

WOMEN SATISFACTION WITH AFFORDABLE NEONATAL HEALTHCARE SERVICES IN NORTHERN NIGERIA

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Abstract

This study examined women satisfaction with affordable neonatal healthcare services in northern Nigeria. For the study, one research objective and its corresponding research question were raised. It is hypothesized that women satisfaction would not be significantly influenced by the provision of affordable neonatal health care services in Northern Nigeria. The study used cross-sectional survey research design. The population of the study was 25,539,366 women of child-bearing age and sample size of 672 was utilized for the study. Multi-stage and simple random sampling techniques were adopted for the selection of 672 child-bearing age women in the area of study. A self-developed eight-item questionnaire was used in data collection and was validated by public health experts. Descriptive statistics of frequency counts and percentages were used for organizing the demographic characteristics of the subjects. The postulated hypothesis was tested using the Chi-square approach at a 0.05 level of significance. The result reveals that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. It is recommended among others that government should reduce the cost of maternal and child healthcare services in Northern Nigeria and also ensure that all women of childbearing age have access to affordable neonatal healthcare services to improve their maternal health.

Keywords: Women, Satisfaction, Affordability, Neonatal Healthcare Services.

Introduction

The number of maternal deaths in developing countries is associated with childbirth. Infant and neonatal mortality and morbidity could as well be linked with poor health care services, lack of health knowledge and bad health practices in our communities. The cost of maternal and healthcare services becomes a barrier in the patronage of health care services. To this end, affordability and women satisfaction need to be assessed with the view to enable the government to come up with policies to improving maternal and neonatal health for both mothers and neonates.

Healthcare is viewed by the World Health Organisation (WHO) as a programme that should make available to the individual and thereby to the community, all facilities and allied sciences necessary to promote and maintain the health of mind and body (Campbell, 2007). WHO study reveals that a significant proportion (40%) of U-5 deaths occurs in the neonatal period (Lawn, et. al., 2005; Rahel, et. al., 2014). African Leadership for Child survival, (2012) study further shows that there were over nine million newborn deaths worldwide every year during perinatal and neonatal period altogether and

nearly all (98%) of these deaths occur in developing countries, Nigeria inclusive. Furthermore, it was categorically estimated that more than 3.3 million babies are stillborn every year; one in three of these deaths occurs during delivery and could largely be prevented (Charlotte, 2014). Another WHO study also reported that every year over four (4) million newborn babies die in the first four weeks of life; three (3) million of these deaths occur in the early neonatal period (WHO, 2015).

The major causes of these deaths identified were birth asphyxia and preterm birth while the contributory causes include pneumonia, septicaemia, diarrhoea and acute gastroenteritis (Bang, et al, 2005). For Nigeria to address the issue of high tolls of newborn deaths, the provision of qualitative newborn healthcare services to the satisfaction of clients is very imperative. Despite that many studies showed that neonatal healthcare service is mostly integrated in maternal and child health care (Auta, 2006; Adamu, et. al., 2009) but the integration of the services in all levels of health care delivery systems would be useful right from the period of labour and delivery, through the first 24 hours to the end of the first week of life, covering the neonatal period (Ahmed & Verber, 2011).

Individual economic status has consistently shown to have a positive association with the satisfaction of health care service and neonatal care is no exception (Jill & Quentin, 2012). Household surveys analysis suggests that for most countries, the cost of health care service is perceived as the main reason for lack of satisfaction with such services. Gagallah, et al., (2013) reported that cost has frequently been shown to be a barrier to utilisation and satisfaction with the provision of healthcare services. Accordingly, Fanan and Felix (2014) emphasize the high cost of getting healthcare as another factor in sub-Saharan Africa. Bazant and Koenig, (2009) studies revealed that affordable care was a significant determinant of satisfaction with newborn care services in both facility and home deliveries in Kenya. Neonatal care refers to care given to newborn infants from the time of delivery through about the first month of life. The term neonate is used for newborn infants during the 28-30 day period. In Nigeria, the study of Daily Trust report of Tuesday, 11 April 2017 pg 26equally stressed that the 2016 recession that worsened the access to healthcare services was due to poverty which indicated that over sixty million of the population was living below the poverty line. It is worrisome to compare the coverage of the Health Insurance Scheme (HIS) of some African countries. Reports revealed that in Rwanda 96% of its citizens were covered in Health Insurance Scheme (HIS), Ghana 46%, Kenya 20% while only 5% of Nigerians have health insurance as of 2016. It is therefore probable that the cost of Medicare of health care services and transportations to healthcare facilities make such services unaffordable. And, the unaffordability of health care services aggravates women dissatisfaction with Nigeria health care system.

Research Question

What is the satisfaction level of women with the provision of affordable neonatal health care services in Northern Nigeria?

Research Hypothesis

HO 1: Women satisfaction would not be significantly influenced by the provision of affordable neonatal health care services in Northern Nigeria.

Material and Methods

A cross-sectional survey research design was used for the study. It is one of the descriptive survey research designs that are observational in nature that involves looking at data from a population at a specific point in time and allows the researcher to look at numerous characteristics at once (Emaiku, 2008). The study was conducted in 2017 to determine women satisfaction with the provision of affordable neonatal health care services in Northern Nigeria.

The population of the study comprised the entire women of child-bearing-age in Northern Nigeria which was projected to 2020 using an annual population growth rate of 1.17%, 117,572,820 as indicated in the 2006 Census.

The sample of the study was as determined by Krejcie and Morgan (1970). They stated that a sample of 384 is sufficient enough to represent 100, 000 and above at the alpha level of 0.05. However, the sample size for the study was increased to 672 women of child-bearing age.

The multistage sampling technique was the adopted procedure used for the study as recommended by Burmgartner and Strong (1994).

Phase I- stratified random sampling was employed to select the six states, two from each of the three geo-political zones in Northern Nigeria.

Phase II- Purposive sampling technique was used to select the tertiary health facilities in the selected states regardless of their location in the state.

Phase III- Simple random sampling was adopted in the selection of two Local Government Areas from each of the six stratified states in northern Nigeria.

Phase IV- Also, simple random sampling was used to select urban and rural Women of Child-Bearing-age respondents from health care facilities during Routine Immunisation (RI) services in Northern Nigeria. Twelve (12) Local Government Areas (LGAs) that were randomly selected included: Katagum and Bauchi, Bauchi state; Dukku and Gombe; Gombe state; Tarauni and Gaya, Kano State; Lere and Ikara Kaduna State; Jos North and Mangu, Plateau State and Kwande, Katsina-ala from Benue State. In each of these selected LGAs 28 rural and 28 urban 28 totalling 672 respondents were used for the study.

A researcher-developed questionnaire based on four optioned Modified Likert-scale of seven (7) items on women satisfaction with affordable neonatal healthcare services in Northern Nigeria was employed for data collection. The instrument was validated by experts in the field of the study. Corrections, suggestions and comments were incorporated to validate the instrument.

Demographic data collected for the study was organised using frequency counts and percentages while the postulated hypothesis was analysed using Chi-square at 0.05 level significance.

Results and Discussion**Table 2 Frequency and Percentage of Demographic Information of the Research Participants**

	Frequency	Percentage (%)
Residential Location		
Urban	326	49.9
Rural	327	50.1
Total	653	100.0
Educational Status		
Had no formal Education	189	28.9
Had Formal Education	464	71.1
Total	653	100.0
Occupational Status		
Working Class	328	50.2
Non Working Class	325	49.8
Total	653	100.0
Birth Order		
1 Only	225	34.5
2 – 4	218	33.4
5 and above	210	32.2
Total	653	100.0
Geo-political Zone		
North East	217	33.2
North West	221	33.8
North Central	215	32.9
Total	653	100.0
Sources of Newborn Care		
Maternity	109	16.7
PHC	142	21.7
CHC	126	19.3
GH	113	17.3
FMC	84	12.9
UTH	47	7.2
Others	32	4.9
Total	653	100.0

Table 2 shows the frequency and percentage of demographic characteristics of women of child-bearing age in northern Nigeria. With regards to the residential location of the research participants, 326 (49.9%) were from urban areas while 327 (50.1%) were from rural areas. Similarly, with regards to their educational status 189 (28.9%) had no formal education while 464 (71.1%) had formal education. Moreover, 328 (50.2%) are working-class mothers while the nonworking class were 325 which accounts for (49.8%). With regards to their parity, 225 (34.5%) had an only child; 218 (33.4%) had only 2 – 4 children and 210 (32.2%) had five children and above. Two hundred and seventeen (33.2%) were from the northeastern region; 221 (33.8%) were from the north-western geopolitical zone and the north-central region has 215 which accounts for (32.9%). Most of the research participants relied on primary and secondary health care facilities: Maternity 109 (16.7%); PHC 142 (21.7%); CHC 126 (19.3%); GH 113 (17.3%); as their source of newborn care while very few seek neonatal care from FMC 84 (12.9%); UTH 47 (7.2%) and Others 32 (4.9%).

Table 2: Chi-Square Contingency Table on Women Satisfaction with Affordable Neonatal Healthcare Services in Northern Nigeria

Affordable Neonatal Healthcare Services	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Total	X ² Cal (O-E) ² /E
Transportation cost to the health facility	0 E 174 (163.25) 0.71	0 E 386(163.25) 303.93	0 E 60(163.25) 65.30	0 E 33(163.25) 108.76	653 478.70	
Labour and delivery care services cost	100(163.25) 24.50	419(163.25) 400.66	63(163.25) 61.56	71(163.25) 52.12	653 538.84	
Immunisation fee: (BCG& OPV)	139(163.25) 3.60	395(163.25) 328.99	83(163.25) 39.44	36 (163.25) 99.188	653 471.188	
Diagnostic services fee for new-born illnesses	146(163.25) 1.82	199(163.25) 7.82	163(163.25) 0.00	145(163.25) 2.04	653 11.68	2,317.99*
Drugs and supplies prices	171(163.25) 0.37	223(163.25) 21.86	137(163.25) 4.22	122(163.25) 10.42	653 36.87	
Medication cost for new-born illnesses	12(163.25) 140.13	64(163.25) 60.34	241(163.25) 37.03	336(163.25) 182.82	653 420.32	
Intensive care services cost for preterm newborn	21(163.25) 123.95	65(163.25) 59.13	287(163.25) 93.80	280(163.25) 83.49	653 360.37	

***Significant X² cal value = 2,317.99, df, 18 > X² tab 88.87 at .05 Significant level**

Table 2 shows the Chi-square contingency analysis on Women Satisfaction with Affordable Neonatal Healthcare Services in Northern Nigeria. The calculated X² value of 2,317.99, df, 18 is larger than the tabulated value of 88.87 at a 0.05 level of significance. The results indicated that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. Therefore, the hypothesis is rejected. The research question is answered and the hypothesis is testified.

Discussion

This study reveals that women satisfaction was influenced by the provision of affordable neonatal health care services in Northern Nigeria. The finding is in line with Srivastava, et al., (2015) who revealed that determinants of maternal satisfaction covered all dimensions of care across the structure, process and outcomes. Structural elements included good physical environments, cleanliness, and availability of adequate human resources, medicine and supplies. Accordingly, access, cost socioeconomic status and reproductive history also influenced perceived maternal satisfaction. Similarly, the outcome of this study lends support to the work of Bang, et al., (2005); Bazant and Koenig, (2009) studies which

revealed affordable newborn care services as the determinant of women satisfaction in both facility and home deliveries in India, Kenya and Pakistan.

In another development, studies conducted by Bazant and Koenig in Kenya (2009); George 2002 in India and Kazim 1995 in Pakistan revealed that affordable care was a significant determinant of women satisfaction as regards newborn care services in health facilities and home deliveries. Also, the outcome of this study is in agreement with the work MacKeith, Chinganya, Ahmed and Murray (2003) Cham, et al., (2009) in Zambia and Gambia respectively found significant associations between cost and maternal satisfaction and utilization of care in both home and institutional births. Studies of Al-Hamdan (2009); Al-Mandhari, et al., (2014); Aradhana, Bilal, et al., (2015) reported significant associations between cost and healthcare satisfaction. It lends supports to Duong (2004) findings which reported that besides the overall cost of care, affordable drugs also influenced care in Vietnam. The availability of free medicine in health facilities also enhanced maternal satisfaction with care in Gambia (Nafisa, et al., 2012). On the cost of transportations to the healthcare facilities, the finding corroborates with Babalola and Okapor (2016) work which revealed satisfaction levels of the health care are higher for women who visited hospital facilities at no cost of transportation.

Conclusion

Based on the finding, it is concluded that women satisfaction was influenced by the provision of affordable neonatal health care services in northern Nigeria.

Recommendations

Based on the conclusions the following recommendations were proffered:

1. Government should reduce the cost of maternal and child healthcare services in Northern Nigeria and ensure that women of childbearing age have access to affordable neonatal healthcare services to improve their neonatal health.
2. Non-governmental organizations should design and come up with some maternal and newborn health care programmes that would strengthen the affordability of neonatal healthcare services in Northern Nigeria.

Reference

- Adamu, T. K., Harrison, W. & Wale, T. (2009). Contextual factors influencing newborn care among rural communities in northwest Nigeria. *Journal of Tropical Pediatrics* 4 (4): 273-275.
- African Leadership for Child survival, (2012). Africa key facts and figures for child mortality committing to child survival: A promise renewed progress report 2012. Retrieved on 23/6/2016 from <http://apromiserenewed.org>
- Ahmed, O. & Verber, N. (2011). Home delivery and newborn care among women in Nigeria. *Global Journal of Medical Sciences* 9 (7): 204-209.
- Al-Hamdan, H. (2009). The impact of waiting time and service quality delivery outpatient satisfaction in Kuwaiti public general hospitals. *Maastricgt SchoolManagement*, 2 (3), 42 -53.
- Al-Mandhari, A., Haran, D. & Hassan, D. (2014). Association between perceived health status and satisfaction with the quality of care: Evidence from users of primary health care in Oman. *Family Practice*, 21 (5), 519 -527.
- Aradhana, S., Bilal, I. A. Preety, R. & Sanghita, B. (2015). Determinants of women satisfaction with maternal health care: a review of literature from developing countries. *BMC Pregnancy and Childbirth*. DOI:10.1186/s12884-015-0525-0.

<https://abueducationjournals.com/gjhrr>

- Auta, T.T. (2006). *Introduction to primary health care for basic student nurses and midwives, and health workers in developing countries*. Minna: Diamond Printing press.
- Babalola T, K. & Okafor I. P. (2016). Client satisfaction with maternal and child health care services at public specialist hospitals in Nigeria Turk J. Public Health 14(3).
- Bang, A. T., Bang. R. A. & Reddy, H. M. (2005). Home-based neonatal care: summary and applications of the field trial in rural Gadchiroli, India. *Journal of perinatal Study* 25 (1), 108-122.
- Bazant, E. S., & Koenig, M. A. (2009). Women's Satisfaction with Delivery Care in Nairobi's Informal Settlements. *International Journal for Quality in Healthcare* 21 (2):79-86.
- Bowers, M., Koehler, W., & Swan, J. (2014). What attribute determine quality and satisfaction with healthcare delivery? *Health Care Management Review*, 19(4), 49-55.
- Buor, D. (2012). Determinants of utilisation of health services by women in rural and urban areas in Ghana. *GeoJournal*, 61(1): 89-102.
- Burmgartner, T.A. & Strong, H.C. (1994). *Conducting and relating research in health and human performance*. Wisconsin, Brown and Brown March.
- Campbell, C. (2007). *Essentials of Health Management Planning and Policy*. Lagos: University of Lagos Press.
- Cham, M., Sundby J. & Vangen, S. (2009). Availability and quality of Emergency Obstetric Care in Gambia main referral Hospital: Women User Testimonies. *Repro Health*; 6:9.
- Charlotte, W. (2014). *Care of the newborn: Community perceptions and health seeking behaviour*. Philadelphia: Stock Seal Publishers.
- Conner, M & Nelson, P. (2014). The Role of Social Cognition in Health Behaviours. In M Conner and P Norman (eds) *Predicting Health Behaviours: Research and practice with social cognition models* Open University Press, Buckingham. 1-22
- Daily trust, April, Tuesday 11, (2017). Catalysing universal health coverage through mandatory health insurance. *PP* 26.
- Emaiku, S. O. (2008). *Fundamentals of educational research methods and statistics*. Nigeria, Makurdi: Selfers Academic Press Limited.
- Fanan, U. & Felix, K. (2014). Analysis of the spatial distribution of health facilities in Benue state, Nigeria. DOI: 10.5923/j.phr.20140405.09.
- Gagallah, M., Anwer, W., Rady, M., & Sallam, I. (2013). Patient satisfaction with primary healthcare services in two districts in lower Upper Egypt. *MediterraneanHealth Journal*, 9(3) 422-427.
- Ganguly, E. & Sharma, P. K. (2014). Client satisfaction with the quality of health care in a rural area in southern India. *Journal of Public health and epidemiology* 6(8) 239-245
- Janeen, M. W. (2010). New-born umbilical cord care: An evidence-based quality improvement project. Doctor of Nursing Practice project, *University of San Francisco*.
- Jill, O. & Quentin, W. (2012). Satisfaction with faith-inspired health care services in Africa: review and evidence from household surveys. World Bank: <http://mpr.ub.uni-muenchen.de/45374/>
- Krejcie R.V. & Margan D.N. (1970). Determining sample size for research. 30,607-610.

<https://abueducationjournals.com/gjhrr>

- Lawn J. E., Cousens, S. & Zupan, J. 2005. *4 million neonatal deaths: When? Where? Why? Lancet* ; 365: 891-900
- Kumsa, A., Tura, G. Nigusse, A. & Kebede, G. (2016). Satisfaction with emergency obstetric and newborn care services among clients using public health facilities in Jimma Zone, Oromia Regional State, Ethiopia; a cross-sectional study. *BMCPregnancy and Childbirth*. DOI: 10.1186/s12884-016-0877-0.
- MacKeith, N. Chinganya, O. J.M., Ahmed, Y. & Murray, S.F. (2003). *Zambian Women Experiences of Urban Maternity Care: Results from Community Survey in Lusaka*. *Afr J. Repro Health*; 7: 92-102.
- Nafisa, L. H., Tracey, L. P. K., Asrafi J. A., Quaiyum, M. A., Al Mahmud. S. & Shahed, H. (2012). Use of mobile phone: Communication barriers in maternal and neonatal emergencies in rural Bangladesh. *International Journal of Sociology and anthropology* 4(8), 226- 237.
- Rahel T, Amare, W., Wanzahun, G. & Bernt, L. (2014). Client Satisfaction with Delivery Care Service and Associated Factors in the Public Health Facilities of Gamo Gofa Zone, Southwest Ethiopia: In a Resource-Limited Setting. *Journal of Social Science and Medicine*, 7(3)24 -31.
- Vanguard, Tuesday, January 3rd, (2017). The recession has worsened access to Nigerians to healthcare. Accessed on 3/1/2017 from [www.vanguardngr.com/2016/12/recession -worsened-access-Nigerians-healthcare/](http://www.vanguardngr.com/2016/12/recession-worsened-access-Nigerians-healthcare/)
- World Health Organization, (2015). *Neonatal and perinatal mortality country, regional and global estimates*. WHO Bulletin 43, 223