

**EDITORIAL****PREVENTING MATERNAL MORTALITY FROM HYPERTENSIVE DISORDERS OF PREGNANCY AND OBSTETRIC HAEMORRHAGE**

Maternal deaths remain a major public health issue in Sub-Saharan Africa. From the days of safe motherhood initiative in 1987 through the MDGs and now to the SDGs, maternal death reduction has always been a target. Significant progress has been made from 1990s to date. However, the rate of progress has stalled. Ghana's maternal mortality ratio (MMR) in the 1990s has reduced from 760 per 100,000 live births to 319 at the end of 2015 (1). Beyond 2015, the rate of reduction has almost plateaued. The most current MMR as at 2017 is 310 (2). In the recent WHO workshop on Regional Accelerated Plan of Action to end deaths from pre-eclampsia/eclampsia and PPH, it was clearly stated that progress to reduce MMR in the African region is very slow and set targets have been missed. In order to reach the SDG 3.1 global target of 70 maternal deaths per 100,000 live births by 2030, the region must fast-track its Average Annual Rate of Reduction (ARR) from the current 2.9 per year to 10.4 per year (3). This is an obvious uphill task.

The evidence gathered over the past years in the region show that the two leading causes of maternal deaths are obstetric haemorrhage and pre-eclampsia/eclampsia accounting for 50% of all maternal deaths (3). At the Korle-Bu Teaching Hospital, hypertensive disorders alone accounted for nearly two-fifths of all deaths whilst haemorrhage accounted for one-fifth of all deaths, the two making up 60% of all deaths (4). The immediate causes of death in hypertensive disorders are eclampsia, acute kidney injury, pulmonary oedema and acute left ventricular failure, HELLP syndrome, cerebral haemorrhage among others. The immediate causes of death in obstetric haemorrhage are haemorrhagic shock, acute kidney injury, haemo-peritoneum following Caesarean Sections, DIC, multiple organ failure, severe anaemia among others.

The situation in most teaching/tertiary hospitals in Ghana is similar to that of the Korle Bu Teaching Hospital. In order to make any headway, we need to refocus and realign all efforts in dealing with these two. In fact, there are strategies and proven interventions to prevent and address these two leading causes of death. For the hypertensive disorders, these strategies include magnesium sulphate use, antihypertensives, early detection of pre-eclampsia and treatment, delivery of patients with severe pre-

eclampsia, calcium supplements during the antenatal period and use of soluble aspirin for prevention. For PPH, the strategies include active management of the third stage of labour (AMSTL), uterotonics (oxytocin and misoprostol), tranexamic acid use, blood transfusion and PPH treatment protocols including both surgical and non-surgical modalities. These interventions are deployed through training, equipping and resourcing health facilities through Basic and Comprehensive Emergency Obstetric and Newborn Care (BEONC and CEONC) setting.

There are usually challenges and gaps with the implementation of these strategies. A very important approach to elucidating these challenges is the maternal death surveillance and response (MDSR). This involves carrying out a thorough review of every maternal death and implementing actionable recommendations to prevent a future similar occurrence. Every maternal death must generate a response action following lessons learnt from the review process. During the review process, it is imperative to determine where the gaps are in order to design innovative ideas and strategies to address the challenges in the management of patients. Behind every maternal death are several gaps, underlying and contributing factors which are all nested in the three-delay model advocated by Thadeus and Maines.

Unpublished maternal death reviews have revealed the following recurring contributory factors; financial barriers to maternal healthcare, ignorance and illiteracy on the part of patients, poor or lack of antenatal attendance, weak referral networks, poorly functioning referral systems (delayed referral to tertiary facilities), limited communication between facilities, inadequate and poorly functioning equipment and consumables, lack of ICU and theatre spaces, lack of blood and blood products, inadequate skills, poor attitudes and unavailability of healthcare providers, insufficient assessment and poor monitoring of patients (poor monitoring of patient's vital signs), misdiagnosis and mismanagement, inadequate follow-up of cases and poor adherence to protocols. These are the gaps in most reviews and these are not new.

To re-echo the former president of FIGO, Mahmoud Fathallah, "Women are not dying because of diseases we cannot treat. They are dying because societies have yet to make decisions that their lives are worth saving".

Deaths from haemorrhage and pre-eclampsia/eclampsia are preventable. Everybody has a role to play. The government, healthcare providers, patients and their families must all increase their level of accountability, so that together we can end these preventable deaths.

### References

1. World Health Organization. Trends in maternal mortality: 1990 to 2013. Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. [Internet]. Geneva; 2014. Available from: <https://apps.who.int/iris/handle/10665/112682>
2. Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF. 2018. Ghana Maternal Health Survey 2017: Key Indicators Report. Accra, Ghana: GSS, GHS, and ICF.
3. World Health Organisation. Ending Preventable Maternal Deaths due to Postpartum Haemorrhage and Pre-Eclampsia and Eclampsia in Sub-Sahara Africa. Regional Accelerated Plan of Action 2021-2030
4. 4. Boafor T. K, Ntumy M. Y., Asah-Opoku K., Sepenu P., Ofosu B., Opong S. A. (2021). Maternal Mortality at the Korle Bu Teaching Hospital, Accra, Ghana: A Five-Year Review. Afr J Reprod Health 2021;25(1):56-66

**Theodore K. Boafor**  
(Senior Lecturer, Consultant  
Obstetrician/Gynaecologist, UGMS)

