The Challenges of Saving Mothers from Childbirth-Related Injuries and Deaths in Nigeria

Dr Godswill James

Department of Sociology, Kaduna State University, Kaduna, Nigeria
E-mail: godswillz@yahoo.com

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Abstract

Nigeria's national maternal mortality rate is estimated at 545 per 100,000 live births in 2008. Despite the decrease compared to previous rate of 800 per 100,000 live births in 2005 it is still high, and presents a picture of maternal health status of the country. Nigerian government has embarked on programmes to reduce maternal mortality such as, Midwife Service Scheme (MSS) aimed at achieving the fifth Millennium Development Goals (MDG) for increased maternal health and survival. However, the achievement made so far is low as annual percentage decline in maternal mortality ratio from 1990-2008 was 1.5% compared to the targeted 5.5%. In addition, maternal deaths and lifetime risk is high as a woman's chance of dying from pregnancy and childbirth in Nigeria is 1 in 13, while it is 1 in 5000 in developed nations. Against the backdrop of the worsening state of maternal health in Nigeria, this paper examines the crucial challenges militating against efforts at saving mothers from childbirth-related injuries and death in Nigeria. Relying mainly on secondary data, the author contends that maternal health is a function of significant and complex underlying interaction of socio-cultural and environmental factors. It is argued that socio-cultural context within which Nigerian people live affects their ideas, decisions and behavior concerning maternal deaths; it affects what people know about pregnancy and delivery, what preparations they make and what they do about life-threatening complications and it ultimately poses challenges on maternal health in Nigeria.

Key Words: Maternal Health, Injuries, Deaths, Challenges, Nigeria, Maternal mortality and morbidity

1. Introduction

Conceptually, maternal mortality refers to the death of a woman while pregnant or within 42 days of termination of pregnancy from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes. It includes deaths resulting from complications of pregnancy or childbearing as well as deaths due to complications of spontaneous or induced abortions. Mortality ratios range from lows of 6 to 12 maternal deaths per 100,000 live births in developed countries such as Norway, Canada, Britain, and the United States, to ratios higher than 870 maternal deaths per 100,000 live births in Africa (WHO, 1996). Although between 600,000 and one million women die each year from childbirth-related causes, only 1 percent of these deaths occur in industrialized countries (Abou-Zahr and Royston, 1991; WHO, 1996; Weinstein, 1997). The vast majority of maternal deaths take place in the cultures of tropical poverty, particularly in Africa; this continent account for 40 percent of the world's maternal deaths. The lifetime risk of a woman dying in childbirth in Scandinavia has been estimated to be as low as one in 25,000; in rural Africa, however, the risk may be as high as one in eight due to the combination of high fertility, complicated pregnancies, and poor access to health care (Abou-Zahr and Royston, 1991; WHO, 1996).

The International Conference on Population and Development (ICPD), held in Cairo in 1994, the Fourth World Conference on Women (Beijing, 1995) and the Safe Motherhood Technical Consultation (Colombo, 1997) have helped to focus international attention on the need for accelerated action to reduce maternal mortality, which can be achieved with relatively small investments. These conferences repeated the World Summit for Children (WSC) call to reduce maternal mortality by half.

National Demographic and Health Survey (NDHS), 2008 estimated the national maternal mortality rate at 545 per 100,000 live births. Despite the decrease compared to previous rate of 800 per 100,000 live births in 2005 it is still high, and presents a picture of maternal health status of Nigeria. Nigerian government embarked on programmes to reduce maternal mortality such as, Midwife Service Scheme (MSS) aimed at achieving the fifth Millennium Development Goals (MDG) for increased maternal health and survival. However, the achievement made so far is low as annual percentage decline in maternal mortality ratio from 1990-2008 was 1.5% compared to the targeted 5.5%. In addition, maternal deaths and lifetime risk is high as a woman's chance of dying from pregnancy and childbirth in Nigeria is 1 in 13, while it is 1 in

5000 in developed nations (UNICEF/WHO/UNFPA/World Bank, 2008; Federal Ministry Of Health/National Primary Health Care Development Agency/Midwives Service Scheme, 2009). In Kaduna State, northern Nigeria for instance, Idris *et al* (2010) in a study on estimation of maternal mortality ratio in three rural communities revealed that the maternal mortality ratio was 1400 per 100,000 live births, a figure that is above the national average of 545 per 100,000 live births. The final report document of Partnership for Transforming Health Systems (PATHS, 2008) titled "reforming Kaduna's health reform agenda" revealed that mothers died frequently from complications of pregnancy and childbirth such as anemia, obstetric hemorrhage, obstructed labor, sepsis and other reproductive health problems. To this effect, Nigeria's progress towards improving maternal health is insufficient.

Maternal death is tragic, most especially because it is preventable in nearly all cases; but the maternal mortality ratio measures only one facet of obstetric outcome. Maternal morbidity (that is, non-fatal diseases and illnesses, injuries, and disabilities associated with pregnancy and childbirth), often have devastating social and physical consequences with an impact greater than maternal death. For each woman who dies as the result of pregnancy complications in less developed countries, as many as 20, 40, or even more women sustain serious injuries, debilitating injuries (Koblinsky et al., 1993; Weinstein, 1997). As with maternal mortality, the burden of maternal morbidity rests largely on the women of the less developed, non-industrialized societies of the world; and as maternal mortality, the problem of obstetric morbidity in less developed countries has been largely ignored by the international community (Fortney and Smith, 1996). There are great disparities between the developed and less developed world in the area of maternal health, leading to the assumption that maternal injury in childbirth is the single largest unaddressed issue in women's health care worldwide (Wall, 1996). The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. Proper care during pregnancy and delivery is an indicator of the status of maternal and child health in the society. This article, therefore examines the challenges of saving mothers from injuries and death associated with pregnancy and childbirth in northern Nigeria.

2. Assessment of Maternal Health Situation in Nigeria

Given the discussion so far, it would be imperative to pose the question, what is the current maternal health situation and what is it tending towards? Table 1 presents maternal mortality ratio in selected areas of Nigeria between 1998 and 1999. The data are based on the Multiple Indicator Cluster Surveys (MICS) conducted by the Federal Office of Statistics (FOS) in 1995 and 1999, as part of the global initiative supported by UNICEF to measure progress towards the goals for the year 2000 set by the WSC in 1990.

The principal indicator of mortality among women is the maternal mortality ratio (MMR), which is the number of maternal deaths per 100,000 live births. The 1999 Multiple Indicator Cluster Survey (MICS) estimated a national MMR of 704 per 100,000 live births (Table 1). This was below National Programme of Action for the Survival, Protection and Development of the Nigerian Child (NPA) goal of 900 per 100,000 live births, but the unavailability of nationwide survey-based estimates for earlier periods makes it impossible to draw any conclusions about trends (NPC and UNICEF, 2002). However, the MICS revealed that there are huge urban/rural and zonal disparities in the MMR.

Table 1: Maternal mortality ratio in selected areas of Nigeria, 1998-99

Location	MMR (per 100,000 live births)	Source
National	704	MICS 1999 (FOS/UNICEF, A-2000)
South West South East North West North East	165 286 1,025 1,549	MICS 1999 (FOS/UNICEF, A-2000)
Urban Rural	351 828	MICS 1999 (FOS/UNICEF, A-2000)
Jos, Plateau State Kano, Kano State Ilorin, Kwara State Anambra State Calabar, Cross River State Ilesha, Osun State Lagun, Oyo state	1,060 3,295 380 380 1,620 285 227	Ujah et al, G-1999 Onwuhafia et al, G-1995 Aboyeji et al, G-1992 Chukudebelu et al, G-1988 Etuk et al, G-1997 Ogunniyi et al, G-1991 Lawoyin, G-1997

Source: National Planning Commission (NPC), Abuja, and UNICEF Nigeria, 2001, p.291

As Table 1 shows, maternal mortality is more than twice as high in the rural areas (828 per 100,000 live births) than in the urban areas (351 per 100,000 live births). The North East is the zone with the highest MMR (1,549 per 100,000 live births), which is almost ten times higher than in the South West. The rate in the North West (1,025 per 100,000 live births) is six times higher than in the South West.

Since 1974, a number of programmes aimed at improving the health of mothers and children in the world and Africa in particular have been established. In 1974 the Expanded Programme on Immunization (EPI) was put in place to immunize children against six preventable childhood killer diseases and later extended to pregnant women. This was closely followed by the Primary Health Care (WHO, 1978) strategy for the development of health care. This scheme has as one of its focus, maternal and child health which is to be executed at the local (primary) level. The MCH focus under this scheme is due to the realization of the enormous health implication which children entails and the death toll attendant in an environment where little or no facilities are available for the maintenance of mothers and their newborns (Turmen, 1993; Ching-Li, 1993). Other programmes worthy of mention are the Safe Motherhood Baby Package (1987) and the baby-friendly hospital initiative (1991).

Evidently, efforts have been made in Nigeria but the spirit or the governing ethos is shrouded by health development. The structure and the development pattern initiated under the colonial masters have largely remained while the obvious fact of the inevitable utility of the traditional structures is becoming manifest. This can be buttressed by the fact that traditional health care practices that were discredited previously are now being adopted and is playing a significant role in maternal and child health in Nigeria. The WHO (1976) has recognized and promoted the idea of the training of traditional medicine men as an effective means of extending the frontiers of health care and the cornerstone of PHC in the developing world. The baby-friendly hospital initiative is also another case in point, which suggests the African depending syndrome. Not until any subject is promoted by the developed world, African elite and government do not take it seriously due largely to the fact that these programmes have foreign aids tied to them which are of interest to African elite and government (Donahue and Mcquire, 1995).

Obviously, the international agencies, on the average, have contributed tremendously to the improvement and the quality of MCH in Nigeria and many other African countries. However, significant as these improvements may appear, they are still a long way from what obtains in the developed world, where under five mortality rate is put at 9 per 1000 while maternal mortality is 7 per 100, 000 (UNICEF, 1996).

Generally, modern health care during pregnancy, delivery, and in the period after the baby is born includes antenatal care, assistance during delivery, and postnatal care.

2.1. Antenatal Care

The newest or updated WHO approach to promote safe pregnancies, called Focused Antenatal Care (FANC), recommends at least four ANC visits for women without complications, and emphasizes quality of care during each visit instead of focusing on the number of visits. The major objective of antenatal care is to ensure optimal health outcomes for the mother and the baby. Early detection of problems during pregnancy leads to more timely treatment and referrals in the case of complications. This is particularly important in less developed countries where physical barriers are a challenge to the health care delivery system. Antenatal care from a trained or skilled health worker or provider is important to monitor the pregnancy and reduce morbidity risks for the mother and child during pregnancy and delivery.

Antenatal care provided by a skilled health worker enables: 1) early detection of complications and prompt treatment (for example, detection and treatment of sexually transmitted infections); 2) prevention of diseases through immunization and micronutrient supplementation; 3) birth preparedness and complication readiness; and 4) health promotion and disease prevention through health messages and counseling of pregnant women (NPC and ICF Macro, 2009).

According to the World Health Organization (WHO), a skilled health worker is “an accredited health professional, such as a midwife, doctor, or nurse, who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, child births and the immediate post-partum period, and in the identification, management, and referral of complications in women and newborns” (WHO, 2008).

However, the NDHS 2008 reported that 58% of women age 15-49 received antenatal care (ANC) from a skilled provider (doctor, nurse/midwife, or auxiliary nurse/midwife) during their last pregnancy, implying that a large proportion of women in Nigeria are either receiving ANC services from unskilled providers or not receiving at all. Moreover, tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus. Overall, less than half (48%) of last births in Nigeria were protected against neonatal tetanus (NPC and ICF Macro, 2009).

2.2. Assistance during Delivery

An important factor in reducing maternal death and morbidity is increasing the number of births delivered in health facilities. The expectation is that if a complication arises during delivery, a skilled health worker can manage the complication or refer the mother to the next level of care. In addition to place of birth, assistance during childbirth is an important variable influencing the birth outcome and the health of the mother and infant (NPC and ICF Macro, 2009). The skills and performance of the person providing assistance during delivery determine whether complications are managed and hygienic practices are observed. Again, the report of NDHS 2008 indicated that only 39% of births in the five years preceding the survey were assisted by a skilled health worker (doctor, nurse, midwife, or auxiliary nurse/midwife). In the absence of a skilled health worker, a traditional birth attendant (TBA) was the next most common person assisting a delivery. Slightly more than one-third of births in the five years before the survey were delivered in a health facility (35%); almost two-thirds (62%) of births occurred at home, 22% of which were assisted by a traditional birth attendant (TBA) and 19% by a relative. About 19% of births had no assistance at all (NPC and ICF Macro, 2009).

2.3. Postnatal Care

A large proportion of maternal and neonatal deaths occur during the first 24 hours after delivery. It follows that prompt postnatal care is important for both the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. It is recommended that all women receive a health check within three days of giving birth. Generally, the practice of postnatal care is reportedly poor and far from expectation because very few mothers visit health facilities after delivery especially in rural areas. A lot of mothers still consider a return to clinics after safe delivery unnecessary. For instance, the NDHS 2008 report showed that less than half (42%) of mothers received a postnatal check-up for the most recent birth in the five years preceding the survey, with 38% having the check-up within the critical 48 hours after delivery. This implies that a large proportion of women do not receive any postnatal care in Nigeria.

3. Socio-Cultural Challenges of Maternal Health in Nigeria

The socio-cultural context within which Nigerian people live affects their ideas, decisions and behavior concerning maternal deaths. It affects what people know about pregnancy and delivery, what preparations they make and what they do about life-threatening complications. The available opportunities, the role models, the reinforcement contingencies that further shape behaviors, the social norms, the perceptions, the beliefs, attitudes and values of an individual are most influenced by his social environment, which affects his/her behavior.

3.1. Beliefs and Values

Within the boundary of Nigeria, there are many social groups with distinct cultural traits, which are reflected in the diverse behaviors of people. For instance, in northern Nigeria, particularly among the Hausa-Fulani, childbirth is associated with *kunya*, a custom which implies a complex feeling of shy and modest behaviors pertaining to pregnancy and childbirth, and avoidance of relations between prescribed categories of kin. *Kunya* prescribes that one disguises signs of pregnancy and labor pains. This behavior may result in problems if the woman in labor has complications as in the case of prolonged labor which could deteriorate if there is no medical intervention. Furthermore, in parts of southern Nigeria, prolonged or obstructed labor is taken to be a sign of the woman's infidelity. Obstructed labor is thus interpreted as punishments for adultery and not recognized as medical problem. Culture demands that such a woman must "confess her sins" so that delivery may progress smoothly and safely, thus preclude the decision to seek medical care for the complications.

Generally in Nigeria, some culture expect women to deliver in solitude and to show stoicism during labor; when she is in labor she goes into a room herself, and manages to deliver without calling for assistance until the baby is born. Such a woman is especially esteemed. Childbirth, thus, represents a rare opportunity for a woman to demonstrate courage and bring honor to both her family and that of her husband by stoic demeanor during labor and delivery. Hospital delivery on the other hand, denies a woman privacy and opportunity to demonstrate courage, as well as prevents her from choosing delivery position. These explain partly low proportion of delivery in health facilities and assisted by skilled health worker.

3.2. Status of Women

Essentially, the status of women in Nigerian society is low and this, to some extent, has implications for maternal mortality. Women's status is a composite indicator of the educational, cultural, economic, legal and political position of women in a given society. In Nigeria, women do not decide on their own to seek care, the decision belongs to a spouse or to senior members of the family. Furthermore, women's mobility is limited in certain areas because they must be permitted to travel. Often, this permission must be granted by the spouse or the mother-in-law. In northern Nigeria in particular, women are required to live in seclusion (*Purdah*) and are not allowed to leave the confines of the family compound. These compounds are surrounded by high walls which block out even the neighbors. When labor or complication arises, permission from the husbands has to be obtained in order to seek care. In fact in some cases, no matter how obvious the need for hospital management becomes for the girl who develops obstructed labor, permission to leave home for hospital can usually be given only by the husband, if he happens to be away from home, those present are often unwilling to accept such responsibility.

Nigerian society also expects and demands women to produce children (and as many as possible), bear sole responsibility for the household chores and help in farm work. This makes women to overwork and over work affects health of pregnant women. Related to this is the societal permissiveness of wife battery. Studies confirm that violence during pregnancy leads to miscarriages (i.e. spontaneous abortion), low birth weight, infant and maternal morbidity; women who suffered violence during pregnancy were two times more likely than other women to have spontaneous abortion and four times much likely to give birth to a baby of low weight (Jejeebhoy, 1998).

3.3. Socio-cultural Practices

Some socio-cultural practices with negative consequences on maternal mortality and morbidity in Nigeria include early marriage and female circumcision otherwise known as female genital mutilation. The risk of dying from pregnancy and childbirth related causes is very high for adolescent girls. Maternal rates for women ages 15 to 19 years are twice as high as women in their 20s. This is because young adolescent girls are not well developed physically (have not reached their full height or achieved their full pelvic size), neither are they prepared emotionally and mentally for the responsibility and realities of life. In spite of this, in some Nigerian communities, young girls are betrothed and married at very young ages (ranging from birth to fourteen years) and taken to live with their husbands who are usually older men (James, 2010). When these girls become pregnant, they are faced with reproductive health problems associated with the immature development of the reproductive organs, such as ruptured uterus, obstructed labor, Vesico Virginal Fistulae (VVF), Rector Vaginal Fistulae (RUF). All these have implications for the physical, mental and social health of the girls (CONNOHPD, 1993).

On the other hand, female circumcision, the traditional practices in which part or whole of the female genital are cut or scrapped, can also endanger women's reproductive health and lead to maternal death. The practice which sometimes involves the stitching together of the vulva, usually by unskilled person, has four operations, namely (i) Circumcision, (ii) Excision, (iii) Infibulations, and (iv) Introcision, all of which involve the removal of part of the genetalia. The health problems associated with female genital mutilation which may occur during pregnancy or soon after delivery include shock, infection, tetanus, septicemia (blood poisoning), and hemorrhage and urine retention, which are capable of leading to obstructed labor and death.

3.4. Attitudinal Factors

Attitude toward operative delivery in Nigeria is very low and this has implications for maternal mortality. Every pregnant Nigerian woman wants to have a baby delivered normally. Even when things go wrong and operative delivery becomes necessary to save their lives, the extent to which some of our women will go to avoid operative delivery is truly astonishing. Permission for such operation will be deliberately delayed with the hope that during the period of delay, normal delivery will take place, making operative delivery unnecessary. Persuading some women to accept operative delivery at times takes a whole day or even more, thus risking her life and the baby's life as well. This explains why only 2% of births in Nigeria are delivered by a caesarean section (NPC and ICF Macro, 2009).

3.5. Socio-economic and Health Status

Maternal mortality rates are higher among groups of low economic status. Economic status is defined and measured in a variety of ways and it commonly includes income and occupation. Income constraints and characteristics of the health

care facilities serving the poor may discourage use, including poor quality of care, physical and institutional accessibility barrier. Indeed, multiple socio-economic factors lead to the death of many mothers in Nigeria. Many women dying in childbirth started on the "Road to Death" from early childhood, having been born into a socially disadvantaged family and community. They then progress along the road by engaging in uncontrolled fertility including high-risk pregnancies. They developed life-threatening complications which were inadequately addressed by community-based services or the referral hospital, and so they died. Such deaths are not unconnected with their low status in society. In essence, a woman does not die just because she has a post-partum hemorrhage, for example. She dies because she does not receive adequate or timely medical treatment of the hemorrhage. To go further back, the hemorrhage may have been caused by having had too many children. In turn, she may have wished to stop childbearing but either not known about modern contraception or not had access to family planning services. Finally, her lack of knowledge about or access to family planning and medical services may have been due to the fact that she was illiterate and lived in a poor, rural area with few roads. Furthermore, a woman dies not only due to the bleeding from placenta previa she had, but because the health facilities where she was taken to did not have sufficient blood (or bank) for transfusion. The clinician was not there when she arrived so she had to wait for surgery after she had traveled for hours to reach the hospital. An efficient communication and transportation system, fully equipped, efficient and well staffed hospital could have averted this tragedy. Indeed, this is the tragedy of many women in Nigeria society.

Similarly, maternal mortality rates are higher among those of low educational status. Education status may be measured by the levels of formal educational attainment namely primary, secondary, and tertiary as well as knowledge of basic health education. The importance of education to maternal health cannot be overemphasized. For instance, education of women during prenatal care is intended to give pregnant women the knowledge to help themselves have a successful and healthy pregnancy. Dietary advice, for example, is intended to include anemia, education about hygiene to reduce exogenous infection, and education about danger signals during pregnancy to encourage prompt treatment of developing complications. Furthermore, education increases self-confidence and imparts respect and influence. Thus, educated women can successfully challenge traditional authority structure, and introduce innovative health concepts and practices. Educated women's experience with the staff at a health facility may be more favorable than that of the uneducated women as health providers tend to treat educated women with more consideration.

From feminist perspective, maternal mortality is associated with continuous gender bias and inequality in the design and implementation of social policies. This has been termed "apartheid of gender", which is explained as systematic marginalization of women's low status in all sphere of life leading to deprivation of their full potentials. They include such issues as access to education, non-participation in decision making in and out of the household, as well as poor feeding which is responsible for the high prevalence of anemia especially during pregnancy. Furthermore, there is lack of autonomy in sexual relationship, poor access to health facilities, limited access to paid employment and progressive traditional practices such as early marriage and genital mutilation, etc. All these expose women to higher risk during pregnancy in Nigeria.

4. Conclusion

It is obvious from the foregoing that there are myriads of crucial challenges militating against efforts at saving mothers from childbirth-related injuries and death. Indeed, maternal health is a function of significant and complex underlying interaction of socio-cultural and environmental factors. Thus any interventions or policies aimed at improving maternal and child health in Nigeria must recognize the crucial role of socio-cultural factors.

5. Recommendations

- Innovative engagement with political, religious leaders and community groups needs to be fostered through sensitization and sustained advocacy to remove constraints and barriers to accessibility of maternal health care in Nigeria. This may also include greater engagement of civil society organization and the private sector.
- There is also the need to engage in aggressive public enlightenment on the rights of women and children, and the advantages to be derived thereof.

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