Chapter

Preventing Maternal Mortality during Childbirth: The Scourge of Delivery with Unskilled Birth Attendants

Omosivie Maduka and Rosemary Ogu

Abstract

The death of a woman during childbirth is devastating. The Sustainable Development Goals aim to reduce the global maternal mortality ratio to less than 70 per 100,000 births. No country is expected to have a maternal mortality ratio of more than twice the global average. In settings with weak health systems and sub-optimal service delivery, more and more women continue to utilize traditional birth attendants during childbirth. Traditional birth attendants are unskilled and unable to prevent or treat the complications during pregnancy or childbirth that leads to maternal deaths. Every effort must be made to prevent maternal mortality. This chapter utilizes qualitative research methodology and discusses the challenges of preventing maternal deaths in a setting where women routinely utilize traditional birth attendants. The reasons for the persistence of the traditional birth attendants are examined. A solution out of the predicament is fundamental.

Keywords: childbirth, maternal mortality, traditional birth attendant, skilled birth attendant, Nigeria

1. Introduction

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. While motherhood is often a positive and fulfilling experience, for too many women, it is associated with suffering, ill-health and even death. Maternal mortality is the death of a woman during pregnancy and within 42 days of delivery irrespective of the gestational age and site of the pregnancy. Maternal mortality ratio is the number of maternal deaths per 100,000 live births while maternal mortality rate is the number of maternal deaths per 100,000 women of reproductive age. The maternal mortality ratio is a key performance indicator for efforts to improve the health and safety of mothers before, during, and after childbirth per country worldwide. 94% of all maternal deaths occur in developing countries [1].

With almost 200 million inhabitants, Nigeria is Africa's most populous country. Nigeria is also the country where nearly 20% of all global maternal deaths happen. Between 2005 and 2015, it is estimated that over 600,000 maternal deaths occurred in Nigeria [2]. To enable reduction of maternal mortality worldwide, maternal mortality reduction in Nigeria must be tackled.

The Sustainable Development Goals (SDGs), aimed at transforming our world through the 2030 Agenda for Sustainable Development," are an intergovernmental set of 17 aspiration Goals with 169 targets [3]. The United Nations in 2015 committed to accelerating the progress made in reducing newborn, child and maternal mortality by ending all such preventable deaths before 2030. This commitment aimed at ensuring universal access to sexual and reproductive health-care services, including for family planning, information and education. By 2030, the UN SDG target is to reduce the global maternal mortality ratio to less than 70 per 100,000 live births. This is largely impossible in the face of the weak health systems operational in developing countries. Urgent strides must be made if the goals are to be attained in countries with weak health systems.

Health systems. A health system, sometimes referred to as healthcare system, is the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations. A good health system delivers quality services to all people, when and where they need them. The exact configuration of services usually varies from country to country, but in all cases requires a robust financing mechanism; a well-trained and adequately paid workforce; reliable information on which to base decisions and policies; well-maintained facilities and logistics to deliver quality medicines and technologies. A well-functioning health system responds in a balanced way to a population's needs and expectations by: improving the health status of individuals, families and communities, defending the population against what threatens its health, protecting people against the financial consequences of ill-health, providing equitable access to people-centred care [4].

Human resources for health. The health workforce is central to achieving health. A well performing workforce is a skilled workforce that is responsive to the needs and expectations of people, is fair and efficient to achieve the best outcomes possible given available resources and circumstances. Countries are at different stages of development of their health workforce but common concerns include improving recruitment, education, training and distribution; enhancing productivity and performance; and improving retention. This requires: arrangements for achieving sufficient numbers of the right mix (numbers, diversity and competencies), payment systems that produce the right kind of incentives, regulatory mechanisms to ensure system wide deployment and distribution in accordance with needs, establishment of job related norms, deployment of support systems and enabling work environments, mechanisms to ensure cooperation of all stakeholders (such as health worker advisory groups, donor coordination groups, private sector, professional associations, communities, client/consumer groups).

With relation to childbirth, the skilled birth attendant is the focal human resource to prevent maternal deaths. A skilled birth attendant is a midwife, physician, obstetrician, nurse or other health care professional who provides essential and emergency health care services to women and their newborns during pregnancy, childbirth and the postpartum period. The World Health Organization (WHO) recommends as an indispensable intervention for improving maternal and perinatal outcomes in low-income countries, women's ready access to evidence-based maternal and perinatal care delivered by a skilled birth attendant [5]. Consultation on improving measurement of the quality of maternal, newborn and child care in health facilities [6]. Standards for improving quality of maternal and newborn care in health facilities.

The best markers of maternal and perinatal health and wellbeing are seen in countries with the highest rates of skilled maternal health attendance even after controlling for other extra parameters of development [7]. Nigeria presently has the second highest number of maternal and perinatal deaths in the world [8].

Poor access to maternal and perinatal health services is the major factor that puts women at increased risk of adverse maternal and perinatal outcomes. Women die during pregnancy and delivery when skilled maternal care is lacking. Evidence shows that unskilled delivery dramatically increases the risk of maternal and perinatal death [9–11]. The most common direct causes of maternal mortality are obstetric hemorrhage, pregnancy-induced hypertension, obstructed labour, unsafe abortion and puerperal infection [6]. Known interventions for preventing these direct causes of maternal mortality include the following interventions: family planning to prevent unwanted and unintended pregnancies, prenatal care to promote early screening and identification of pregnancy complications and thus manage accordingly to prevent morbidity and mortality, emergency obstetric care using effective medications and treatment regimens to reduce fatalities from obstetric complications such as eclampsia, ruptured uterus, obstructed labour, retained placenta, abruptio placenta, antepartum hemorrhage, postpartum hemorrhage, abnormal lie in labour, fetal distress in labour, skilled birth attendant (SBA) at childbirth (to effectively manage potential complications of childbirth), and postnatal care (to promote maternal recovery, infant feeding practices and the health of the newborn baby). Despite these known interventions for preventing maternal deaths, it is worrisome that women continue to use traditional birth attendants who are unable to provide these interventions. Accordingly, this lack of intrapartum care by the SBA with the basic knowledge about aseptic technique, manual and pharmacological uterotonics, basic antibiotics, and magnesium sulfate, results in preventable maternal mortality.

Care during childbirth. Nigeria currently has the second highest absolute number of maternal and perinatal deaths in the world. More often than not, women who die during pregnancy, or have perinatal deaths, are women who did not receive antenatal care, women who during childbirth had their deliveries with an unskilled birth attendant or women who delivered at home alone. The evidence is out that unskilled delivery dramatically increases the risk of maternal deaths. National data from the Demographic Health Survey indicate that only about 65% of Nigerian women receive antenatal care during pregnancy, while less than 33% are attended to by skilled birth attendants (SBA) at the time of delivery. The World Health Organization defines a traditional birth attendant (TBA) as: "a person (usually a woman) who assists a pregnant woman at childbirth, and who initially acquired her skills delivering babies by herself or working with other TBAs". Estimates indicate that between 60 and 90% of births in some parts of sub-Saharan Africa are assisted by TBAs, with countries such as Chad, Niger and Nigeria reaching extremely high proportion of TBA-attended deliveries [12]. In sittings where the number of skilled birth attendants are inadequate to meet the needs of the community, calls have been made for empowering the TBAs with health information and skills to enable them improve their practice and prevent maternal deaths. Prevention of maternal deaths is through the provision of essential and emergency health care services during pregnancy, childbirth and the postpartum period.

This chapter utilizes qualitative research methodology and discusses the challenges of preventing maternal deaths in a setting where women routinely utilize traditional birth attendants. The reasons for the persistence of the traditional birth attendants are examined.

2. Methodology

2.1 Study population and methods

Investigators from the Medical Women's Association of Nigeria Rivers State Branch, as part of efforts to improve outcomes of gestational diabetes mellitus, implemented

a research that screened 20,000 pregnant women for hyperglycaemia in Pregnancy. The study was conducted in 42 communities in five local government areas (LGAs) in Rivers State. Rivers State is one of the 36 states of Nigeria, situated in the oil-rich region of the country known as the Niger Delta. The LGAs included in the study were Ahoada East LGA, Khana LGA, Obio-Akpor LGA, Okrika LGA, and Port Harcourt City LGA. Social mobilization officers of the various LGAs, Local Government Agency for the control of HIV AND AIDs (LACA) officers, Women Leaders, and Medical Officers of Health assisted in getting the TBAs. The discussions with the pregnant women centred on why the women choose to attend the TBA home, while the discussions with the TBAs centred on their level of education, where the TBAs conduct the childbirth, what they do to retain the patronage of parturient amongst other questions.

2.2 Ethical approval

The ethical approval for this study was obtained from the Research Ethics Committee of the University of Port Harcourt. Consent was obtained from the Ministry of Health, Primary health care board, chairmen of the selected Local Government areas, advisory counselors on health of the concerned LGAs and medical officers of health of the various LGAs. Informed consent was obtained from the women before beginning the interactions.

3. Results

In-depth interviews and 10 group discussions were carried out in the five LGAs; one each per pregnant women and one each per TBAs. The pregnant women ranged in age from 25 to 42 years (median = 31 years) while the TBAs ranged in age from 34 to 67 years (median = 44 years). A large proportion of the pregnant women had secondary level of education while the TBAs had no formal education. The pregnant women patronized the TBAs because they were close by, they were cheaper and they were allowed to pay in installments.

About a third of the TBAs claimed God showed them in the dream that they should conduct childbirth. A quarter said they had longed to be nurses but could not afford formal training as nurses, so they opted to be TBAs and learnt from already practicing TBAs. Another quarter said they were trained as auxiliary nurses but decided to set up TBA practice. The rest were cleaners in maternity units, retired health workers or family members to thriving TBAs practice.

Majority of the TBAs conducted the childbirth in their personal bedrooms. They did not have a separate facility while some TBAs had a separate room for conducting childbirth and a few had facilities such as a two-bedroom apartment. To maximize patronage by parturient, the TBAs responded that they sang and danced, cooked pepper soup and collected fees in installments. The TBA wished that government would employ them as health care providers.

4. Discussion

Childbirth-related complications constitute major drivers to the increasing burden of death and disability. The direct causes of deaths during childbirth (maternal deaths) are eclampsia, obstetric hemorrhage, obstructed labour, sepsis, abruptio, and ruptured uterus. To avert these medical conditions during childbirth requires skilled care. Yet our women continue to patronize these unskilled birth attendants because of poverty, ignorance and cultural acceptance. Our interaction

with the pregnant women revealed they go to TBAs because they are closer to them, they are allowed to pay their bills in installments and because they pet them—singing and dancing for them. Pregnant women want easy access to care. Stakeholders must take this into cognizance and strategize to save lives. Our interaction with the TBAs reveal they are uneducated and unable to provide the requisite care needed to prevent maternal mortality and morbidity. A large proportion of the TBAs had no formal education and had no idea of the treatment or management of childbirth related complications. This is similar to the findings by Ofili and Okojie as far back as in 2005 [13]. The scourge of TBAs has been a long-standing challenge for maternal health improvement in Nigeria and countries of Africa and Asia. In an editorial in 2014, Okonofua and Ogu [14] posited that interventions based on provision of social safety nets in terms of cost reduction, transport provision and conditional cash transfers for women who seek hospital delivery would likely be effective in increasing the proportion of women delivered by skilled birth attendants in the population of women who patronize TBAs because of lack of transportation. Poverty underlies the patronage of TBAs—Women's inability to pay for services at government or private facilities offering quality care. During the index discussions, women reiterated that they utilized the TBAs because it was cheaper for them. Poverty is real and cannot be waved off. Economic empowerment is part of the solution to reducing maternal mortality.

Some have made calls for the integration of TBAs into the provision of quality care during childbirth, yet despite these calls, the practitioners are mostly uneducated. They are largely women who desire to look after pregnant women but were either unable to afford orthodox education fees or were unable to gain admission into training schools. The lax nature of health services in developing countries like Nigeria has enabled the TBA to exist as an unskilled provider of health service—service here being the care of pregnant women and care of parturients during childbirth. There is an obvious need for more skilled attendants at childbirth. The estimated 2 per 1000 persons currently available in Africa is a far cry from the approved expected. Thus, the unmet need for skilled birth attendants is filled by the TBAs. However, the TBAs is ill-equipped and cannot prevent morbidity and mortality during childbirth. Some have equally called for a ban of TBAs. Will government banning TBAs be the solution to the scourge of TBAs? A 2012 study in the western part of Nigeria found more than 77% of users of TBA opposed the banning of TBA services [15]. A recent study from Malawi found that a ban on TBA patronage markedly aggravated the barriers pregnant women faced in attempting to access healthcare during childbirth [16].

The "care" rendered by the TBA in the face of ruptured uterus, obstetric hemorrhage, malpresentation, eclampsia, and obstructed labour will not prevent or treat the complications of childbirth which results in morbidity or mortality. Accordingly, a TBA without the knowledge and skills to utilize and implement aseptic techniques, uterotonics, antibiotics, anticonvulsants, blood transfusion will basically cause preventable maternal and perinatal mortality. We reiterate that only long-term action, backed up by political commitment and adequate investments, will lead to the transformative changes required to attain sustainable results in developing the health workforce [17]. For a truth; there can be no health without a workforce. A clear lesson learned so far is the need to move away from piecemeal approaches and short-term solutions; retraining TBAs to be aware of danger signs in pregnancy and childbirth will not improve outcomes if they continue to try to provide care that they are incapable of providing. A TBA cannot transform into a skilled birth attendant. The basic foundation gained during the training in medical and nursing school is missing. The implementation of an effective intrapartum-care strategy is an overwhelming priority in the quest to prevent maternal deaths.

Therefore, concerted efforts to support and strengthen existing healthcare systems to provide skilled emergency obstetric care is imperative. A health facility intrapartum-care strategy is the best scenario to reduce the high rates of maternal mortality. Delivery in a health facility with a skilled birth attendant who can ensure clean environment and delivery technique to prevent puerperal infections and optimize childbirth outcomes. The Partograph is essential for labour surveillance to detect early complications and avoid prolonged and obstructed labour. Active management of third stage of labour with oxytocics is imperative to prevent postpartum hemorrhage. The ability to use magnesium sulfate in the management of eclampsia, antibiotics to prevent puerperal sepsis, delivery of operative interventions such as cesarean sections and hysterectomy where applicable saves lives. Here, skilled assistance to a woman during labour and childbirth, including supportive companion where feasible, detects complications early. This detection of maternal complications early and referral of all parturient with maternal complications early prevents all-causes of maternal mortality. In the same vein, early detection of newborn complications and prompt referral of all newborns with complications prevents neonatal morbidity and mortality. Simple procedures such as resuscitation of the newborn with at least an ambu-bag, adequate newborn warmth, hygienic cord care, early breastfeeding through advice promoting early and exclusive breastfeeding ensures survival of the newborn. Pre-arranged organized transport to referral facilities is crucial to prevent all-causes of mortality. These intrapartum interventions are crucial for the reduction of mortality and morbidity during childbirth. Despite the skilled birth attendance challenge by personnel shortages and persistent financial, transport, and geographic barriers, TBAs are not trained, equipped or able to manage obstetric emergencies.

In our interaction with the TBAs, their prayer was that government employs them. They craved our intervention to government to incorporate and integrate TBAs into the health Workforce by employing them as health assistants who will be paid salaries/remuneration. This may well be the solution to the scourge of women delivering with an unskilled attendant. The TBAs can be employed by government and paid for ensuring that all pregnant women are guided to the health facilities to deliver with skilled attendants. There may be a workable strategy—a situation where government employs the TBAs to act as health promotion officers—they could undergo a one-month training to learn about the danger signs of pregnancy and childbirth and how to effectively enable referrals. The education about the danger signs of pregnancy and childbirth is to enable them see the impracticability of them attempting to provide skilled care. Their employment as health promotion officers will be to assist the pregnant women to a health facility with available skilled attendants. Bryne and Morgan [18] in their systematic review showed that building the interpersonal and communication skills of formal health workers to improve their interactions with TBAs is a mechanism for integration and raises TBA referrals and skilled birth attendance.

Thus, training health workers to collaborate effectively with TBAs and women as applied in Peru [19] and by Mullany and Colleagues [20] increased skilled birth attendance substantially from 37 to 95% and from 5 to 48.7%, respectively. In the same vein, integrating TBAs into the formal health sector without first engendering community participation may be ultimately detrimental to the continuum of care as seen in Malawi [16]. Thus the Primary Health Care Development Agency as the arm of government charged with ensuring primary health care should as a matter of urgency do more and decimate the way forward. Too many women have died in their inability to afford skilled birth care during childbirth. As the TBAs home is the first port of call by numerous pregnant women, the healthcare management board should take charge and ensure that appropriate care is delivered at the relevant

health facilities with skilled attendants. Emergency ambulances and transportation of the pregnant woman/TBA Pair should be deployed to quickly bring them to the appropriate health facilities.

Furthermore, efforts should be put in place to enable and sustain the training of skilled birth attendants such as midwives and doctors. Medical Schools and Universities such as the Ondo State University of Medical sciences should be encouraged, supported and funded to produce health personnel. Only long-term action, backed by political commitment and adequate investments, will lead to the workforce required to improve maternal health and prevent morbidity and mortality during childbirth.

5. Conclusion

Poverty, ignorance and cultural acceptance continue to fuel pregnant women's use of traditional birth attendants. The traditional birth attendants are ill-equipped to prevent maternal mortality or manage obstetric complications. We advocate that the traditional birth attendants are employed by government and remunerated for ensuring that all pregnant women are guided to the health facilities to deliver with skilled attendants. Medical Schools and Universities should be funded to produce the requisite skilled health workforce/manpower. Women's economic empowerment, health workers improved welfare, government increased commitments for functioning health facilities are some interventions needed to prevent maternal death. Only long-term action, backed by political commitment and adequate investments, will lead to the workforce required to improve maternal health and prevent morbidity and mortality during childbirth.

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Author details

Omosivie Maduka and Rosemary Ogu*
University of Port Harcourt, Port Harcourt, Nigeria

*Address all correspondence to: rosemary.ogu@uniport.edu.ng

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