

Maternal Mortality in Developing Countries: A Threat to the Millennium Development Goal

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Abstract: *Maternal mortality has for long been a serious problem that is engulfing the lives of many childbearing (pregnant) women mostly in the developing countries as a result of many contributory factors. Millennium Development Goal (MDG) 5 focuses on improving maternal health, with target 6 aiming to reduce the maternal mortality ratio (MMR) by three quarters by 2015 through some strategic plan of actions but the trend is not welcoming. This paper discussed maternal mortality concepts, factors of maternal mortality in the developing countries and the way forward for the reduction of maternal mortality in developing countries. The paper suggested among others that pregnant mothers in the developing nations should be encourage to attend antenatal clinics for routine check-ups, so that risk factors of pregnancy related infections will be diagnosed; be detected early and treated promptly and also health education and promotion programme should be intensified in developing countries in order to create awareness, so that people can adopt positive health behaviour by heeding to good treatment seeking behaviour pattern when at risk.*

Keywords: *MDG, Maternal Mortality, Developing Countries,*

I. Introduction

Maternal mortality continues to be a leading public health problem in the developing world, and particularly in the African Region. The trend in maternal mortality in the Region has worsened from 870 deaths per 100,000 live births in 1990 to 1000 deaths per 100,000 live births in 2001 (Andrew, 2004). That is why Millennium Development Goal (MDG) was launched and MDG 5 focuses on improving maternal health, with target 6 aiming to reduce the maternal mortality ratio (MMR) by three quarters by 2015. There was a great effort to reduce maternal mortality globally through different strategies (United Nation, 2008).

This prevailing contemporary reproductive health problem that is affecting the health of the women worldwide maternal mortality (MM) has continued to be a major health problem particularly in developing countries that is swallowing many lives every minute. The progress of the MDG programme in many countries across the world to minimize the ratio has been very slow and questionable. Worldwide, more than half a million women die every year as a result of complications arising from pregnancy and childbirth. However, World Health Organisation (2007) revealed that nearly 600,000 women die each year as a result of pregnancy complications and childbirth, most of these deaths can be prevented with attainable resources and skills. They further stated that, the great majority of maternal mortality about (99%) occurs in developing countries, of which 65% was in sub Sahara Africa. One of the cardinal objectives of MDGs was to mitigate the rising profile of maternal mortality rate by 75% by 2015. Deaths from common medical causes of maternal mortality such as haemorrhage, toxæmia, infection, obstructed labour and unsafe abortion can be prevented if properly and effectively managed (Betty, 2004).

Even the United State failed to rank in the top of countries with the lowest rates of maternal mortality and actually slid farther behind other developed countries, ranking closer to Russia and countries of Central America, South America and North Africa. These deaths were almost equally divided between Africa (251,000) and Asia (253,000), with about 4% (22,000) occurring in Latin America and the Caribbean and less than 1% (2500) in the developed countries. The average risk of dying from pregnancy related causes in Africa is about 1 in 20, compared to 1 in 2000 in developed countries. Nigeria, the most populous country in Africa, has one of the highest maternal mortality rates and is only second to India in the world (WHO, 2007).

Concept of Maternal Mortality

Maternal mortality (MM) refers to the death of women while pregnant or within 42 days after delivery, excluding accidental causes of death. It is also seen as “death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accident or incidental causes (WHO, 2007). Ibeke (2011) stated that high maternal mortality in developing countries is a tragedy in which many children are

rendered motherless as, as such; children are deprived of maternal care which goes a long way to affect adversely both their physiological and psychological development. United Nation (2008) and Peter and Liasu (2007) revealed that three delays aggravate maternal mortality ratio. These are:

Delay 1: Late in recognising dangers signs and deciding to seek care are influence by a woman's knowledge of complications and complication signals in prenatal, natal, and postpartum periods and by her ability to access resources of her family and community. Social, culture norms and tradition customs are also influencing the women to seek for health care services. Poor women with low status in the family tend to delay decision making when complications arise.

• **Delay 2:** Late in reaching health facilities. Once the decision of using health care services is made, the women must be transferred to the health facilities timely. The accessibility to health services, including distance, availability and cost of transportation, poor infrastructure, greatly influences on the delay in this period.

• **Delay 3:** late in receiving care at health facilities is influenced by economic status, discrimination based on gender or prejudice, and quality of care provided by the health facilities, including availability of providers, training for health staff, availability of supplies and equipment and the management of the health services. Poor families often have to borrow money to pay up front for treatment of obstetric complications. Frequently, the families do not have sufficient cash in time which leads to delay in receiving appropriate care including needed supplies, medication, and services at health facilities.

Factors Contributing to Maternal Mortality in Developing Countries

Maternal mortality continues to be the major cause of death among women of reproductive age in many countries across the world and remain the most serious public health issues particularly in developing countries (WHO, 2007). According to medical experts, causes of the death during pregnancy include anaemia, malaria, obstructed labour, unsafe abortion, toxemia, maternal infections and haemorrhage (Abdulkarim, 2008). The followings are considered as factors responsible for maternal mortality in developing world according to Abdullahi, (2000) and Chukeizi, (2010):

- **Poverty-** Many spouse particularly in developing countries live below the poverty line. As such they cannot afford to have access or pay for qualitative medical services in hospitals; thus, can only manage to seek for the assistance of untrained traditional birth attendants during labour which may result in complications and even lead to death of a woman. Ujah (2008) added that many women now seek for prenatal care but poverty makes it difficult for them to purchase the food they need and live in condition better for their health. Maternal mortality occurs due to poverty condition and low socio-economic status of women.
- **Illiteracy-** It is surprising that so many women in developing countries do not go to antennal clinics but prefer to give birth at home due to illiteracy, not knowing the implication behind this or they may seek the assistance of unqualified or untrained women to assist them during childbirth. Approximately 70% to 80% of women prefer to deliver at home, in the community. This phenomenon is common in both urban and rural communities as reported in AFRO study on home deliveries in Angola, Ethiopia, Nigeria and Senegal, (Arabang, 2003). In general, not enough studies have been carried out to ascertain and document the outcomes in home deliveries. Family and community members lack the knowledge to recognize complications and danger signs in pregnancy, labour and delivery and in the newborn. This results in delay in seeking appropriate care.
- **Drug Abuse and Misused-** it is common in developing countries to obtain over counter drugs particularly in Nigeria without qualified medical prescription and some these drugs are not even approved by the drugs regulatory bodies thus when used could lead to miscarriage or eventually death if not well managed.
- **Over Confidence-** when a woman is over confident, just because she had given birth to too many children in the past, she may stay waiting and prolong and obstructed labour could rupture her worm and bleed to death if she decides to deliver a child herself without medical assistance.
- **Irregular Antenatal Visits-** there are some tests are necessary during gestation period. These tests are being done periodically. The pregnant mother who does not visit clinics regularly may miss out some tests and eventually come down with obstetrics emergency, which may lead to her death.
- **Inadequate Equipments For Emergency-** some teaching hospitals and private clinics are doing better in providing necessary equipments for obstetric care, but a large number of health care facilities do not have adequate equipments for emergency and obstetric care.
- **Inadequate Qualified Staff-** inadequate qualified staff to manage obstetric emergency care and infrastructures to accommodate patients, places many women at risk of complications associated with pregnancy. For instance, bleeding can kill a healthy mother in less than two hours after given birth to a child.

- Teen Pregnancy- It was reported that teen pregnancy is a major risk factor for maternal mortality. Younger mothers are more likely to experience complications and tend to die for them. Although the rate is decreasing globally, but the trend remain high in developing countries and 90% of teen pregnant mothers live in poor countries.
- Socio-Cultural Factors- socio-cultural factors affect maternal mortality in large scale. Culture and religion do not only exert significant impact on women socio-economic status but also influence their treatment seeking behaviour pattern even during childbirth.

Maternal Mortality: A Challenge to MDG(s)

Over the past two decades, the international community has repeatedly declared its commitment to reduce the high levels of maternal mortality in developing countries, starting with the 1987 Safe Motherhood Conference in Nairobi, Kenya, followed by the 1990 World Summit for Children at United Nations headquarters, the 1994 International Conference on Population and Development in Cairo, Egypt, the 1995 Fourth World Conference on Women in Beijing, China, 'Nairobi 10 Years On' in Sri Lanka in 1997 despite all these efforts the ratio of maternal mortality increased from 870 deaths per 100,000 live births in 1990 to 1000 deaths per 100,000 live births in 2001 (Andrew, 2004; Onwuhafua, 2007). The Millennium Development Goals was established by the United Nations in 2000 and in 2007, a number of events marked the 20th anniversary of the launching of the Safe Motherhood Initiative, including the Women Deliver Conference in London, England, at which calls were made for renewed commitment, programmes and monitoring.

WHO, UNFPA, Unicef and AMDD (2009) further stressed that countries throughout the world are investing more energy and resources into providing equitable, adequate maternal health services. One way of reducing maternal mortality is by improving the availability, accessibility, quality and use of services for the treatment of complications that arise during pregnancy and childbirth. These services are collectively known as Emergency Obstetric Care (EmOC). In 2000, the estimated number of maternal deaths worldwide was 529,000. 95 per cent of these deaths occurred in Africa and Asia. While women in developed countries have only a 1-in-2,800 chance of dying in childbirth — and a 1-in-8,700 chance in some countries — women in Africa have a 1-in-20 chance. In several countries the lifetime risk is greater than 1 in 10 (Paul & Judith, 2009). Despite longstanding international commitments to reducing maternal mortality, so far progress has been disappointing.

The Way Forward For Reducing Maternal Mortality

The maternal mortality ratio of any nation reflects not only the adequacies of obstetric care centres but also the general level of socio-economic development of the country. The high ratio could also be related to the deteriorating living condition and poverty that is prevalent in the developing nations. According to the WHO, UNFPA, Unicef and AMDD (2009) Sound programmes for reducing maternal mortality, like all public health programmes, should have clear indicators in order to identify needs, monitor implementation and measure progress. In order to fulfil these functions, the data used to construct the indicators should be either already available or relatively easy and economical to obtain and the possible ways in which ante-natal care might reduce the risk of death and long term complications from puerperal infections are widely acknowledged. These include:

- Risk detection and referral promptly
- Health education for clean deliveries in order to avoid infections or rupture membranes during childbirth
- Supply of clean delivery kits to women in order to prevent unhygienic deliveries
- Detection and treatment of genital tract infections that manifested prior to labour
- Government stewardship and philanthropic organisations commitment

Anna (2004) also stated that the following points should be considered in reduction of maternal mortality in developing countries:

- Women must have access to skilled care before, during and after given birth
- Health care providers must be trained on emergency obstetric care. Health care centres must have all necessary drugs and equipment to handle and manage complications.
- Maternal health care systems should be strengthened and communities should be mobilised and educated to encourage birth in delivery centres.

It is often said that maternal mortality is overwhelmingly due to a number of interrelated delays which ultimately prevent a pregnant women accessing the health care she needs. Each delay is closely related to services, goods, facilities and conditions which are important elements of the right to health.

The Three Delays Model and their Corresponding Solutions

Three Delays	Corresponding Solutions
Delay in seeking appropriate medical help for an obstetric emergency for reasons of cost, lack of recognition of an emergency, poor education, lack of access to information and gender inequality.	Access to health information and education Access to affordable and physically accessible health care Enjoyment of the right to health on the basis of non-discrimination and equality
Delay in reaching an appropriate facility for reasons of distance, infrastructure and transport.	Safe physical access to health care Women empowerment
Delay in receiving adequate care when a facility is reached because there are shortages in staff, or because electricity, supplies are not available.	An adequate number of health professionals Availability of essential medicines Safe drinking water, sanitation and other water or medical underlying determinants of health

Source: Reducing Maternal Mortality: The Contribution of the Right to the Highest Attainable Standard of Health (2009).

II. Conclusion

Maternal mortality ratio in developing world has remained high and the trend is rising despite the MDG aimed at reducing the ratio by three quarter by 2015. The main causes for mortality are haemorrhage, eclampsia, sepsis, unsafe abortion, hepatitis, acute renal failure and insufficient skilled practitioners that can offer antenatal, intra-partum and post natal care services and also unavailability Partographs to be used in recognising and dealing with slow progress of labour before it becomes obstructed, and if necessary, to ensure caesarean section is perform on time to save mother and the baby. For women to benefit from these cost-effective interventions, they must be attended by skilled health personnel during antenatal visits for them to be able to understand the type of support that will be required during the childbirth in order to minimize the mortality ratio. Three barriers and other factors are the bottleneck constrains that hinder the achievement of the MDG by the year 2015.

III. Recommendations

Based on these, the following recommendations were offered:

- Pregnant mothers in the developing nations should be encourage to attend antenatal clinics for routine check-ups, so that risk factors of pregnancy related infections will be diagnosed; be detected early and treated promptly
- Health education and promotion programme should be intensified in developing countries in order to create awareness, so that people can adopt positive health behaviour by heeding to good treatment seeking behaviour pattern when at risk.
- Free antenatal, intra-partum and postnatal care services should be given to enable poor can have access to clinical services and avoid loss of live during this critical period.
- Health facilities should be well equipped with sufficient and trained personnel, laboratory equipments and reagents to enable them render qualitative care services in developing countries
- Periodic sensitisation campaigns should involve both medical personnel and women of childbearing age on how to handle obstetric emergencies.
- Girl child education, gender disparity and women empowerment programmes should be intensified and strengthened to place women in better positions to enable them to take good care of their health problems.

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