# Re-Inventing the Fight against High Maternal Mortality among Developing Nations: A Case Study of Nigeria

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#### **ABSTRACT**

This study aimed to determine the strategies for re-inventing the fight against high maternal mortality among developing nations using Nigeria as a case study. Specifically, the study ascertained the preventive measures for maternal mortality among pregnant women in rural communities in Nsukka local government area of Enugu State, Nigeria. One research question was used to identify the preventive measures of maternal mortality among these women in Nsukka local government area of Enugu State, Nigeria. The survey design was used. Data was collected using a questionnaire. A total of 108 pregnant women participated in the study. Data were analyzed using mean and standard deviation. The study revealed that administering test, management of pre-eclampsia, anemia, tetanus toxoid, screening infection, prompt treatment and magnesium sulfate using skilled care at delivery, a cesarean section in case of prolonged labour, family planning counselling, and use of essential vaccinations are noted for preventing maternal mortality. Based on the study, the following recommendations are made: education of women to raise their decision-making power, government and Non-Governmental Organizations should offer financial support to families to cushion the effect of maternal death, the government should establish legal law with a penalty to abolish harmful practices like FGM and child marriage below 18 years, the government should implement the full practice of Safe Motherhood in all the rural poor and government should make child and maternal survival a core national and global health concern.

**Keywords:** Developing Nations, Maternal Mortality, Preventive Measures

#### I. Introduction

Improving the healthcare system is immensely a critical component to reducing maternal mortality and improving general health. The health of the citizens measures development in a nation. United Nations (UN)(2008) stated that emergency obstetric interventions, such as antibiotics, oxytocics, anticonvulsants, manual removal of placenta and instrumented vaginal delivery, are vital to improve the chance of survival. UN believes that increasing ante-natal care, training for traditional birth attendants and promoting family planning

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will reduce maternal mortality. Due to unwanted pregnancies, women are given more comprehensive access to safe abortions. In addition, Browne et al. (2015) mentioned the prevention measures and treatment of the major causes of maternal deaths. These include the use of Oxytocin/Misoprostol in the management of haemorrhage and post-abortion complications, management of eclampsia with magnesium sulphate and prevention of sepsis by using clean delivery kits and antibiotics. In their view, the use of criteria-based clinical audits is a valuable tool for identifying gaps in obstetric practice and providing targeted information on areas requiring quality movement or intervention. They further stated that the application of such audits could be valuable for monitoring care and guiding improvement plans for increasing adherence to standard protocols. In support, World Health Organization (WHO) (2009) stated that reducing maternal mortality in developing countries involves a wide range of activities, including training traditional birth attendants, providing skilled care at birth, distributing clean delivery kits, safe abortion and post-abortion care, family planning and obstetric care.

Moreover, Partnership for Maternal Newborn and Child Health (2011) pointed out that trained frontline workers, including qualified or unqualified medical practitioners, private drug sellers, community health workers, traditional birth attendants, trained midwives and other skilled birth attendants together provide a critical link to address the problem of low coverage of interventions. Likewise, Darmstadt, Marchant, Claeson et al. (2013) is of the opinion that by linking cadres frontline workers who are primarily community-based with those who work in primary health facilities, a more significant number of families can be supported through combined counselling and health facilities. Moreover, they opined that a larger number of families could be supported through combined counselling, health education and negotiation at home, pregnancy care, skilled care at birth and post-natal healthcare in communities and primary health facilities. In addition, Lassi, Haider and Bhutta (2010) reported that connecting communities with the health system by mobilizing and empowering families to seek health care with birth preparedness planning or communication and referral systems is lifesaving interventions that can be brought closer to those who need them especially, impoverished women.

Furthermore, Bhutta et al. (2010) are of the view that behaviour change both at home and in primary health facilities where childbirth services are available by families and health providers can strengthen the interconnections between maternal and newborn health and between frontline workers and families, ensuring that they are well connected to accessible, good quality, clinical services. Not only but also Graham, McCaw-Binns and Munjanja (2013) suggested that to respond to the demand and other enhanced care-seeking practices, attention to the quality of services provided to pregnant women, their newborn babies and sick children at firstlevel facilities is critical for achieving impact on maternal, newborn and child deaths. Expressing the same view, Musiilmenta (2010) enumerated several ways to reduce maternal mortality. They include: women must have access to skilled care before, during and after birth, health providers must be trained in emergency obstetric care, health centres and clinics must have surgical supplies to handle complications, maternal healthcare systems must be strengthened, communities mobilized and educated to improve deliveries in birth clinics, skilled community-based birth attendants should be trained and posted to increase maternal coverage in remote areas, give incentives to health providers to motivate them to do their job effectively. Furthermore, Musiilmenta (2010) emphasized that connection with private organizations to deliver maternal healthcare services, educate and empower women's group so they can deliver political success and tangible health outcomes, lunch professional, well-informed advocacy groups to call for action on maternal health, implement streamlined and

evidence-based maternal health interventions, implement evidence-based strategies to increase utilization of maternal healthcare services.

In continuation, Musiilmenta (2010) suggested the removal of user fees for maternal health care services and provision of transportation services to maternal health centres, evaluation and monitoring of maternal and child health policies, making sure that the appropriate government ministries are accountable to the public about the performance of investments in maternal health, creating strategic alliances between groups representing maternal health as these will open the door to political and financial supports and make child and maternal survival a core national and global health concern.

Furthermore, United Nations Population Fund (UNFPA 2017) enumerated four essential elements to maternal death prevention. First, prenatal care – it is recommended that expectant mothers receive at least four antenatal visits to check and monitor the health of mother and fetus. Second, skilled birth attendance with emergency backup such as doctors, nurses and midwives who have the skills to manage standard deliveries and recognize the onset of complications. In addition, they emphasized emergency obstetric care to address the major causes of maternal death: hemorrahage, sepsis, unsafe abortion, hypertensive disorders and obstructed labour. Lastly, post-natal care, which starts after birth, during post-natal care, peuperial, sepsis, hypertensive disorders and other birth complications are detected and treated early enough to avoid complications

Moreover, Royston and Armstrong (1989) suggested that education is a distant factor that offers the possibility of affecting maternal mortality in many different ways. One of the well-known effects of education is lowering fertility. If women get pregnant less and bear fewer children, they are less at risk of maternal health. Similarly, they discovered that women's social status, self- image and decision-making powers might all be increased through education, which may reduce their risk of maternal death resulting from early marriage and pregnancy or lack of information health services. According to them, educated women may also be less likely to accept dangerous practices to alleviate complications in pregnancy.

We need to preserve our tradition and culture but not to the detriment of maternal health. Hence, UNICEF (2005) opined that it is true that tradition and culture are essential aspects of any society in helping to mould the views and behavioural patterns of the society; some traditions and cultural beliefs and practices like female genital mutilation (FGM) are harmful and must be abolished. Furthermore, they pointed that a multidisciplinary approach is needed to tackle this deep-rooted legendary practice of FGM. There is a need for legislation in Nigeria with health education and female emancipation in the society. In their view, the process of social change in the community with a collective, coordinated agreement to abandon the practice of "community-led action" is essential. Supporting the same view, Odoi in Kwawukume (2005) mentioned that with improvement in education, social status of women and increased awareness of complications of FGM, most women who underwent FGM disapprove of the practice, and only very few are prepared to subject their daughters to such harmful procedures. In his view, the more educated, more informed, and more active socially and economically a woman is, the more she is able to appreciate and understand the hazards of harmful practices like FGM and sees it as unnecessary procedure and refuses to accept such harmful practice and refuses to subject her daughter to such an operation.

Another harmful practice related to FGM is early marriage which leads to various complications in childbirth. To eliminate early marriage for girls will go far to prevent maternal death. In like

manner, Human Rights Watch (2015) reported that adopting and implementing cohesive national legal frameworks that uphold international human rights standards is vital. This includes making 18 the minimum marriage age, avoiding loopholes such as exceptions for parental consent, ensuring the laws require free and full consent of both spouses, requiring proof of age before marriage licenses are issued, and imposing penalties on anyone who threatens or harms anyone who refuses to marry. In continuation, they pointed out that governments should ensure these protections are not undermined by religious or customary laws and traditions and should regularly engage with religious and community leaders.

In addition, Washington DC in Human Rights Watch (2015) emphasized on the effectiveness of empowering girls with information and support networks; ensuring girls' access to quality education; engaging and educating parents and community members about child marriage; providing economic incentives and support to girls' families; and establishing and implementing a robust legal framework, such as a minimum age of marriage as concrete measures to prevent maternal mortality.

The three delays that cause maternal mortality can be tackled to ensure safe delivery. According to WHO (1998)reported that those delays could be significantly alleviated by a national Safe Motherhood programme that encompasses the following six pillars: family planning, ante-natal care; essential obstetrics care; post-natal care; post-abortion care; and STD/HIV prevention In their view, the effectiveness of those pillars in attenuating maternal morbidity and mortality entails: raising the socioeconomic status of women; education for women; functional and accessible primary health care; and effective communication for behaviour change. All these measures may go a long way to prevent maternal mortality in Nsukka Local Government Area as prevention is better than cure. Therefore, the present study aimed to determine the strategies for re-inventing the fight against high maternal mortality among developing nations using Nigeria as a case study. Precisely, the study ascertained the preventive measures for maternal mortality among pregnant women in rural communities in the Nsukka local government area of Enugu State, Nigeria.

## II. METHOD

The study used a descriptive survey research design. One research question on the preventive measures of maternal mortality in the Nsukka local government was used for the study. The study area is Nsukka Local Government Area in Enugu state, Nigeria comprising of eight health centres as follows: District hospital Nsukka, Nsukka. Health Centre, Comprehensive Hospital Okpuje, Edem—Ani Health Centre, Ibagwa-Ani Primary Health Centre, Comprehensive Health Centre Obukpa, National Primary Health Care Agbamere and Opi Health Centre. The people of Nsukka Local government are Igbos. They are known for bearing many children. The population is 245 pregnant women registered in the government health centres in Nsukka Local Government Area. The sample used for the study was 108 registered pregnant women in three health centres in Nsukka local government area. A simple random sampling technique was used to determine the sample size. The instrument used was the Preventive Measures of Maternal Mortality Questionnaire (PMMMQ) self-developed by the investigators. The number of items in the questionnaire was 10.

Three experts validated the instrument. Their inputs were incorporated into the instrument by the researchers. Data was collected on their antenatal days, which lasted for weeks. The instrument was

distributed to 108 women, while 102 women adequately responded and returned theirs. Data were analyzed using mean and standard deviation to answer the research question. The mean of 2.5 becomes the boundary

range, and any mean of 2.5 or above was regarded as important.

# III. RESULT

**Research Question:** Do you think that the following measures can prevent maternal mortality in Nsukka Local Government Area?

Table: Mean scores of pregnant women on the preventive measures to maternal mortality (102)

S/N	ITEM	SA	A	D	SD	X	SD	Decision
1	Administering test and management of pre-eclampsia and anemia	40	32	19	11	2.99	1.00	A
2	Administering tetanus toxoid	54	36	7	5	3.36	0.81	SA
3	Screening infection and prompt treatment	54	38	8	2	3.41	0.68	SA
4	Promoting exclusive breast feeding	48	26	22	6	3.14	0.95	SA
5	Administering magnesium sulfate	55	40	5	2	3.42	0.69	SA
6	Using skilled care at delivery	60	28	11	3	3.45	0.79	SA
7	Using cesarean section in case of long labour	45	41	13	3	3.25	0.79	SA
8	Treatment of maternal and new born illness	52	37	10	3	3.35	0.7	SA
9	Providing family planning counseling	54	35	8	3	3.35	0.75	SA
10	Use of essential vaccinations	54	38	6	4	3.39	0.77	SA
	Grand mean					3.31	7.93	SA

In table one, the data in item 6 with the mean of 3.45 was strongly agreed by the respondents as the best measure to prevent maternal mortality. Also the respondents in items 2,3,4,5,7,8,9 and 10 strongly agree that they are preventive measures of maternal mortality. Data in item 1 with mean of 2 and above also shows that the respondents agree that it is a preventive measure. The grand mean of 3.31 indicated that the respondents strongly agree that all the items are preventives measures of maternal mortality.

#### IV. Discussion

This study aimed to determine the strategies for re-inventing the fight against high maternal mortality among developing nations using Nigeria as a case study. Specifically, the study ascertained the preventive measures for maternal mortality among pregnant women in rural communities in the Nsukka local government area of Enugu State, Nigeria. The findings evidenced that pregnant women strongly agree to administer a test, managing pre-eclampsia, anemia, tetanus toxoid, screening infection, prompt treatment and magnesium sulfate as strong preventive measures of maternal mortality. The result could be because of proved solutions from the above actions. This finding agrees with the study of Browne, Van, Srofenyoh et al. (2015), who mentioned strategies for the prevention and treatment of the major causes of maternal mortality to include use of oxytocin/misoprostol in the management of hemorrhage and post-abortion complications, management of eclampsia with magnesium sulphate and prevention of sepsis by using clean delivery kits and antibiotics. Also in support is UN(2008), who claimed that emergency obstetric interventions, such as antibiotics, oxytocics, anticonvulsants, manual removal of placenta and instrumented vaginal delivery are vital to improving the chance of survival.

The study also revealed that using skilled care at delivery, a cesarean section in case of prolonged labour, family planning counselling, and essential vaccinations are noted for preventing maternal death. Agreeing with the findings are Lassi, Haider and Bhutta (2010) which reported that by connecting communities with the health system by mobilizing and empowering families to seek health care with birth preparedness planning or through communication and referral systems, life-saving interventions could be brought closer to those who need them especially poor women.

Furthermore, Bhutta et al. (2010) are of the view that behaviour change both at home and in primary health facilities where childbirth services are available by families and health providers can strengthen the interconnections between maternal and newborn health and between frontline workers and families, ensuring that they are well connected to accessible, good quality, clinical services. The finding reported that treatment of maternal and newborn illness is paramount to eliminating maternal death. In support of Graham, McCaw-Binns and Munjanja (2013) suggested that to respond to the demand and other enhanced care-seeking practices, attention to the quality of services provided to pregnant women.

## V. Conclusion

The effect of maternal death cuts across individual, children, families, communities, nations and worldwide. There are numerous factors responsible for maternal mortality. They include illiteracy, poverty, poor nutrition, infections, illnesses during pregnancy, female genital mutilation, unsafe abortions and inadequate health care during pregnancy and delivery etc

All these factors are preventable as prevention is better than cure. Accessibility to safe motherhood practises, education of women, functional and accessible primary healthcare services, raising the social status of women, counselling on behaviour change, abolishing FGM and early marriage deserves urgent implementation

among the developing to curb maternal death. To increase our GDP and preserve the next generation, a broad approach is expedient to prevent maternal death worldwide.

#### VI. Recommendations

- 1. Education of women to raise their decision-making power.
- 2. Government and Non-Governmental Organizations should offer financial support to families to cushion the effect of maternal death.
- 3. Government should establish legal law with a penalty to abolish harmful practices like FGM and child marriage below 18 years.
  - 4. Government should implement the full practice of Safe Motherhood in all the rural poor.
  - 5. Government should make child and maternal survival a core national and global health concern.

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