Preferred Place Of Delivery By Women In A Rural Community Of Lagos State

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Abstract

Background

Maternal mortality ratio of 800 per 100,000 in Nigeria is about one hundred times higher than that of Europe. The uptake of health facility delivery in Nigeria is said to be 35% and the choice of the place of delivery is dependent on several factors. This study was conducted to assess the factors influencing the place of delivery by women in a rural community in Lagos, Nigeria.

Methods

A descriptive cross sectional study involving women aged between 15 – 45 years in Agbowa, a rural community in Lagos State.

Results

A total of 420 women were recruited, mean age was $31\pm$ 1.5 years. About 81% of the respondents preferred to deliver at the hospital, however 41% eventually delivered at the hospital during their last delivery. Cost, bad attitudes of hospital staff, long waiting time, long distance and poor hospital environment were reasons responsible for the non utilization of health facilities by women during their last deliveries. There was significant association between the educational statuses of the respondents and their spouses as well as the place of delivery.

Conclusion

There is need for the government to reorganize the health sector in such a way as to enhance access to the health facilities especially by the underserved rural communities.

Keywords: Place of delivery, women, reproductive age, rural.

Introduction

f all health statistics, those for maternal mortality show the greatest disparity between developing and developed countries. Every year, over 500,000 women die from complications arising from pregnancy and childbirth. About 99% of these maternal deaths occur in developing countries and especially in sub-Saharan Africa.¹ In addition, almost 4 million infants do not survive childbirth or the immediate postnatal period, and millions more are disabled because of inadequately managed pregnancies and births, a situation that has remained almost unchanged for many years.²

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Maternal Mortality Ratio (MMR) in Nigeria is about 800 per 100,000 live births. This is almost twice as high as values obtained in Botswana (480 per 100,000 live births); a hundred times worse than values obtained in industrialized countries; and about 10% of the global burden^{3,4} Poor organization of the health systems, poor infrastructural facilities and socio-economic factors have been shown to be responsible for this poor maternal health indicators in Nigeria.⁵

Studies have shown that a principal effective intervention for reducing maternal mortality is the universal use of skilled birth attendants based in functioning health care facilities^{6,7}. However, facility delivery rates in sub-Saharan Africa are the lowest in the world. A study showed that 47% of women delivered in a health facility in 28 sub-Saharan African countries.⁸ Reports from the Nigerian Demographic Health Survey (NDHS) showed that 35% of births in Nigeria were delivered in a health facility and three in five births occurred at home. Women in urban areas, between the ages of 20-34 years, with higher levels of education and having their first baby were most likely to deliver in a health facility. The proportion of births occurring in a health facility decreased sharply as birth order increased.9

Factors responsible for the choice of preferred place of delivery by women include a variety of interplaying social, economic and health system factors, which operate at various levels; the household, community, the health institutions and the larger social and political environments.^{10.11}

This study is aimed at assessing the factors influencing the preferred place of delivery by women of the reproductive age group in Agbowa- Ikosi, a rural community in Lagos State.

Methods

A descriptive cross sectional study was conducted among women in the reproductive age group at Agbowa- Ikosi, a rural community in Ikosi Ejirin Local Council Development Area of Lagos State, Nigeria. Using an appropriate sample size formula, 420 women aged 15 - 45 years, who had delivered within the last 24 months and had resided at Agbowa for at least 3 years were selected by systematic random sampling method. structured interviewer-А administered pretested questionnaire was used to collect data on the sociodemographic characteristics of the respondents, knowledge about causes of maternal mortality, place of last child birth, the decision maker of the place of birth in the family, where the women wished to deliver and the reasons for their choice.

Ethical clearance was obtained from the Health Research Ethics Committee of the Lagos State University Teaching Hospital. In addition, permission to conduct the study was also obtained from the traditional ruler of Agbowa and the Executive Chairman of Ikosi Ejirin Local Council Development Area. Informed consent was obtained from the respondents before the questionnaires were administered.

Data Analysis

The data was analyzed using EPI –INFO 2002 Statistical Software. The mean and standard deviation and test of association using chi square were computed. Statistical significance was set at P < 0.05.

Results

Socio-demographic characteristics

A total of 420 women in the reproductive age group were interviewed during the study period. The mean age of the respondents was 31 ±1.5 years. The majority (41.7%) were between 30 - 39 years, 358 (85.3%) were married and 79 (18.8%) had no formal education as shown in Table 1. Table 2 shows the places the respondents preferred to deliver at their last delivery. The hospital accounted for 81.4%, while Traditional Birth Attendant (TBA), Church and home accounted for 11.4%, 6.2% and 1.0% respectively. However 172 (41%), 169 (40.2%), 42 (10%) and 37 (8.8%) delivered at the hospital, TBA, home and church respectively. Amongst those who did not deliver at the hospital during their last delivery, 97 (38.9%), 79 (32%), 30 (12.2%), 23 (9.3%) and 19 (7.6%) attributed it to high cost of delivery, bad attitudes of hospital staffs, long waiting times at the hospital, long distance and poor hospital environment respectively as shown in table 3. The decision of where to deliver was made by the husbands in 61% of the respondents while 164 (39%) of the respondents made the decision for place of delivery during their last pregnancy

One hundred and fifty two (36.2%) of the respondents were of the opinion that maternal death was not preventable, while 353 (84.1%), 52 (12.4%) and 15 (3.5%) of the respondents felt that the hospital, TBA and Church respectively were the places to go in the event of any obstetric emergency as shown by Table 4. There was significant association between the educational status of the respondents and their perception on the possibility of the prevention of maternal deaths in our environment (p < 0.05).Of the respondents who felt maternal deaths were not preventable, the majority (83.1%) considered it is an act of God while 9.7%, 2.8% and 4.4% respectively considered the high cost of hospital care, long distance of the hospital and inability of the hospital to be of help in the past respectively as reasons why maternal deaths may not be preventable in our environment. There was significant association between the educational status of women and their spouses and the choice of the place of birth during their last delivery (p < 0.05).

(Figure 1).

Table 1: Socio-demographic characteristics of respondents Variables Frequency (n = 420) %			
Variables	Frequency ($\mathbf{n} = 0$	420) %	
Age group			
< 20 years	22	(5.2)	
20 - 29	155	(36.9)	
30 - 39	175	(41.7)	
40-45	68	(16.2)	
Marital Status			
Single	32	(7.6)	
Married	358	(85.3)	
Separated	30	(7.1)	
Ethnic group			
Yoruba	277	(66)	
Igbo	51	(12)	
Hausa	29	(7)	
Others	63	(15)	
Educational Status			
No formal Education	79	(18.8)	
Primary	97	(23.1)	
Secondary	156	(37.1)	
Tertiary	88	(21.0)	

Table 1: Socio-demographic characteristics of respondents

Place of delivery	frequency (n = 420)	%
Hospital	172	41.0
TBA	169	40.2
Home	42	10.0
Church	37	8.8
Preferred place of delivery	Frequency (n= 420)	%
Hospital	342	81.4
TBA	48	11.4
TBA Home	48 4	11.4 1.0

 Table 2: Preferred and Actual place of delivery of respondents

Table 3: Distributions of factors militating against hospital delivery

Factors	freq	uency (n=248) %
Cost of care	97	38.9
Bad attitudes of staff	79	32
Long waiting tomes	30	12.2
Long distance	23	9.3
Poor hospital environment	19	7.6

Perceptions	Frequency (n = 420)	⁰∕₀
Maternal death can be prevented		
Yes	268	63.8
No	152	36.2
Reasons why maternal	Frequency (n = 152)	%
deaths cannot be prevented		
It is an act of God	126	83.1
Hospital is too expensive	15	9.7
Long distance of the hospital	4	2.8
Hospital has never been of help	7	4.4
Where to go in case of obstetric	Frequency $(n = 420)$	%
complications		
Hospital	353	84.1
TBA	52	12.4
Church	15	3.5

Table 4: Different Perception of respondents on maternal deaths

Table 5: Educational status of respondents and perception on the prevention of maternal deaths

Educational Status	Perception of prevention of maternal deaths		
	Yes (%)	No (%)	
	n = 268	n = 152	
No formal Education	45 (16.8)	34 (22.4)	
Primary	67 (25.0)	30 (19.7)	
Secondary	74 (27.6)	82 (53.9)	
Tertiary	82 (30.6)	6 (4.0)	

Educational status	Hospital	TBA (%)	Others (%)	X2
Of respondents	deliveries (%)			p value
No formal education	31 (18.0)	33 (19.5)	15 (19.0)	^x 34.069
Primary	35 (20.3)	47 (27.8)	15 (19.0)	^{xx} 0.000
Secondary	60 (34.9)	62 (36.7)	34 (43.0)	
Tertiary	46 (26.7)	27 916.0)	15 (19.0	
Total	172 (100.0)	169 (100.0)	79 (100.0)	
Of Respondents' Spouses				
No formal education	14 (8.1)	20 (11.8)	20 (25.3)	^x 18.389
Primary	20 (11.6)	37 (21.9)	20 (25.3)	^{xx} 0.005
Secondary	86 (50.0)	92 (54.4)	20 (25.3)	
Tertiary	82 (47.7)	20 (11.8)	19 (24.1)	
Total	172 (100.0)	169 (100.0)	79 (100.0)	

Table 6: Educational status and choice of place of delivery

x = Chi square

xx = p value

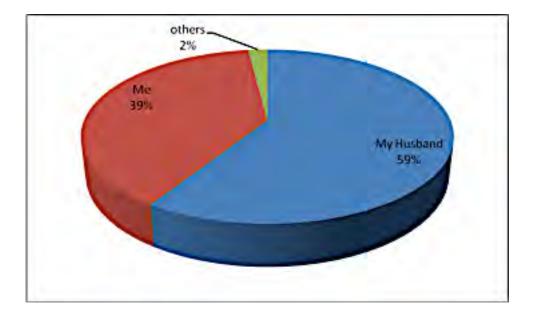


Fig 1. Decision makers on the place of delivery

Discussion

The choice of place of delivery has been said to depend on the individual's perception of need for medical care, the socio cultural factors prevailing in the community and other variables affecting the characteristics of the health care system obtainable within the community. This study showed that most of the respondents (59%) delivered outside the health facilities during their last confinement. This finding is similar to the surveys conducted by the Federal Ministry of Health which showed that about one third of births took place at the health facilities.^{4,12} However, this finding is in contrast with studies conducted in Latin America, East Asia and North America where the proportions of health facility deliveries were reported as 64%, 93% and 100% respectively.¹³

The finding of cost of hospital admission as being a major determinant of choice of place of delivery is in agreement with other Nigeria.^{14,15,16}The studies done in significant association between the educational status of women and their spouses and the place of delivery may be because wives of high income earners such as top civil servants, professionals and business men are usually able to afford institutional deliveries while small scale farmers and traders are likely to deliver health institutions outside probably reflecting not only their usually lower level of education but also the irregular and seasonal nature of their income. Traditional birth attendants who conduct home deliveries may accept payments in kind rather than cash and monetary considerations pose no barrier to obtaining immediate care from them.¹⁶

The cost of normal delivery in churches/homes has been found to be almost free¹⁷.

The bad attitude of health workers was another factor responsible for the non utilization of the hospital for deliveries by women in this study. A population based study assessing women's preferences for place of delivery in rural Tanzania found that in making a choice for a place of delivery, women valued respectful, attentive providers over other facility features, including type of provider, cost, distance, and availability of transport.¹⁸Poor attitudes of health workers has been attributed partly to the reason why in developing countries, high risk pregnant women turn away from tertiary hospitals and attempt delivery at home or in church sheds or other unorthodox places which often lead to disastrous consequences.17

About 60% of the respondents claimed that the decision of where to deliver was made by their husbands. There was a significant association between the educational statuses of the women (including their spouses) and the choice of place of delivery. In a study from Uganda, the socio economic class of the husband rather than the educational status of the woman was a major factor influencing home deliveries. It was suggested that the place of delivery is more often than not the husbands' choice as against the wishes of the pregnant woman who bears the burden of pregnancy and childbirth.¹⁹

It has been observed that there are four factors which influence people's perception of the need to use health facilities. The prospective user must be aware of his condition and feel it warrants medical services intervention: the must he acceptable to him; he must have confidence in the technical competence and humanness of the facility and its provider; and he must have the ability to obtain the services.²⁰ About 84% of the respondents felt that the hospital is the best place to go when an obstetric complication occurs. Most people usually view the hospital as the last place of resort after trying all other options. The decision to go to the hospital is usually taken very late, when it is often too late to salvage the woman's life. Most of the respondents (83.1%) perceived maternal mortality an act of God and therefore not preventable. This finding is similar to that obtained in a study from Cross-Rivers State, Nigeria, where most of the women identified witchcraft and supernatural forces as major causes of haemorrhage during deliveries and majority would go first to a TBA or herbalist for help.²¹ Another study from Ghana showed that women perceived obstructed labour to be due to witchcraft or insubordination: therefore women consulted traditional and spiritual healers before going to the hospital.²²

The traditional diviner usually had spiritual explanations for most complications. Moreover they lived close to the people, thus a visit would not require expensive transportation and payment in cash or in kind is often accepted. They also get involved with the people's lives, caring not only for their health alone but also other aspects of their lives which the medical practitioners do not do. In addition, most of the remedies prepared by the TBAs and other traditional healers in form of herbs and concoctions appeal to the peoples' cultural beliefs rather than the drugs and other various invasive procedures including caesarean sections provided by the orthodox practitioners.²³

Conclusion

This study showed that health facility delivery by women in the rural communities is low. The decision on the choice of place of delivery was mostly made by the husbands. Many women who preferred to deliver at the hospital could not do so because of the high cost of hospital admission, bad attitudes of staff, long waiting time at the hospital, and long distance. There is need for the government to reorganize the health sector and also promote community insurance in order to facilitate easy access to health facilities by women especially in the rural areas.

References

- World Health Organization. Maternal Mortality in 1995: Estimates Developed by WHO, UNICEF, UNFPA. Geneva: WHO, 2000.
- World Health Organization. Research on Reproductive Health at WHO: Biennial Report2000–2001. Geneva: WHO, 2002
- WHO, UNICEF,UNFPA and the WORLD BANK estimates of Maternal mortality in 2005 www.who.int/entity/bulletin/volumes/8 8/2/08-057828-ab/en/2005. 2008. accessed July 7 2010.
- Federal Ministry of Health/ World Health Organization. Reduce Maternal and New born deaths in Nigeria. Make pregnancy safer. FMOH publication 2001.
- Madunagu B, Okonofua FE, Adeyemi N, Bello M, Odeku M, Mairiga M. Training curriculum for leadership training in safe motherhood. Benin City, Nigeria:Nigerian Partnership for Safe Motherhood; WHARC.2004;1-34.
- Koblinsky M, Matthews Z, Hussein J. Going to scale with professional skilled care. Lancet. 2006; 368:1377–1386.
- Freedman LP, Graham WJ, Brazier E. Practical lessons from global safe motherhood initiatives: time for a new focus on implementation. Lancet. 2007; 370(9595):1383–1391.
- STATcompiler. Calverton, MD: MEASURE DHS, Macro International Inc.

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Available at:
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http://www.statcompiler.com. Accessed January 15, 2008.

 Nigeria Population Commission. Nigeria demographic health survey 2008. Available at www.nigeriapopulation commission.com. Accessed 15th December 2010.

- Ogunniyi S O, Faleyimu BL, Makinde O N, Adejuyigbe E A, Ogunniyi F A, Owolabi AT. Delivery care services utilization in an urban Nigerian population. Nigerian Journal of Medicine. 2002; 9: 81–85.
- Onah_HE, Ikeako LC, Iloabachie GC. Factors associated with the use of maternity services in Enugu, southeastern Nigeria. Social Science & Medicine. 2006; (63):1870–1878.vol 63
- Fatusi A. Maternal mortality situation and determinants in Nigeria: A review commissioned by Federal Ministry of Health. 2002; 1–41.
- Royston, E., & Armstrong, S. Preventing maternal deaths: The role of health services. Geneva: WHO 1989;153–183.
- Katung, P. Y. Socio-economic factors responsible for poor utilization of primary health care services in a rural community in Nigeria. Nigerian Journal of Medicine. 2001; 10:28–59.
- Ogunniyi S O, Faleyimu BL, Makinde O N, Adejuyigbe E A, Ogunniyi F A, Owolabi AT. Delivery care services utilization in an urban Nigerian population. Nigerian Journal of Medicine. 2002; 9: 81–85.
- Nwakoby BN. Use of obstetric services in rural Nigeria. Journal of Royal Society of Health.1994; 114:132–136.
- Ogunniyi S O, Faleyimu BL, Makinde O N, Adejuyigbe E A, Ogunniyi F A, Owolabi AT. Delivery care services utilization in an urban Nigerian population. Nigerian Journal of Medicine. 2002; 9: 81–85.
- Kruk ME, Paczkowski M, Mbaruku G, Helen de Pinho, Galea S, Women's Preferences for Place of Delivery in Rural Tanzania: A Population-Based Discrete Choice Experiment. Am j Public Health 2009; 99(9):1666-72

- Nuwaha F, Amooti –kaguua. Predictors of home deliveries in Rakai district, Uganda. Africa Journal of reproductive health. 1999; (2): 79-86.
- 20. Mechanic D. Public expectations and health care; essays on the changing organization of health services: Wiley, New York. 1972.
- Olaniran N, Offiong S, Ottong J, Asuquo E, Duke F. Mobilizing the community to utilize obstetric services in cross Rivers State. Nigeria. International journal of gynaecology and obstetrics. 1997; 59(2):181-189
- Wilson JB, Collison AH, Richardson D, Kwofie A, Senah KA, Tinkerang EK. The maternity waiting home concept, the Nsawan Ghana experience. International Journal of Gynaecology and Obstetrics. 1997; 59 (2): 165-170
- 23. Ademuwagun Z. The relevance of Yoruba medicine men in Public health practice in Nigeria. Public health report (USA). 1969; 84:1085-1091