

ORIGINAL RESEARCH ARTICLE

Community Perception of Maternal Mortality in Northeastern Nigeria

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ABSTRACT

This study was conducted to find out community's knowledge and perceived implications of maternal mortality and morbidity. The community members' perception on ways to prevent the scourge was also explored. It was a population- based qualitative study which took place in two urban and two rural communities in Borno state, Nigeria. A total of one hundred and sixty eight (168) community members participated in Focus Group Discussions (FGD) and in-depth interviews. Most agreed that there were maternal deaths in the communities. Many of the respondents identified at least two of the five main direct causes of maternal mortality that are universal. But many have misconceptions about the causes of maternal mortality. There were many implications narrated by the respondents and various suggestions made to improve on the poor Maternal Health in the areas. The knowledge and implications of maternal mortality was good in the areas and therefore intervention programs should exploit and capitalize on the linkages between the perceived implications and the causes of maternal deaths (*Afr J Reprod Health 2008; 12[3]:27-34*).

RÉSUMÉ

La perception de membres communautaires de mortalité maternelle au Nord-est du Nigeria Cette étude a été menée afin de rechercher la connaissance de la communauté et les implications perçues de la mortalité maternelle et la maladie. Les solutions/conseils des membres communautaires sur la prévention de la maladie ont été explorés. C'était une étude de qualité basée sur la population qui a eu lieu dans deux communautés rurales de l'Etat de Borno, au Nigeria. Un total de cent soixante-huit (168) membres communautaires ont participé dans un Groupe de Discussion Cible (GDC) et des interviews minutieuses. Plusieurs s'accordent sur l'existence des mortalités maternelles dans les communautés. Maints des défenseurs ont identifié au moins deux des cinq causes principales directes de la mortalité maternelle qui sont universelles. Mais plusieurs ont des idées fausses sur les causes de la mortalité maternelle. Il y a plusieurs implications narrées par les personnes interviewées et plusieurs suggestions ont été proposées pour améliorer les pauvres soins médicaux dans les régions. La connaissance et les conséquences de la mortalité maternelle a été bien dans les régions, ainsi, les programmes d'intervention doivent exploiter et tirer parti de liens entre les conséquences perçues et les causes des mortalités maternelles (*Afr J Reprod Health 2008; 12[3]:27-34*).

KEY WORDS: Community; Perceptions, Maternal mortality; Northeastern Nigeria

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Introduction

The issue of maternal deaths emerged as a world health concern through the United Nation's call for "Safe Motherhood" in the 1980's. Through "Safe Motherhood", education and advocacy on improving maternal health and reducing maternal deaths are to be the priority for governments' health care policy¹. Despite such advocacy, it appears that there has been little improvement in maternal health care delivery. Maternal mortality rates in many countries have remained essentially unchanged for 20 years². Countries in Africa may have actually lost ground³.

The world's maternal mortality ratio (the number of maternal deaths per 100,000 live births) is declining too slowly to meet Millennium Development Goal (MDG) 5 target; which aimed to reduce the number of women who die in pregnancy and childbirth by three quarters by 2015. While an annual decline of 5.5 per cent in maternal mortality ratios between 1990 and 2015 is required to achieve MDG 5, figures released by WHO, UNICEF, UNFPA and the World Bank show an annual decline of less than 1 per cent⁴. In Nigeria a population-based study indicated that maternal mortality ratio is worst in Northern Nigeria; an average staggering figure of 2,420 (ranging between 1,373 and 4,477) per 100,000 live was recorded in Kano state⁵. This figure is the worst world over. While the Northeastern region, which include Borno state, has an estimated maternal mortality ratio of 1,549 per 100,000 live⁶. This ratio is also one of the worst recorded in the world.

The member countries of the United Nations agreed to reduce maternal mortality by three quarter by the year 2015 as part of the Millennium Development Goals (goal number 5)⁷. To aid decisions on how to effectively reach that goal, that has so far shown poor progress, information on community members' perception on maternal mortality and morbidity are critical to show what improvements in health could be achieved, as these are key stakeholders. One of the greatest challenges facing the international public health community is creating sustainable interventions in countries where the needs are greatest. This proves especially difficult in the area of maternal health, as there are so many levels at which initiatives can be taken. Crucial to the success of programs is community ownership, and public-private partnerships to ensure long-term cooperation, support, funding and sustainability. And this can only be achieved by understanding the perception of the community members and the subsequent community sensitization and mobilization.

We examined community members' knowledge, perceived implications and solutions to maternal mortality with the view to understanding their perception, hence providing additional information on how to achieve Maternal Health related Millennium Development Goal. This paper provides policy makers and program managers with the necessary information to enable them evaluate how they can best achieve Millennium

Development Goal 5 as perceived by the primary stakeholders.

Study Area

The study was conducted in Borno state, Nigeria. Borno State occupies the greater part of the Chad Basin and is located in the Northeastern corner of Nigeria. The capital of the state is Maiduguri. Borno state covers an area of 69,436 sq kilometers and the Population of the state was 4, 151, 193⁸ and a population density of 70/sq. kilometer. The main languages spoken in the area include English (official), Hausa, Kanuri and Babur. Predominantly the inhabitants are Muslims.

Available statistics show that the reproductive health situations in Borno State is worst compared to any part of Nigeria. The Crude birth rate is 43.60 per 1,000, and maternal mortality ratio of 1,549 per 100,000 live births⁶, while total fertility rate is 7 per woman⁹. Proportion of women who deliver in Health Facility is 19.2%, percentage of women who receive antenatal care is 36.7% and percentage of women using any family planning method is 1.7%¹⁰

Methodology

This was a population-based qualitative study conducted between 22nd May 2006 and 22nd July 2006 in four communities of Borno state, Nigeria. Two Community based organizations (CBOs) were chosen in Borno state to conduct the research. The selected CBOs were chosen by a team of three consultants assigned for the research by

Development Research and Project Center (DRPC), Kano. The selection of the CBOs was based on their organizational profiles, especially their past research activities. Four local government areas in Borno state were chosen for the research, two were urban local government areas (Maiduguri Metropolitan and Jere) and the other two were rural local government areas (Magumeri, Gubio). This was to have a fair reflection of what were happening in both the rural and urban communities of the state.

In each of the local government areas, there were advocacy visits by the chosen CBOs to key stakeholders to introduce the project and solicit support. This was followed by training of the researchers on how to conduct the research and then the data collection in form of one-on-one in-depth interviews and Focus Group Discussions (FGD) with key stakeholders on maternal health and influential persons in the local government areas. Structured one-on-one in-depth interview and Focus Group Discussion guides were used for the collection of the data.

Before the commencement of each one-on-one in-depth interview and FGD session, the respondents were briefed on the subject matter permission were also obtained to capture the proceedings by video recorder, tape recorder and still-pictures. Each member of the Focus Group Discussions was given the chance to respond to each question before the subsequent question was posed.

Total of six Focus Group Discussions, (FGD) and ten one-on-one in-depth interviews were conducted in

each of the local government areas. The FGDs comprised the following groups:-

1. FGD with five (5) traditional Birth Attendants (TBAs)
2. FGD with five (5) women of Reproductive age (i.e. 15-45 years)
3. FGD with five (5) husbands (men)
4. FGD with seven (7) members of Community-Based Organizations working in the area of Maternal Health
5. FGD with seven (7) Primary Health care staff
6. FGD with two (3) traditional leaders

The one-on-one in-depth interviews were conducted with another 2 community leaders, 2 religious scholars and three each from women and men of reproductive age group. A total of one hundred and sixty eight (168) community members participated in the interviews. All participants were selected by the researchers; who were members of the selected CBOs and were trained. The interviews were conducted in the local languages (Kanuri and Hausa). All interviews were audiotape-recorded and extensive notes were taken during the interviews, and these were employed when the tapes were reviewed and transcribed.

Data Analysis

The information obtained was coded and transferred on to a profoma already designed for the study. Qualitative information was analyzed descriptively, paying attention to the issues and matters that were mentioned by the majority of

the respondents and capturing any unique experiences reported.

Results

Knowledge and Perception of maternal death in the communities

Most agreed that there were maternal deaths in the communities; however 5 respondents from Magumeri said they do not know if there were any maternal deaths in their community. And three from different communities said there was none. Unfortunately all the three that said there was no maternal death happen to be Traditional Birth Attendants (TBAs). Many identified eclampsia, prolonged labour and bleeding as causes of maternal mortality. More of the respondents identified at least two of the five main direct causes of maternal mortality that are universal. However their responses are grouped as follows

Causes of maternal death: communities' perceptions

1. **Medical:** Some of the medical causes of maternal mortality identified by many community members were eclampsia & hypertension; prolong labour; bleeding and fever.

2. **Socio-economic and Cultural:** The socio-economic and cultural factors acknowledged by the community were early marriage; poverty; malnutrition + hard working; husbands refusal to allow their wives to attend clinics; home delivery; frequent delivery; lack of attending antenatal services; illiteracy /ignorance; cultural factor; delay in seeking medical attention. Also some mentioned inadequate facilities and

health personnel; harassment from health personnel; non residency of health personnel and inaccessibility to health centers.

3. **Misconceptions:** Some respondents had misconception of the causes of maternal mortality as many mentioned Evil spirit. A traditional ruler felt that *“Lack of having sex after the onset of pregnancy can cause labour obstruction”*. Yet another traditional ruler suggested that *“Once a woman is pregnant she should not be given too much food, because it will cause the baby to grow big and she may not be able to deliver (the baby)”*. While a married woman declared that *“Mental stress and over ambitions will cause hypertension in some women as such they will die in labour because of the hypertension”*.

Implications of Maternal Mortality: Communities' Perceptions

Implications of maternal mortality identified included the following:

1. Psychological impact both on the husband and the child left behind. This was the response of most of the respondents. The psychological issues on the husband include stress of losing wife, difficulty in getting another wife akin to the one that died, and caring for the child or children left behind by the deceased. *“The husband is usually left in problem”* as indicated by a community leader; who was a victim of maternal death. He added *“I'm in it, my first wife died and left me with eight (8) children; as a result we are all in problems”*.

2. Lack of care to the child left behind by the deceased mother. This, the respondents said will result in poor

upbringing of the child leading to diseases, poverty, poor training, delinquencies such as stealing, drug abuse and other vices.

3. The task of getting another wife. This is because a lot of money is spent on marriage festivities

4. Unstable family, with rancor and misunderstandings.

Opinions as to what can be done to Reduce Maternal Mortality

Suggestions provided by the respondents on what can be done to reduce maternal mortality include: -

1. Government and community leaders to inform educate and sensitize people on maternal and child health. This according to them can be done through the mass media, advocacy to community and religious leaders, community sensitization and mobilization especially to the rural dwellers. Some stressed the need for educating and counseling husbands on not only allowing their wives to attend antenatal services, but also hospital delivery and early health seeking behavior when the need arises.

2. To the government, most respondents suggested prayers and good governance, especially they suggested for locating clinics closer to the rural dwellers, provision of free or cheap drugs, control of expired drugs and foods, limitation to TBA activities, to increase the number of qualified health personnel in government clinics, provision of basic equipments and poverty alleviation programs to be expanded to reach more poor rural dwellers.

3. To the health personnel, the respondents advised them to be more dedicated to their duties, show concern to their patients and to desist from harassing their patients.

4. To husbands and parents, the respondents advised them to provide good nutrition to their families, allow their wives to attend antenatal clinic and to deliver in the hospital, stop early marriage to their daughters and invest in girl-child education, practice child spacing and not to over work their wives, especially when they are pregnant.

5. To the women folk, the respondents requested them not to patronize traditional medicine sellers, to attend antenatal clinics and deliver in the hospital, avoid delay in seeking medical attention and to eat good food. One of the female respondents advised thus *“women should eat good food and stop packing worldly materials for fashion at the detriment of their health.....”*

Discussion

This study, as in other studies in Northern Nigeria, ^{11, 12} has pointed that the community's knowledge of maternal mortality is fairly good. However, one must stress the importance of community mobilization and advocacy as a good number of community members are having poor knowledge of maternal mortality or full of misconceptions. It is sad to discover some TBAs believing that there were no maternal deaths in their communities. This issue buttresses the phobia of some obstetricians on the role of TBAs in reducing maternal mortality in a given community. But since all of

the five TBAs were not trained, perhaps, training, re-training and meticulous monitoring and evaluation may help the situation. Otherwise the role of the TBAs will definitely negate achieving the Millennium Development Goal 5.

Eclampsia has persistently occupied the minds of people in our community as the leading cause of maternal mortality. Earlier institutional¹³ and community based¹⁴ researches have consistently given eclampsia as the leading cause of maternal mortality; as against the global leader, Obstetric haemorrhages. This emphasized the need for program managers and policy makers to have a base-line assessment of the community before planning and implementing an intervention programs in any given community.

Obstructed labor continues to be a common and serious medical problem, with thousands of women suffering significant morbidity each year. The knowledge of such labor complication was clear to most members of the communities studied. This may point to the high prevalence of the menace in the communities and probably one of the reasons of very high prevalence of vesico-vaginal fistulas in Northern Nigeria. Therefore, as preventive measure of preventing the scourge of vesico-vaginal fistulas, interventions should focus primarily on preventing and prompt management of obstructed labor. Since the community members were aware of obstructed labor, interventions programs should focus on enlightening the communities on ways of preventing or early management of obstructed labor.

This will assist not only in preventing prolonged labor but also in reducing the high incidences of morbidities, such as the vesico-vaginal fistulas.

Almost all the respondents mentioned one or more implications of maternal deaths in the communities. These identified implications can be utilized to intensify campaigns on reducing maternal mortalities and morbidities. Emphasis on these implications will surely convince husbands; that have over-whelming control on the women's activities and minds, to allow their wives to attend antenatal care services and deliver in the hospital. In these communities studied, only 37% and 11% of women attend antenatal care services and deliver in the hospitals respectively¹⁰.

Since most of the respondents were aware of the implications of maternal mortality, the obvious thing required, is to educate the community members on the linkages between the implications of maternal mortality and solutions to reducing the maternal mortality; and hence reducing the consequences/implications of the maternal deaths.

In conclusion, this study has demonstrated that maternal mortality and morbidity is common and well known to the communities studied, the implications of the maternal deaths well appreciated and the communities' perception of the solutions very clear. What is paramount now, to achieve the Millennium Development Goal 5 by the year 2015, is to convince the community members on the need for early health seeking behaviour, clear some misconceptions

about causes of maternal mortality and importantly the need to involve the community members in planning and managing intervention programs. Also the community members' perceived solutions to the maternal deaths will not only provide good community-provider relationships but also sustained community ownership of designed intervention projects.

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References

1. Rosenfield A. The history of safe motherhood initiatives – introductory remarks. *Int J Gynecol Obstet.* 1997, 59 (2)7-9.
2. UNPFA, Update 1998-1999, Maternal Mortality.
3. WHO. "Pregnancy-Related Death Rates Remain High in Developing World," *Bulletin of the World Health Organization*, 2001.
4. Lale S, Mie I, Samuel M and Emi S. Mortality in 2005: estimates developed by WHO, UNICEF, UNFPA and the World Bank. Geneva: WHO; 2007 pp 15-17

5. Yusuf MA, Pattern of Maternal Morbidity and Mortality in Kano State: A geographical analysis. *J Soc Mgt Science*. 9 (special edition) 2005, 196-221.
6. National Population Commission (Nigeria). 2004. Nigeria Demographic and Health Survey 2003. MD: National Population Commission and ORC/Macro, p 51-60
7. Millennium Project, Interim Report of Task Force 4 on Child and Maternal Mortality, available at: <http://www.unmillenniumproject.org/html/tf4docs.shtm>.
8. Federal Office of Statistics. National Population census, Est., Federal Office of Statistics Abuja, Nigeria, 2006
9. National Population Commission (Nigeria). 2000. Nigeria Demographic and health survey 1999. Calverton, Maryland. National Population Commission, pp 35-43.
10. UNFPA Reproductive Health and Gender indicators: Baseline Survey of UNFPA assisted states in Nigeria 2004. UNFPA 2005.
11. Lawoyin TO; Olusheyi OC; Adewole, D. Men's Perception of Maternal Mortality in Nigeria. *Journal of Public Health Policy* (2007) 28, 299-318
12. Zubairu I; Mairo UM; Aliyu TM. Community Leaders' Perception of Reproductive Health Issues and Programmes in Northeastern Nigeria *Trop J Obstet Gynaecol* Vol.21(2) 2004: 83-87
13. MB Kawuwa, AG Mairiga, HA Usman. Maternal mortality: Barriers to care at the health facility – workers perspective. *J. Obstet. Gynaecol*, 2006, 26 (6): 544-545
14. Adamu YM, Salihu HM, Sathiakumar N, Alexander GR. Maternal Mortality in Northern Nigeria: a population-based study. *Eur J Obstet Gynecol Reprod Biol*. 2003 Aug 15; 109 (2): 153-9.