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EDITORIAL OPEN ACCESS

Maternal mortality: Lessons of the millenium development goals, a way forward

Ntiense M Utuk, Aniekan M Abasiattai

The death of a female patient during pregnancy or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, due any cause related to or aggravated by the occurance pregnancy or its management, but not from accidental or incidental causes is called maternal mortality [1]. The latest estimated maternal mortality ratio in Nigeria is 576/100,000 live births [2] which is certainly an underestimation. Vital statistics in a low resource setting such as Nigeria are often incomplete or do not exist and estimates are often based on hospital data which may not reflect the maternal risk within communities. In comparison, the maternal mortality ratio in Denmark is 5.3/100,000 live births. The commonest causes of maternal mortality include haemorrhage, unsafe abortions, hypertension in pregnancy, infections and obstructed labor [3]. These are all direct causes of mortality but a variety of other factors contribute to the delay in a pregnant women seeking help in the presence of complications.

A three-delay model was presented for the understanding of the factors which could contribute to maternal mortality [4]. These were delay 1- the decision to access care, delay 2- the transport to a medical facility, and delay 3- the receipt of adequate treatment. These factors are interrelated. For example, socioeconomic, cultural factors, religion, financial and educational factors may lead to a delay in taking a decision to access care. On the other hand, institutional factors and lack of personnel, material may reinforce negative stereotypes about care provided in hospitals and lead to a reluctance to access care. Thus, maternal mortality is seen to be due to a different factors, and not only depends upon the economic or human factors.

Ntiense M Utuk[1], Aniekan M Abasiattai[1]

Affiliation: [1]Department of Obstetrics/Gynaecology, University of Uyo Teaching Hospital, Uyo, Nigeria.

Corresponding Author: Professor Aniekan M Abasiattai, Department of Obstetrics/Gynaecology, University of Uyo Teaching Hospital, Uyo, Nigeria; Email: animan74@yahoo.com

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There have been various initiatives in Nigeria to reduce the high maternal mortality ratio. The various methods include include the adoption of the safe motherhood program which was launched in Nairobi 1987; the roadmap for acceleration of the attainment of the millennium development goal 4 and 5 in 2005; and the integrated maternal , child and newborn health strategy of 2007 [5]. However, pregnant women continue to die in large numbers from preventable conditions associated with pregnancy.

The recent adoption of the WHO Sustainable Development Goals (SDG) seeks to leverage the momentum generated by the MDGs. It seeks to reduce the maternal mortality ratio to 70/100,000 live births by the year 2030 [6]. However, lessons must be learnt from the failure of the MDGs if the SDGs are to have any hope of achievement.

Various factors have been found to be responsible for the failure of the MDGs. These include lack of human capacity for implementation, poor access to health care delivery systems with its high cost, unreliable data systems, inadequate funding and endemic corruption [7]. Other factors also include sequential industrial actions by health care workers, poor coverage of the National Health Insurance Scheme so that 60% of health care expenditure are out-of-pocket expenses, and the Boko Haram insurgency in the north of the country [8]. These factors can be conceptualized within the 3-delay model of maternal care.

The 3-delay model also helps explain why Nigerian women die during pregnancy. In Nigeria it is known that only a three of deliveries occur in the presence of a skilled attendant [2]. Most pregnant women deliver in unorthodox health care facilities even though it has been shown that the outcome in such places is poor [9]. A variety of reasons are given for the reluctance to access orthodox care. These include fear of spiritual attacks, fear of caesarean section and episiotomy as well as the high cost of orthodox health care [10]. These are some of the factors responsible for level 1 delay. Atser and Akpan [11] in 2009 also demonstrated the inequity in the spatial distribution of health care facilities in Akwa-Ibom state in Nigeria. Of the 31 local governments studied,

15 did not have a general hospital while three had two each and one had three general hospitals. Twenty (40%) sampled communities had no health care facilities of any kind despite their population thresholds for health clinics. Thus, accessibility becomes a problem, even in the presence of good road network. This would account for level two delays. Level three delays occur at the institutional level.

Emergency obstetric care seeks to address the occurrence of unexpected complications of pregnancy like haemorrhage and hypertensive crisis [12]. It can be basic or comprehensive. Basic emergency obstetrics care includes services such as administration of antibiotics, uterotonic and anticonvulsant drugs, manual removal of a retained placenta, removal of retained product following delivery or abortion, assisted vaginal delivery with a vacuum extractor, and basic neonatal resuscitation procedures [12]. This is expected to be carried out in primary health care centers. The comprehensive emergency obstetric care consists of all the basic functions mentioned above, as well as the ability to perform caesarean section safely, the administration of blood transfusion and the provision of advanced treatment and resuscitation of the newborn. This should be available in secondary and tertiary health care facilities [12]. All these are known interventions for preventing maternal and neonatal mortality and morbidity. Unfortunately, for many countries in sub Saharan Africa, these basic components are often not available. A study of six African countries showed that only 2.3% provided all seven signal functions of comprehensive emergency obstetric care [13]. This study concluded that health facilities in surveyed countries do not have the capacity to adequately manage the emergency obstetrics complications

It has been found that maternal mortality ratio of 70/100,000 live births is associated with a per capita income of $2648, a total fertility rate of 2.0, and completing 12 years of education [6]. Further, to achieve the same aim, they also required: 78% of pregnant women should attend at least four antenatal visits, 81% of deliveries should be in-facility deliveries, and 87% of pregnant women should have a skilled attendant at birth [6]. Quality of care must also be taken into consideration as family planning services, antenatal care, in-facility delivery, skilled birth attendance, emergency obstetric care and postnatal care increase. However, current figures on these indices make for grim reading in Nigeria. The average per capita income between 1981 and 2017 was $1669. According to the latest national health and demographic figures, the fertility rate per woman was 5.5, contraceptive prevalence rate was 15.1%, antenatal care coverage (4 visits) was 51.1%, and births attended by a skilled attendant 38% [2]. Clearly, work still needs to be done to achieve the sustainable development goals.

The suggested solutions to these various problems have to be multifacet and all encompassing. Firstly, there should be a general improvement in the socioeconomic status of the population by creating job opportunities and also reducing the cost of living. The coverage of the National Health Insurance Scheme should be improved so that health care is affordable. There should be mass mobilization of community and religious leaders in a bid to create awareness of the problems of maternal mortality and morbidity and the need to utilize orthodox health care. Efforts should be continued to eradicate illiteracy. Family planning services must be improved by widespread public education to help reduce and space the number of children per couple. This must include comprehensive sex education, multiple methods of modern contraception and access to safe abortion. In this regard, restrictive abortion laws currently in place in Nigeria should be liberalized. Hospital practices should be reviewed to encourage attendance. This includes free and accessible antenatal services which offer high quality care; adequate staff and material to cater to in-facility deliveries and skilled birth attendant services; and provision of emergency obstetric services. These measures, if instituted, will help make the sustainable development goals attainable in 2030.

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REFERENCES

1. Khan KS, Wojdyla D, Say L, Gülmezoglu AM, Van Look PF. WHO analysis of causes of maternal death: A systematic review. Lancet 2006;367(9516):1066–74.
2. National Population Commission. Nigeria Demographic and Health Survey. 2013. Maryland: NPC Nigeria; 2014. [Availabale at: https://dhsprogram.com/pubs/pdf/FR293/FR293.pdf]
3. Sule-Odu AO. Maternal deaths in Sagamu, Nigeria. Int J Gynaecol Obstet 2000;69(1):47–9.
4. Thaddeuss S, Maine D. Too far to walk: Maternal mortality in context. Soc Sci Med 1994;38(8):1091–110.

5. Ezugwu EC, Agu PU, Nwoke MO, Ezugwu FO. Reducing maternal deaths in a low resource setting in Nigeria. Niger J of Clin Pract 2014;17(1):62–6.
6. GBD 2015 Maternal Mortality Collaborators. Global, regional, and national levels of maternal mortality, 1990-2015: A systemic analysis for the Global Burden of Disease study 2015. Lancet 2016;388(10053):1775–812.
7. Ajiye S. Achievements of millennium development goals in Nigeria: A critical examination. International Affairs and Global strategy 2014;25.
8. Oleribe OO, Taylor-Robinson SD. Before Sustainable Development Goals (SDG): Why Nigeria failed to achieve the Millennium Development Goals (MDGs). Pan Afr Med J 2016;24:156.
9. Etuk SJ, Itam IH, Asuquo EE. The role of spiritual churches in antenatal clinic default in Calabar, Nigeria. East Afr Med J 1999;76(11):639–43.
10. Udoma EJ, Ekanem AD, Abasiattai AM, Bassey EA. Reasons for preference of delivery spiritual in church-based clinics by women of south-south Nigeria. Niger J Clin Pract 2008;11(2):100–3.
11. Atser J, Akpan PA. Spatial distribution and accessibility of health Care facilities in Akwa-Ibom State, Nigeria. Ethiopian Joural of Environmental Studies and Management 2009;2(2):49–57.
12. Okonofua F, Yaya S, Owolabi T, Ekholuenetale M, Kadio B. Unlocking the benefits of emergency obstetric care in Africa. Afr J Reprod Health 2016;20(1):9–15.
13. Ameh C, Msuya S, Hofman J, Raven J, Mathai M, van den Brock N. Status of emergency obstetric care in six developing countries five years before the MDG targets for maternal and newborn health. PLoS One 2012;7(12):e49938.

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Author Contributions

Ntiense M Utuk – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Aniekan M Abasiattai – Conception of the work, Design of the work, Acquisition of data, Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

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Author declares no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

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