International Journal of Medical and Health Sciences Research
2017 Vol.4, No.3, pp.38-44
ISSN(e): 2313-2752
ISSN(p): 2313-7746
DOI: 10.18488/journal.9.2017.43.38.44
© 2017 Conscientia Beam. All Rights Reserved.

ASSESSMENT OF THE QUALITY OF ANTENATAL CARE RENDERED AT A NORTHERN NIGERIA PRIMARY HEALTH CARE CENTER, ZARIA, NIGERIA

Madugu NH[1+]
Abdul M A[2]
Sabitu k[3]
Mandara M[4]
Bawa U[5]

[1,2,5]*Dept. of Obstetrics and Gynaecology, ABU, Zaria Nigeria*
[3]*Dept of community Medicine ABU, Zaria, Nigeria*
[4]*Bill and Melinda gates Foundation Abuja, Nigeria*

(+ Corresponding author)

Article History
Received: 19 December 2016
Revised: 25 January 2017
Accepted: 7 March 2017
Published: 20 April 2017

Keywords
Antenatal care
Health center
Maternal mortality
Skilled attendants
Primary health
Centre, Nurse midwifes.

ABSTRACT

Background: Primary health care facilities are the closest to the community and are easily accessible to pregnant women and their children. Ensuring quality Antenatal care by skilled attendants at this level is pre-requisite to reducing pregnancy complications and over all maternal mortality Objective: This study was aimed at assessing the adequacy of antenatal care rendered at this level of care. Methods: A cross sectional study was conducted at Babban-dodo primary health center, Zaria. An exit Questionnaires was administered to 400 pregnant women. Information on their demographic status and information about the Antenatal care just received was obtained focusing standard protocol for antenatal care. Result: showed that the women were not rendered all the full component of ANC. History of feeling unwell was not asked in 88%, examination including blood pressure check was done in only 37%, Obstetrics examination was done in more 80% of the women however symphsio-fundal height was not measured with tape. The women were sent to do most of the routine investigations, as they pay for these investigations and the revenue collected is used to partially run the hospital. There was only one nurse midwife at the center; community health workers were the sole providers and no medical doctor visit the hospital. Ninety six percent of the respondents were satisfied with the services while 3.6% were dissatisfied. Conclusion: There is total disregard for standard of care for antenatal services expected at this level. There is the need for re-assessment of all primary health care centers that are the first point of contact with our pregnant women, if reducing maternal mortality rate is great concern to all of us.

Contribution/ Originality: This study further demonstrated that the quality of antenatal care in primary care facilities in Nigeria particularly in the Northern part of the country is poor and indirectly explains why maternal mortality and morbidity is very high.

1. INTRODUCTION

Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth, 99% of these maternal deaths occur in developing countries [1]. The maternal mortality ratio in developing countries in 2013 is 230 per 100 000 live births versus 16 per 100 000 live births in developed countries [1, 2].

Ten countries account for about 60% of these global maternal deaths among countries with this high maternal mortality death in the world, Nigeria is rated second (630 maternal death per 100,000 live birth) only after China,

+ Corresponding author
© 2017 Conscientia Beam. All Rights Reserved.

accounting for about 13 percent of the global maternal death rates with an estimated 36,000 women dying in pregnancy or at child birth each year [2].

The country's MDG commitment to reducing maternal mortality and morbidity by 75%, by the 2015 is reliant on achieving improved utilization of the proven and efficacious antenatal and delivery supervision [3]. The local government has a strategic role to play since it is closest to the people through the primary level-health facility. This level includes the comprehensive health center, the primary health center and the basic health center [4]. Primary health care facility are the closest to community, they provide first aid care and referrals. Offering quality Antenatal care services at this level is a pre-requisite to reducing pregnancy complications. Reports have shown that Eclampsia is the leading cause of maternal mortality in Northern Nigeria [2]. Ensuring quality care by skilled attendants during pregnancy is therefore essential in order to detect abnormalities early enough [5, 6].

Antenatal care is to prevent maternal and fetal complications through, appropriate pro-active measures, treatment of any emergent problems in the pregnant woman and her fetus, preparation of the parents for the process of childbirth and child rearing. For the care to effectively do this, a standard protocol should be in place. Antenatal care standard of practice can help identify the actual competencies required by the health personnel. In routine, normal practice such standards can be used (by setting criteria on which competency will be judged), as the basis for assessing current practice. There are other means of assessing quality of activities: it is either through systemic review or audit of medical records or through direct observation of what goes on Roemer and Montoya [7]. This assessment is only possible when skilled attendant are available, in the absence of skilled attendant instructions has to be given to the mother or family members [8].

The main objective of this study is to assess the quality of Antenatal care rendered to pregnant women at Baban Dodo Comprehensive health center in Zaria Local Government of Kaduna State, Nigeria and to give appropriate recommendations based on the findings of the study.

2. METHODOLOGY

The study was carried out at Baban-Dodo comprehensive health center. It is one of the Local Government health centers in Baban-dodo health district. This facility is situated at the center of the ancient city - Zaria city of Kaduna state in Northern Nigeria. It runs a maternal health services on 24 hours basis and the antenatal clinic is run daily on weekdays, in which Wednesdays and Thursdays are booking days (for Primigravidae and multiparous). The hospital was chosen as the area of study because of its patient load (an average of 300 women on weekly bases).

3. MATERIALS AND METHODS

Descriptive- Cross sectional study was conducted at Baban-Dodo Comprehensive Health Facility in Zaria city in Northern Nigeria using a pre-tested structured questionnaire. Two research assistants were trained to administer the structured questionnaires.

The trained researchers sought the consent of all the consecutive multiparous pregnant women who came for a follow-up visit as they exit the consulting room and those who consented were interviewed regarding the quality of antenatal care just received.

Variables such as age, level of education, religion and ethnicity, last menstrual period, income earning, spouse income-earning were asked. Also included were types of laboratory investigations she was requested to carry out such as blood, urine and ultrasound. She was also asked if she had general and systemic examinations including the gravid uterus and blood pressure measurement. The content of health education messages such as advice on diet, breast-feeding, sleep and rest was also sought. Adequacy of Tetanus Toxoid immunization and haematinics were explored. Information on the general hospital infrastructure, cleanliness, and attitude of health care providers, her rating and satisfaction with the service were sought. The data was analysed using SPSS version 18.

© 2017 Conscientia Beam. All Rights Reserved.

4. RESULTS

A total of Four hundred pregnant women were interviewed. The average age of the respondents was 26.01±4.41 years (range was between 15 years and >40 years). The highest frequency distribution 138(34.5%) was found among age group between 21-25 years. Majority of the women have at least one living child 102 (25.5%), however those with five living children and above were 120(30%) although 36(9%) refused to disclose the number of children alive. The entire respondents were married and majority were Hausa and Muslims only 12 (3%) were Christians. High proportion of those with formal education had just primary 152 (38%) and those with informal education (Islamic) were also high 116 (29%). Fifty seven percent (57%) of respondent were found to be full time house. Majority of the spouses of the respondents were drivers, which constituted 228 (57%). Regarding spouse income, 126(31.5%) of the respondent spouses received an average of 21-30naira per month.

Details about the rapport, history of complaint, whether or not general examination was done, the response to most of the question were low. Less than 20% gave a positive response, except in 152(38%) that agreed that they were asked if they still perceived fetal movement.

Permission to perform an obstetric examination and listening to fetal heart rate was done in large number of respondent (>80%) except that the fundal height measurement with tape measure was done in only 8(2%). Blood pressure measurement was done in only 150(37.5%) of the respondents.

Laboratory investigations request and routine medications were given to more than 80% of the respondent however only 7% were told to have an obstetric scan.

Birth preparedness, Signs of labour, place of delivery and when to go to hospital were discussed with more than 80% of the respondents.

5. DISCUSSION

Antenatal care is to be conducted based on standard practice worldwide. It starts with health talk, history, physical examination, investigation and treatment of any complications and follow up appointments [9, 10].

In a study recently conducted in the northern part of the country shows that maternal mortality is 2,420 deaths per 100,000LB. Eclampsia, ruptured uterus and anemia were responsible for about 50% of maternal death, which was the highest maternal mortality ratio in the world [2, 11]. In this study only 37.8% of the women had their blood pressure checked. quality care in obstetrics practice can only be obtained if skilled attendant were present or available during antenatal care, labour and immediate post delivery. This has been demonstrated to be one of the most effective means of reducing maternal mortality and morbidity [9]. In this study the care was not adequate, the skilled attendant was just one nurse midwife. The situation is worse in Northern Nigeria, where only 10-13% of women are delivered by skilled birth attendant [11]. This study showed that 87.5% of respondents where not told about danger signs during pregnancy such as vaginal bleeding and 88% were not asked if she had headache. This is consistent with a study conducted in Tanzania in which in Fifty-two (20%) severe maternal morbidities were attributed to substandard ANC [12] 42% clients were not informed of any pregnancy danger signs. In this study permission was not taken before general and abdominal examination was done in 35% and 12% respectively.

The presence of a skilled attendant in any antenatal clinic influences the use of the facility and for follow-up this was documented in a study done in a remote area in Zambia in a among the poorest population. .

In a Muslim dominating society like in Northern Part of Nigeria and especially in the heart of the city where this study was conducted male providers are not allowed to give antenatal care. One nurse/midwife cannot adequately provide care needed by these women and also provides necessary follow-up and continuity. The health sector is labor intensive and manpower constitutes a critical component [9].

In study conducted to measure pre-intervention quality of routine antenatal and childbirth care in rural districts of Burkina Faso, Ghana and Tanzania and to identify shortcomings, 6 primary healthcare facilities were randomly sampled. Quality of care was assessed through health facility surveys, direct observation of antenatal it

© 2017 Conscientia Beam. All Rights Reserved.

was found that health talk was inadequate. This is in agreement with the finding in this study where although the health talk is done routinely but inadequate [13].

6. CONCLUSIONS

Despite the availability, accessibility and affordability of services at the health. The services were not liked by 3% of the respondents. Forty-six (46%) percent were satisfied while 22.5% were highly satisfied. None of the respondent was highly dissatisfied. There was only one nurse and no medical doctor. The structure is situated in the center of the town and well attended

Within this context is the development of standards of midwifery practice, if implemented appropriately, will no doubt enhance the level of performance that is required to ensure quality antenatal care and reduce the complicating leading to maternal death. However many women who seek care, the health care givers do not even recognize the signs of danger during pregnancy or she is over whelm with too many women waiting to be seen that a condition is not recognized as serious.

Standards of practice can help identify the actual competencies required by the health personnel in routine normal practice. Such standards can be used (by setting criteria on which competency will be judged), as the basic for assessing current practice, reorganizing refresher and updating programmers, as well as developing future curricula.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

[1] WHO, *World health statistics*. Geneva: World Health Organization, 2014.

[2] Y. M. Adamu, S. M. Hamisu, S. Naalini, and A. R. Greg, "Maternal mortality in Northern Nigeria: A population-based study," *European Journal of Obstetrics and Gynaecology and Reproductive Biology*, vol. 109, pp. 153-159, 2002. *View at Google Scholar* | *View at Publisher*

[3] National Demographic and Health Survey, 2013.

[4] Safe Motherhood, *Safe motherhood: A women's right to life, information kit*. Bangladesh: Ministry of Health and Family Welfare, 1997.

[5] Mother-Baby, *Mother-baby package: Implementing safe motherhood in countries*. Geneva: World Health Organization, 1994.

[6] E. Y. Kwawukume, B. A. Ekele, D. Ka, and E. Emuveyan, *Maternal mortality in the tropic. In; Comprehensive obstetrics in the tropics*, 2nd ed. Asseble of God Literature Center, 2015.

[7] M. Roemer and A. C. Montoya, *Quality assessment and assurance in primary health care*. Geneva: World Health Organization (WHO), (WHO Dffiset Publication No. 105, 62, 1988.

[8] Home Delivery, *Home delivery without attendant, In. Pregnancy, childbirth, postpartum and newborn care: A guide for essential practice*, 3rd ed. P Luxembourg: World Health Organization, c12, 2015.

[9] A. Montayo, "How to measure and assess performance In: Measuring the performance of hospital and health centres," *WHO/SHS/DHS/94*, pp. 12-14, 1997.

[10] E. G. Heidemann, *The contemporary use of standards in health care*. Geneva: World Health Organization, (Document WHO 1987, (WHO European Series No, 1993.

[11] Performance, "Performance Standards for Emergency Obstetric and Newborn Care in Nigerian Hospitals," *Federal Ministry of Health, USAID*, p. 3, 2007.

[12] A. S. Nyamtema, J. A. Bartsch-De, D. P. Urassa, J. P. Hagen, and J. Van Roosmalen, "The quality of antenatal care in rural Tanzania: What is behind the number of visits?," *BMC Pregnancy Childbirth*, vol. 12, p. 70, 2012. *View at Google Scholar* | *View at Publisher*

© 2017 Conscientia Beam. All Rights Reserved.

[13] E. Duysburgh, W. H. Zhang, M. Ye, A. Williams, S. Massawe, A. Sié, J. Williams, R. Mpembeni, S. Loukanova, and M. Temmerman, "Quality of antenatal and childbirth care in selected rural health facilities in Burkina Faso, Ghana and Tanzania: Similar finding," *Tropical Medicine & International Health*, vol. 18, pp. 534-547, 2013. *View at Google Scholar* | *View at Publisher*

Table-1. Distribution of Maternal Socio-Demographics

Maternal age	Percentage distribution
15-20	20.5
21-25	24.5
26-30	34.0
31-35	11.5
36-40	10.0
>40	0.0
TOTAL	**100**
No of living children	
1	25.5
2	13.5
3	2 9.0
4	13.0
5	12.0
6	9.0
7	4.0
8	0.0
9	3.0
10 and above	2.0
not disclosed	9.0
TOTAL	**100**
Religion	
Christians	3.0
Muslims	97.0
Others	0.0
TOTAL	**100**
Ethnic group	
Hausa	71.0
Yoruba	10.0
Igbo	0.0
Others	19.0
TOTAL-	100
Educational status	
Primary	38.0
Secondary	14.0
Tertiary	9.0
Informal	29.0

© 2017 Conscientia Beam. All Rights Reserved.

No response	10.0
TOTAL-	**100**
Occupation	
Civil servant	10.0
Petty trader	20.0
Full time House wife	57.0
Self employed	7.0
Unemployed	3.0
No response-	3.0
TOTAL	**100**

Table-2. Distribution of Respondents by Spouses average income in NAIRA

Monthly income (Naira).	Percentage distribution
10,000-20,000.	17.3
21000-30,000	31.5
31,000-40,000	5.7
41,000-50,000	7.0
51,000-60.000	7.4
61.000- 70.000	23.5
71,000- 80,000	6.1
.>81,000	1.5
TOTAL	100.0

Table-3. Patient Appraisals of Antenatal Cares for Index Pregnancy

Performance	Variables requested	percentage responses
General	if she was greeted	12.6
History	if has any complain	18.5
	-Vagina bleeding	12.8
	-Drainage of liquor	12.8
	-If she feels fetal movement	38.5
	-if she had headache	12.0
General exam	Conjunctiva/palms	05.5
	Legs/feet	6.9
	Blood pressure	37.5
Obstetrics Exam	permission sought	88.0
	Covered	89.0
	abdomen was inspected	88.0
	fundal height was measured with a tape	2.0
	abdomen palpated	80.0
	fetal heart	81.0
	She was helped to get down.	3.5
	Informed on key findings.	67.0
	- Findings were recorded.	89.0
Laboratory test	she was asked if she was sent for Blood test	83.5
	Urine test	82.0
	Ultra sound	7.0
medication	tetanus toxoid	82.0
	Iron table	82.0

© 2017 Conscientia Beam. All Rights Reserved.

Birth preparedness	To about Signs of labour	80.0
	When to go to hospital if labour starts	82.0
	Items for delivery	82.5
Return visit	Danger signs in labour asked if she was told if ---	65.0
	She has any question	25.8
	When is the next visit	88.0
	She should come any time if she has danger sign	78.0
	She understood everything discussed	89.0

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Medical and Health Sciences Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.

© 2017 Conscientia Beam. All Rights Reserved.