Safe Motherhood

Causes of maternal mortality in a semi-urban Nigerian setting
Jasper Chiwuzie, Suleiman Braimoh, Jacob Unuigbe, & Patience Olumeko

Focus group discussions with people in Ekpoma, Nigeria, revealed them to be quite knowledgeable about haemorrhage in pregnancy and delivery. However, because of their inability to recognize early warning signs they continued traditional treatment even when clear evidence of danger existed. Furthermore, they tended not to seek help in clinics and hospitals because of sociocultural conditioning and a negative perception of the quality of care available. There were shortages of materials and adequately trained and committed personnel in the modern health institutions serving the community. An outline is given of the kinds of intervention needed in order to overcome these deficiencies.

Maternal death is the death of a woman while pregnant or within 42 days after the termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management (1). Globally every year over half a million women die in pregnancy and childbirth (2), nearly all of them in the developing world. The commonest medical causes of maternal death are haemorrhage, severe complications of hypertension in pregnancy, infection, obstructed labour and unsafe abortion.

Maternal mortality is largely preventable

Even though 15% of pregnant women in the developed countries experience complications, rapid intervention minimizes fatalities and maternal mortality is up to 200 times lower than in the developing world (3). For many women in sub-Saharan Africa the nearest obstetric care centre is several days’ travel away from where they live.

The high level of maternal mortality in developing countries stems from a complex array of factors: in addition to the inadequacy of health services there may be social, cultural, economic and logistical problems, coupled with very high fertility. In Africa the average number of live births per woman is 6.4, and in rural areas it is quite common for a woman to have given birth to eight live babies and to have been pregnant on several more occasions. These women have a lifetime risk of at
least 1 in 15 of dying from pregnancy-related causes. By and large such women, having been neglected as children and married when adolescent, are poor, illiterate, underfed, overworked, subjected to harmful traditional practices, and denied social equality with men; they usually lack adequate family planning and maternal health services and cannot get their views heard where they matter (4).

A multidisciplinary team was set up in the University of Benin, Nigeria, to look into ways of dealing with pregnancy-related complications that often lead to maternal deaths. The project, whose ultimate aim was to reduce maternal mortality caused by haemorrhage, was based in the semi-urban community of Ekpoma, situated some 80 kilometres north of Benin City. It was undertaken only after a strong rapport had been established with the traditional ruler of Ekpoma, the heads of the 13 villages comprising the Ekpoma Clan, opinion leaders and members of the community in general. In order to understand the factors responsible for preventing or delaying effective care and treatment for women with pregnancy-related complications the following areas were selected for study.

- The knowledge, attitudes and practices in the general community relating to haemorrhage during pregnancy and delivery and to maternal mortality caused by haemorrhage.
- Traditional obstetric care for haemorrhage during pregnancy and delivery, including the knowledge, attitudes and practices of traditional birth attendants.
- The number, location, type, geographical distribution and accessibility of modern health institutions.
- The manpower, facilities and quality of care available in these institutions.

The first two areas were tackled by holding focus group discussions, the others by visiting the institutions.

Community influences

Fifteen focus group discussions involved samples of community members stratified by age, sex, educational level and occupation. Separate sessions were organized for traditional birth attendants. A female sociologist and a retired male schoolteacher, both trained for the purpose, acted as facilitators for the female and male groups respectively. The discussions were recorded on cassette, transcribed, translated into English and eventually analysed.

Although the people had a degree of general knowledge about the dangers of haemorrhage during pregnancy and delivery and of the possibility of maternal mortality caused by haemorrhage, the following factors resulted in women failing to benefit fully from modern obstetric care.

- There was a lack of knowledge of the warning signs and risk factors of haemorrhage during pregnancy and delivery, and of the potential danger of bleeding after delivery.
- Certain food taboos were potentially disadvantageous for pregnant women.
- A belief existed that some cases of haemorrhage in pregnancy and delivery could be caused by supernatural forces.
- There was a lack of knowledge about when to seek help in modern obstetric health institutions.
There was a tendency to continue relying on the care provided by traditional birth attendants even when haemorrhage developed.

Transportation difficulties occurred.

There were negative perceptions of the quality of care provided in modern obstetric institutions, relating in particular to:
- bureaucracy;
- lack of drugs and other supplies;
- nonfunctioning equipment;
- absence of doctors, especially at night;
- apparently unfriendly attitude of staff towards patients.

Referral from one level of care to another was not well organized.

Institutional influences

The community was served by 14 modern health institutions: two state-controlled general hospitals, one at Iruekpen and the other at Ubiaja, three maternity centres controlled by local government, a dispensary, and eight private clinics/maternity centres. The five public institutions collaborated in a hierarchically structured system of obstetric care, with the local government maternity centres at the primary level, the general hospital at Iruekpen, on the outskirts of Ekpoma, at the secondary level, and the zonal general hospital at Ubiaja, some 60 kilometres away, at the tertiary level. The main problems associated with this structure were as follows.

The hospitals at Iruekpen and Ubiaja were a long way from the areas in which their patients resided and the means of transportation were inadequate and, in most cases, too expensive for the people concerned.

The Iruekpen hospital and the primary centres were not adequately staffed for essential obstetric functions throughout the day and night. Only the tertiary referral hospital had a well-trained obstetrician available at all times for handling obstetric emergencies.

None of the institutions had adequate supplies of instruments and other items for carrying out essential obstetric functions and handling emergencies.

The private institutions, whose main raison d'être was, of course, economic, were fairly uniformly distributed in the community but it was difficult to evaluate the skills of their owners and the quality of their equipment. It was considered that the standards of practice in these clinics was, at best, comparable with those in the secondary referral hospital.

Maternal mortality rates in Nigeria are among the highest in the world, ranging from 800 to 1500 per 100,000 live births (4). The present study clearly indicates that a wide range of factors is responsible for this situation. An even worse picture would undoubtedly be revealed in rural areas, particularly those that are riverine, mountainous or subject to severe erosion.

The modern obstetric services available in Ekpoma were inadequate for anything beyond routine antenatal care. Shortages of skills and essential tools, and a lack of commitment on the part of health workers, tended to reinforce traditional sociocultural beliefs and practices. In these circumstances it
was hardly surprising that pregnant women generally preferred to visit traditional birth attendants and healers, who were comparatively accessible and affordable, whose

services were readily available at all times, and whose practices were culturally more acceptable than those of the institutions.

There were clearly problems at all levels. In the community there were attitudes, perceptions and practices which could prevent or delay the decision to use modern obstetric services. Where this decision was taken, difficulties of transportation frequently arose. In the institutions, the attitudes and skill levels of staff, and the paucity of working materials, discouraged pregnant women.

In order to overcome these deficiencies, well-planned interventions are needed, among them the following.

- An effort should be made to educate the people, in particular the women, about the warning signs of haemorrhage during pregnancy and delivery and the dangers of not seeking the necessary care early enough.

- Conditions should be improved in the obstetric institutions: equipment should be repaired or replaced as necessary, drugs and other supplies should be provided in sufficient quantity, and health workers’ skills should be improved by organizing seminars and workshops.

- All staff should be made aware of the importance of adopting a friendly attitude towards their patients.

When changes have been effected in the modern health care institutions the community should be informed of this through the traditional ruler, the village chiefs and the leaders of opinion. The measures taken should be monitored and evaluated in order to ensure effectiveness and discover whether they reduce maternal mortality caused by haemorrhage or, if necessary, why they do not achieve this goal.

Acknowledgements

The authors gratefully thank the Carnegie Corporation of New York for funding the project on which the present article is based. They acknowledge the invaluable contribution made by the Prevention of Maternal Mortality Network technical assistance team from Columbia University, New York City. Special thanks go to Ms Deborah Maine, Ms Angela Kamara and Dr James Allman for their help.

References