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PREVALENCE AND ASSOCIATED FACTORS FOR NON UTILISATION OF MATERNITY CARE SERVICES IN RURAL KANO STATE

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ABSTRACT

Objectives:- To determine the prevalence and the related sociodemographic determinants for non-utilisation of maternity care services in Shekar Maidaki Village, Kano State.

Design:- Community based study.

Methods:- One of the three wards in Shekar Maidaki Village was randomly selected. A cross sectional survey of all women in the village was carried out to identify mothers of children aged 23 months or less. These mothers were voluntarily recruited into a case – control study using a pretested questionnaire.

Results:- The prevalence of non-utilisation of maternity care services amongst the 152 mothers of children aged 23 months and below was 78.3%. The key determinants for non-utilisation are low level of maternal education ($P=0.005$) high parity ($P=0.007$) and antenatal care non-attendance ($p=0.001$). Main reasons for non-hospital delivery are spousal inhibition (36.2%), access to experience TBA (24.1%) and the cost of institutional services (15.1%).

Conclusion:- Utilisation of available maternity care services in our rural communities is poor, as a result of high illiteracy rate, cultural barriers and cost of institutional care. Formal education of the girl child, free maternity care and improvement of the quality of care may enhance utilisation.

Key Words:- Non-utilisation, maternity care services, rural.

INTRODUCTION

The Maternal Mortality ratio of 1000/100,000 births officially cited for Nigeria is one of the highest in the world¹. Even more alarming however, is the inherent wide regional variation that is buried in this national index. The ratio varied from 600/100,000 births in Calabar South Eastern Nigeria² to 2420/100,000 births in Kano North Western Nigeria¹. This variation implies differing needs and magnitude of the problem regionwise. A review of the major causes and associated factors in these deaths will unearth a background of illiteracy, high rates of unbooked emergencies and poverty in most cases^{1,3,4,5}. Little wonder maternal mortality is the health indicator with the widest gap between developed and developing nations of the world.

The main objective of maternity care is to reduce maternal and perinatal morbidity and mortality. There is evidence that effective utilization of well equipped and appropriately staffed maternity institutions for delivery decrease maternal morbidity and mortality and improve reproductive outcome⁶. In rural Gambia, the decrease in maternal mortality occasioned by such utilisation was recently shown to be as high as 50%⁷. Consequently maternity care services are potent tools for the reduction of the high maternal mortality rate in sub-Saharan Africa.

In spite of this compelling evidence, utilisation of available maternal health services have continued to be low^{8,9,10} especially in our rural communities. These areas are in addition grossly underserved with maternity care services¹⁰. In Nigeria, and indeed Kano State close to 70% of the populace are rural based, yet most studies for health seeking behaviour and utilisation of maternity care services are from populations attending urban based teaching hospitals^{9,10}. These institutions have been shown to attract a clientele that are educated, reside in urban areas and are economically more likely to patronise the relatively expensive services¹. To the best of our knowledge the study by Adamu and Salihu⁸, was the only one that looked at the determinants of utilisation among rural dwellers in our part of the country. However, their study population did not have existing services in the community. This study conducted in a rural area of Kano State with a functioning maternity centre, seek to determine the level of non-utilisation of existing maternity care services and the related sociodemographic determinants.

SUBJECTS AND METHODS

This is a pilot study to assess the non-utilization of existing maternity care services in Shekar Maidaki village of Kumbotso local government area, Kano State. Shekar Maidaki is situated about 27 kilometres south west of Kano city and is about 10 kilometres from Kumbotso town. The village has a functioning primary health centre with a trained midwife. It is connected to Kano City and Kumbotso town by motorable roads, and there is motor vehicle transportation to and from the village from these urban areas all days of the week. The inhabitants are mostly Hausa-Fulani, muslims with few Christian settlers. The village is made up of three wards Sheka Babba, Shekar Sarki and Malamai. One of these wards, Shekar Sarki was randomly selected for the study.

CROSS SECTIONAL SURVEY

A house to house survey was carried out in Shekar Sarki ward with a view to identifying mothers of children aged 23 month or less. These mothers were then divided into cases and controls based on the place of their last confinement. Controls were mothers who delivered in the local maternity centre or one of various health institutions in Kumbotso town or Kano city. The cases were the mothers that delivered outside these health institutions. Self reported non-utilisation by these mothers was not validated. These mothers were the respondents in the case control study.

CASE CONTROL STUDY

Cases and controls were interviewed using a pretested questionnaire by trained medical students in the native hausa dialect. All interviewers were blinded as to the cases and the controls. Data was collected between 10th October to 17th November 2001, supervised by the first author. Information sought in the questionnaire relates to the sociodemographic characteristics of the respondent, her spouse, antenatal care attendance, and place for last confinement, postnatal care attendance, reason for institutional or non-institutional delivery, assessment of the services rendered as well as suggestion on how utilisation of the services could be encouraged. Where a mother eligible for this study was not found home as confirmed by people in the neighborhood an arrangement was made for a follow-up visit.

The data was analysed using the SPSS statistical software. The odd ratio of association and their 95% confidence interval were used to test for association between qualitative variables. P-values less than 0.05 were considered statistically significant.

RESULTS

In the cross sectional survey there were 437 women aged 15-45 years in Shekar Sarki ward, out of these 152 (34.9%) had children 23 months or less. Of these 152 women 33(21.7%) delivered in the health facility, 35.5% attended antenatal care,

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while 2(1.4%) delivered in an untrained traditional birth attendants houses. Decision for place of last confinement was mainly taken by the husbands in 63(52.9%) of the cases and 13(39.4%) of the controls. In all other instances the mothers decided in both cases and controls. Ten mothers (15.9%) among the cases in whom the husbands determined place of confinement, said they would have decided differently if they were in position to do so. Only 2(1.4%) of the cases will have their next delivery in a health institution. Eleven (9.2%) had attained their desired family size; none of them was currently using contraception.

More of the cases 43.7% were aged 25-34 years compared to 57.6% of the controls aged 15-24 years. The corresponding mean ages were 27.1 + 3.4 years and 25.6 + 2.7 years respectively. These were not statistically different.

Cases were of higher parity than the controls ($P=0.007$) but of lower levels of formal education ($P=0.005$) and were less likely to have attended antenatal care than the controls ($P=0.001$). The controls had more obstetrics complications in the past ($P < 0.05$). However educational status of the spouses just failed to attain statistical difference between the cases and the controls ($P=0.05$). Similarly religious practices were not an important influence ($P>0.05$).

The main reasons for non-utilisation of maternity care services amongst the cases are shown in table III. Spousal inhibition, access to experience traditional birth attendant and costly services were the most prominent reasons, together accounting for 75.7% of the reasons for non-utilisation. Seven multiparous women (5.9%) felt they were sufficiently experienced not to require skilled services, having always delivered normally, 2(1.7%) others felt they were healthy. Three (2.5%) gave no reason whatsoever while majority of the controls 84.8% cited safe and supervised delivery as their reason for institutional confinement.

Towards improving utilisation of delivery care services 73(48.0%) of the women interviewed wanted health care providers to adopt a more friendly and empathetic attitude towards their patients, 44(28.9%) advised for free maternity care services while 43(28.3%) advised on improvement of infrastructure, number and quality of health care providers.

DISCUSSION

The contribution of poor utilisation of available delivery care services to the appalling levels of maternal mortality in our environment is well documented^{1,4,11}. Women in rural areas of Kano State traditionally deliver their children at home even where orthodox services exist, regarding the later as inevitable alternatives resorted to when all other efforts failed. This is well illustrated here, 78.3% of the survey population having delivered at home or in TBA houses despite ready access to functioning maternity care services. Although this may seem to be an improvement on 96.3% reported by Adamu and Salihu⁸ from another rural community in Kano State, it is important to note that there were no maternity services in their survey locality and their figure represented the intention and wishes of their subjects not the actual practice. Interestingly some of our women actually attended antenatal clinics but prefer to deliver at home. For instance 64.5% of our study population had some antenatal care but only 21.7% gave birth in the health institution. This suggests a gap in utilization of different aspects of maternity care services by the same population. A similar experience was reported from a teaching hospital in Southern Nigeria with more affluent and educated clientele with disastrous consequences². Adamu and Salihu⁸ blamed partly the timing of their survey in dry season when most husbands had no ready funds for medical care for the very low levels of utilization, but our experience here is similar although majority of our

survey population delivered around the harvest period when their spouses were most affluent. Thus cultural barriers are probably more important determinants than economic factors. More so in the period under review the maternity care services were completely free in state government health facilities. Only 2(1.7%) of the cases intend to use health institutions for future confinement reflecting the tenacity of their belief and the need for a focused health education programmed to change the attitude of the people. The key determinants of maternity care in this review were literacy level, parity and experience of previous obstetrics complications. The influence of education and high parity on health seeking behaviour is well documented^{3,4}. Importantly here however, was the failure of the literacy levels of the spouse to reach statistical significance, thereby suggesting emphasis on female education. Improved utilization of maternity care services amongst women who had previous obstetrics complications was observed¹². Unspoken barriers to the utilization of maternity care services encountered by others in African communities are perception of cultural insensitivity, fear of episiotomy shared by one (0.8%) of our subjects, delivery practices and content of health education which almost always include family planning^{3,4,13,14}. Aversion to family planning in our rural communities is reflected here as 11(9.2%) of the cases had attained their desired family size but none of them was using contraception or intended to do so.

An important observation in this study was that decision on place of confinement was taken at the level of the couple with no input from the in-laws. The over bearing influence of father and mother in laws on maternity care services seeking behaviour in our culture and its negative effect was shown by Harrison et al³. The emergence of opinion amongst our women folk, whereby ten women (15.9%) held different views from their spouses means that if empowered such opinions could translate into practices. This is a positive departure from the universal helpless positions

reported by others⁴. On the other hand multiparous women have remained adamant in their attitude of home delivery. This is reflected in the position of seven (5.9%) such women amongst the cases who felt that they were healthy and had always delivered normally thus required no care in labour. The far reaching consequences of this is that, these women respected in the community by virtue of their high parity eventually become traditional birth attendants (TBA) after menopause, and may have inhibitory role for the patients that come under their care. Not surprisingly, the main reason for non utilization among 29(24.4%) of the cases was access to such traditional birth attendants.

Improvement of delivery care services utilisation can be enhanced by empathetic, friendly attitude on the part of health care providers according to 73 (48.0%) of our survey population. Forty-three (25.6%) advised on improvement of infrastructure, number and quality of health care providers. A further 44(28.9%) advocated for free maternity care services. The effect of cost on utilization of maternity care services has been aptly demonstrated by Ekwempu et al 1990¹⁵. It is encouraging to note the effort of the democratic government in Kano state by making maternity care free. Direction for further focus for the governments is the quality of the care, as poor quality health care may negate the potential for such noble objectives^{16,17}. Indeed operators of the scheme may have realized the little impact the free maternity scheme has made on maternal mortality and serious pregnancy morbidities such as eclampsia, obstetrics fistula and ruptured uterus despite the increase in utilization, this surely is not unconnected to the failure of the local government council to provide free services in concert with the state but also has to do with the quality of care that is being offered to the patients.

As advocated by the survey population, infrastructural development, staff training and retraining should be viewed with some seriousness

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by both state and local governments. Universal poverty eradication especially amongst women should be pursued by the governments without ethnic, religious or partisan coloration. Indeed girl child education would seem to be the key issue in the long run.

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Table I- Age distribution

Age (years)	Cases	Controls
< 15	2 (1.6%)	0 -
15 - 24	46 (38.7%)	19 (57.6%)
25 - 34	52 (43.7%)	10 (30.3%)
35 - 44	16 (13.4%)	4 (12.1%)
> 44	3 (2.6%)	0 -
TOTAL	119 (100%)	33 (100%)

- X + SD= 27,1 + 3,4

25.6+2.7 P>0.05

Table II: Sociodemographic characteristics

Characteristics	Cases	Controls	P - VALUE
Educational Status of Mothers			
Non-formal	114	22	0.005
Primary	3	8	
Secondary	2	3	
Tertiary	-	-	
Educational Status of the Spouse			
Non-formal	76	16	0.05
Primary	21	9	
Secondary	19	4	
Tertiary	3	4	
Parity			
1 - 4	72	23	0.007
> 5	47	10	
ANC attendance			

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Yes	32	21	0.001
No	87	12	
Birth attendant			
Non-medical	119	0	<0.001
Medical	0	33	
Religion of respondent			
Islam	114	32	0.84
Christianity	5	1	
Previous Obstetrics Complication			
Yes	13	16	<0.05
No	106	17	
Mother's Occupation			
Housewife	58	18	0.55
Petty Trader	61	15	

Table III: Reasons for non-utilisation (N=119)

Reasons	Number (%)
Husband's preference	43 (36.2)
Access to experience TBA	29 (24.4)
Cost of Institutional Delivery	18 (15.1)
Always deliver normally	7 (5.9)
God's will	7 (5.9)
Religious belief	4 (3.4)
Distance of maternity Services	3 (2.5)
No reason given	3 (2.5)
Healthy	2 (1.7)
Precipitate labour	1 (0.8)
Not aware	1 (0.8)
Fear of Episeotomy	1 (0.8)
TOTAL	119 (100.0)