Reducing maternal deaths

It is fitting that Professor James Drife has written an opinion piece on the value of confidential enquiries.[1] When the then Minister of Health (Minister Dlamini-Zuma) created the National Committee for the Confidential Enquiries into Maternal Deaths (NCCEMD) in 1997, Professor Drife was asked by the Department of Health to facilitate getting the committee and its subsequent reports established. Subsequently five reports have been written, with *Saving Mothers 2008 - 2010: The Fifth Report on Confidential Enquiries into Maternal Deaths in South Africa*[2] being recently released.

The NCCEMD made 10 Key Recommendations in each of the last four reports. These recommendations remained essentially the same for all the reports, as the problems also remained the same. The recommendations have been sketchily implemented in the past.[2] A new approach has been adopted in the latest report. The committee has made the recommendations more focused and easily understandable so that the messages can be remembered and implemented by all healthcare workers and therefore hopefully have more of an impact.

The 2008 - 2010 report clearly identified three conditions that contribute to the majority of preventable maternal deaths, namely non-pregnancy-related infections, obstetric haemorrhage, and complications of hypertension in pregnancy. These conditions comprise 66.7% of possibly and probably preventable maternal deaths.

The three conditions have many common preventable factors, which are mostly related to the knowledge and skills of the healthcare providers and the challenges within the healthcare system. The committee summarised its recommendations into five key points, namely:

- Reducing deaths due to **H**IV/AIDS
- Reducing deaths due to **H**aemorrhage
- Reducing deaths due to **H**ypertension
- **H**ealth worker training
- **H**ealth system strengthening.

This can be summarised as the **5 H's**. In each of these points there are specific actions that need to be taken, and each recommendation for the key conditions has a preventive and emergency care aspect. The recommendations are summarised under each point below.

HIV and AIDS

- Promote the 'Know your status' and 'Plan your pregnancy' messages in communities and in the health sector, and ensure non-judgemental approaches.
- Ensure that every maternity facility is able to screen for HIV infection and perform early initiation of highly active antiretroviral therapy (HAART), and to recognise and treat co-infections, especially respiratory infections.

Haemorrhage

- Promote preventive interventions: community education, prevention of prolonged labour, prevention of anaemia; use safe methods for induction of labour; and practise active management of the third stage of labour (AMTSL).
- Severe obstetric haemorrhage must have the status of a 'major alert' requiring a team approach, with immediate attention to diagnosis of the cause of haemorrhage, resuscitation and a stepwise approach to arresting the haemorrhage.

Hypertension

- All maternity facilities must provide calcium supplementation to all women throughout their antenatal care and ensure the detection, early referral and timely delivery of women with hypertension in pregnancy.
- Severe hypertension, imminent eclampsia, eclampsia and haemolysis, elevated liver enzymes, low platelets (HELLP) syndrome must be recognised as life-threatening conditions (major alerts) requiring urgent attention. All maternity facilities must be able to administer magnesium sulphate to prevent convulsions, administer rapid-acting agents to lower severely raised blood pressure, provide close monitoring before and after delivery, and manage fluid balance safely.
- Promotion of family planning services in the population at large (women, their partners, families and communities).

Health worker training

- Train all health care workers involved in maternity care in the ESMOE-EOST programme and obstetric anaesthetic module, with emphasis on the following:
  - Standardised observation and monitoring practices that stipulate the frequency of observations and aid interpretation of severity, e.g. early warning monitoring charts. These would enable earlier detection of haemorrhagic shock following delivery and after caesarean section (CS), and also enable earlier interventions for complicated pre-eclampsia.
  - The skills of safe labour practices; use of and interpretation of the partogram, AMTSL, use of uterotonic agents, safe CS, and additional surgical procedures for complicated CS.
  - To achieve competence in the management of obstetric emergencies, e.g. postpartum haemorrhage, eclampsia, acute collapse.
- Train all healthcare workers who deal with pregnant women in HIV advice, counselling, testing and support (ACTS), initiation of HAART, monitoring of HAART and the recognition, assessment, diagnosis and treatment of severe respiratory infections.

Health system strengthening

- Ensure 24-hour access to functioning emergency obstetric care, both basic and comprehensive:
  - Adequate and appropriately trained staff for acute areas such as labour wards and theatres, but also for antenatal clinics and postnatal monitoring areas
  - Maternity-dedicated inter-facility transport system within healthcare facilities
  - Standardised referral criteria for set conditions, e.g. hypertension
  - Development of maternity waiting homes
  - Maternal mortality and morbidity audit meetings to occur regularly with minutes documenting plans for rectifying modifiable factors. Progress on key indicators to be displayed as graphs and charts for staff to review.

- Ensure accessible and appropriate contraceptive services for all women, which are integrated into all levels of healthcare and which must be available on site for women postmiscarriage and postpartum.

Bradshaw and Dorrington[4] report that the maternal mortality ratio, based on vital statistics data and accepted as the basis on which the effect of the Health Service Delivery Agreements will be judged, was 310/100 000 live births in 2008 and 333/100 000 live births in 2009. Further Seutlwadi *et al.*[5] report that sexual behaviour of our South African youth is becoming more risky. Clearly, to reduce the number of maternal deaths the new focused recommendations must be vigorously implemented.

Bob Pattinson
Editor

1. Drife J. The value of confidential enquiries. South African Journal of Obstetrics and Gynaecology 2012;18(2):32-36.
2. Saving Mothers 2008-2010: The Fifth Report on Confidential Enquiries into Maternal Deaths in South Africa. Pretoria: Government Printer, 2012.
3. Odhiambo A, Mthathi S. 'Stop making excuses' accountability for maternal health care in South Africa. Human Rights Watch, August 2011. http://www.hrw.org (accessed 30 March 2012).
4. Bradshaw D, Dorrington R. Maternal mortality ratio – trends in the vital registration data. South African Journal of Obstetrics and Gynaecology 2012;18(2):38-42.
5. Seutlwadi L, Peltzer K, Mchunu G, Tutshana BO. Contraceptive use and associated factors amongst South African youth (18 - 24 years): A population-based survey. South African Journal of Obstetrics and Gynaecology 2012;18(2):43-47.