital for ANC (7.8%). Most of the respondents (65.2%) delivered their babies at a public hospital – including, PHCs, state and federal hospital, others used private hospitals (22.2%) and mission houses/traditional birth attendants (12.6%) (Table 2).

**Maternal expectation during childbirth:** The study revealed that majority of the women (95.2%) expects nurses to help reduce the pain of childbirth, most (96.3%) also had the expectation that the nurses should change their clothing and bed linen whenever they request for it to be changed. 80.0% of the respondents expected that the nurses must be able to satisfy their needs when they feel hunger and thirst, almost all the women (97.0%) expected that they should not be ignored by nurses whenever they call to be examined, even if repeatedly. It was deduced that (93.0%) had high expectations towards care they envisage to receive from nurses during delivery (Table 3).

**Level of Satisfaction on care received during delivery:** Majority of the respondents 96% remarked their satisfaction with the way they were

treated by the nurses, most claimed they were confident about the midwife's professional competency (97.0%), majority (94.8%) reported they were satisfied with the amount of information the received from the nurses about breastfeeding.

A similar proportion (95.2%) remarked satisfaction for the education they received about their child care, majority of the respondents showed satisfaction towards the services rendered to them during their stay in the delivery wards. Many of the women (89.3%) acknowledged that the nurses were open to answer their questions; many (85.6%) also acknowledged they received care with dignity – politeness and respect – in the delivery wards. it was deduced from the study that more than half (60%) of the women were satisfied towards the care they received during delivery (Table 4).

**Factors Contributing to Satisfaction of Patients to Care:** In terms of the health workers' attitude and behaviour towards the women during childbirth; result from Table 6 showed that majority of the respondents (80%) were satisfied with polite language usage by the doctors and nurses. Over eighty percent reported satisfaction with the explanations they received on medications for the baby by the nurses (82.2%), how the midwife assisted them in delivery of their babies (82.2%), and the professional support of the nurses they received during delivery (81.4%) (Table 5).

**Factors Associated with Women's Level of Satisfaction towards Care Received:** The type of facility used by the women was statistically associated with their level of satisfaction to delivery care ( $p=0.030$ ); women who delivered in private hospitals had the highest prevalence of satisfaction (73.3%), those who delivered in a mission house or TBAs had a relatively lower prevalence (64.7%), while those who delivered in public hospitals had the lowest satisfaction prevalence (55.7%) (Table 6). Only 158(62.9) were satisfied with the cares received which was significant (Table 7).

**Table 1: Socio-demographic characteristics of respondents (N= 270)**

Demographic Characteristics	Number	%
<b>Age of mothers</b>		
18 – 29 years	122	45.2
30 – 39 years	124	45.9
40 – 49 years	24	8.9
<b>Gender of index child</b>		
Male	115	42.6
Female	155	57.4
<b>Religion</b>		
Christianity	166	61.5
Islam	103	38.5
<b>Level of Education</b>		
None	12	4.4
Quranic	14	5.2
Primary	11	4.1
Secondary	121	44.8
Tertiary	112	41.5
<b>Occupation</b>		
Artisan	74	27.4
Trading	63	23.3
Civil servant	49	18.1

Self-employed	49	18.1
Unemployed	21	7.8
Student	6	2.2
Others (Banker, Nurse, Secretary)	8	3.0
<b>Marital status</b>		
Single	8	3.0
Married	262	97.0
<b>Monthly Income</b>		
Below 18,000	84	31.1
≥ 18,000	186	68.9

\*Mean age of respondents 30.5±5.7

**Table2: Respondents' places of delivery and types of facilities**

Places of delivery and types of facilities	Number	%
<b>I did my ANC at:</b>		
PHC	142	52.6
State hospital	66	24.4
Private facilities	41	15.2
Federal hospital	21	7.8
<b>Type of facility used for delivery</b>		
Public hospital	176	65.2
Private hospital	60	22.2
Mission house/Homes/TBAs	34	12.6

**Table3: Patients' perceived expectation for care during delivery**

Patients perceived expected care	Strongly Agree N (%)	Agree N (%)	Undecided N (%)	Disagree N (%)	Strongly Disagree N (%)
The nurses are supposed to help reduce the childbirth pain (for example, back massage, using drugs)	195(72.2)	62(23.0)	3(1.1)	10(3.7)	0(0.0)
The nurses are supposed to change my clothing and bed linen whenever I feel it is dirty	192(71.1)	69(25.6)	7(2.6)	2(0.7)	0(0.0)
The nurses are supposed to satisfy my needs in times of hunger and thirst or have a convincing answer during delivery	133(49.3)	84(31.1)	31(11.5)	21(7.8)	1(0.4)
The nurses are supposed to examine me repeatedly whenever I call during labour and not ignore me.	176(65.2)	86(31.9)	5(1.9)	3(1.1)	0(0.0)
The nurses are supposed to help me be in the right position in the delivery room	180(66.7)	78(30.7)	5(1.9)	2(0.7)	0(0.0)
The nurses are supposed to do the post-delivery care of my baby	185(68.5)	74(29.3)	5(1.9)	1(0.4)	0(0.0)
The nurses are supposed to make the delivery room comfortable for me during delivery	201(74.4)	64(23.7)	4(1.5)	1(0.4)	0(0.0)
The nurses are supposed to explain breathing and meditation to reduce labour pain to me during delivery	195(72.2)	68(25.2)	6(2.2)	1(0.4)	0(0.0)

**Table 4: Level of Patients Satisfaction to care received during delivery**

Level of Patients Satisfaction to care	Not Satisfied (%)	Satisfied (%)
Are you satisfied with the way the nurses treated you	10 (3.7)	260 (96.3)
Were the nurses open to your questions	29 (10.7)	241 (89.3)
Were you confident about the midwife's professional competency	8 (3.0)	262 (97.0)
Were you treated politely and with respect by the health care providers in the delivery ward	39 (14.4)	231 (85.6)
Did you receive sufficient information during your stay in the delivery ward	57 (21.1)	213 (78.9)
Were the services rendered to you during your stay in the delivery ward well organized	21 (7.9)	249 (91.9)
Did you receive sufficient information about your physical health after delivery	89 (33.0)	181 (67.0)
Did you receive sufficient information about possible mood changes after delivery	103 (38.1)	167 (61.9)
Did you receive sufficient information about breastfeeding	15 (5.2)	255 (94.8)
Were you educated about your child care	13 (4.8)	258 (95.2)

**Table 5: Factors Contributing to Satisfaction of Patients to Care Received**

Factors Contributing to Patients Satisfaction	Not Satisfied (%)	Satisfied (%)	Very Satisfied (%)
Polite language usage by doctors and nurses.	54 (20.0)	176 (65.2)	40 (14.8)

The attitude of the admission staff.	95 (35.2)	146 (54.1)	29 (10.7)
The duration of your wait time for a doctor after admission.	72 (26.7)	166 (61.5)	32 (11.9)
How well did the doctors and the health workers respond to you.	66 (24.4)	166 (61.5)	38 (14.1)
Courtesy of the nurses and midwives.	127 (47.0)	111 (41.1)	32 (11.9)
The extent to which nurses respected your privacy during your stay.	79 (29.3)	156 (57.8)	35 (13.0)
How well did the nurses and midwives cared about your pain and discomfort.	102 (37.8)	138 (51.1)	30 (11.1)
How well did the nurses care for you and your baby after delivery.	57 (21.1)	175 (64.8)	38 (14.1)
The treatment provided for you and your baby.	57 (21.5)	171 (63.3)	42 (15.6)
The relationship between you and the healthcare workers during delivery.	69 (25.6)	167 (61.9)	34 (12.6)
Attitudes of doctors and nurses during ward round.	60 (22.2)	173 (64.1)	37 (13.7)
Explanation of the medications for you and the baby by the nurses.	48 (17.8)	182 (67.4)	40 (14.8)
How the midwife delivered your baby.	48 (17.8)	177 (65.6)	45 (16.7)
The professional support of the nurses during delivery.	53 (19.6)	166 (61.5)	51 (18.9)

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**Table 6: Factors associated with women's level of satisfaction towards care received**

<b>Factors</b>	<b>Not satisfied</b>	<b>Satisfied</b>	<b>X<sup>2</sup></b>	<b>p-value</b>
<b>Age of women</b>				
18 – 29 years	53 (43.4)	69 (56.6)	4.33	0.115
30 – 39 years	48 (38.7)	76 (61.3)		
40 – 49 years	5 (20.8)	19 (79.2)		
<b>Occupation</b>				
Artisan	28 (37.8)	46 (62.2)	5.83	0.322
Trading	22 (34.9)	41 (65.1)		
Civil servant	15 (30.6)	34 (69.4)		
Self-employed	25 (51.0)	24 (49.0)		
Unemployed/Student	13 (48.1)	14 (51.9)		
Others	3 (37.5)	5 (62.5)		
<b>Level of education</b>				
Below secondary	10 (27.0)	27 (73.0)	3.02	0.221
Secondary	52 (43.0)	69 (57.0)		
Tertiary	44 (39.3)	68 (60.7)		
<b>Monthly income</b>				
Below 18,000 naira	38 (45.2)	46 (54.8)	1.83	0.176
18,000 naira or higher	68 (36.6)	118 (63.4)		
<b>Type of health facility</b>				
Private	16 (26.7)	44 (73.3)	7.00	0.030
Public	78 (44.3)	98 (55.7)		
Mission house/Home/TBA	12 (35.3)	22 (64.7)		

**Table7: Association between level of expectation and Level of satisfaction during delivery**

Level of Expectation	Satisfaction towards care received		X <sup>2</sup>	P-value
	Not Satisfied	Satisfied		
Low	13(68.4)	6(31.6)	7.29	0.0007*
High	93 (37.1)	158(62.9)		
<b>Quality of infrastructure in health facility used</b>				
Low	9 (47.4)	10 (52.6)	0.12	0.735
High	129(51.4)	122(48.6)		
<b>Quality of Health workers' attitude toward women during delivery</b>				
Low	9(47.4)	10 (52.6)	0.29	0.589
High	135(53.8)	116(46.2)		

\*Significant

## Discussion

Studies have revealed that if women can be satisfied by health care services especially during childbirth it will improve the rate at which mothers receive modern obstetric care which in turn leads to low rate of maternal mortality. It was found that a number of socio demographic and economic factors have a significant influence on mothers' satisfaction. They include type of health facility, age, occupation, educational level, and monthly income. Those that were educated up to secondary school were 44.8% and tertiary level was 41.5%. Most of the women had their antenatal care at a PHC. These findings agree with those of previous studies (Ravi and Ravishankar, 2014; Shah and Bélanger, 2011; Lwelamira and Safari, 2012; Nekesa et al., 2013; Yar'zever and Said, 2013). However, age of the woman and occupation did not seem to have a significant influence in this study.

The study revealed that majority of the women (95.2%) expected of the nurses to help reduce the pain of childbirth, most of the respondents (97.7%) also believed it is the nurses' duty to do

post-delivery care of their babies, also majority of the respondents believe that nurses are supposed to make the delivery room comfortable for them during delivery. In this context it is important that efforts to improve access and availability of skilled delivery care to women in developing countries focus equally on sensitizing providers on respectful care. It is but natural that women attach great value to the care they receive during this time.

In this study, 40% of the mothers were not satisfied and 60% were fairly satisfied with the overall care received during delivery. This was also the findings of Okonufua et al. (2017) who evaluated 8 secondary and tertiary hospitals in Nigeria. From this study, it was deduced that The level of satisfaction on care received during delivery can be associated with professional competency of staffs (the doctors, nurses and midwives), the fact that the nurses are open to answering any sort of questions, amount of information received about breastfeeding which most times seems to be the fear of new mothers, the mothers were treated politely and with respect. A woman who is educated and of higher

socio economic status is able to make wise decisions about her own health than their counterparts. Similar findings have been reported by previous researchers (Shimamoto and Gipson, 2015; Adekoya and Arowolo, 2012; Adekunle and Similoluwa, 2012).

Overall, it was deduced that not up to half of the women can be said to be satisfied with the quality of facilities and infrastructures available at the health facilities. This is substantiated with the finding that women in their first visit to the facility express greater satisfaction with services owing to the positive impact of first experience of care, as compared to those making repeat visits. But for those who have accessed care multiple times, poor availability of drugs or equipment or any other factor could be a serious quality gap, as has emerged in the evidence from literature.

The findings of this study suggests that, Expectation for care during delivery is of great importance, being the fact that Labour and childbirth is a particularly vulnerable time for women and the need for attention and care is very important. This study suggests that there are certain factors that play a crucial role in influencing women's expectations and satisfaction with care during pregnancy and childbirth. The perception of 'good' care is therefore a significant determinant of maternal satisfaction, with five sub-themes emerging as major determinants; level of education, monthly income, age, occupation, types of facility used.

The finding of this study indicate that women have differing levels of dissatisfaction with maternity services offered by hospitals in Ibadan North Local Government Area, Ibadan, Oyo State, Nigeria. The review findings have revealed that women's experience, expectation and satisfaction of care is affected by a wide range of determinants, this could influence their future utilization of care. Maternal health programmes and policies therefore must take into account women's perspective on the care they need and the services they receive from health care facilities.

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