The Role of the Midwife in Preventing Maternal Mortality

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ABSTRACT
Many pregnant women die each year in South Africa as a result of pregnancy and childbirth. Non-pregnancy related infections, complications of hypertension, obstetric haemorrhage, pregnancy-related sepsis and pre-existing maternal disease are the five common causes for maternal deaths in South Africa. A large proportion of these deaths are preventable. Many deaths can be avoided if the problems are recognized and treated sooner rather than later. Midwives play a crucial role in the care of pregnant women, from the first antenatal visit right through to the delivery and the postpartum period. Midwives are the one group of health care workers than can impact on this problem.

Introduction
For most women and their families’ childbirth are the highlight and the climax concluding a nine month period of expecting a new life to enter this world and to become part of a family. When this event leads to the death of the birthing mother, it can only be regarded as a huge tragedy resulting in one or more children growing up without a mother and in many cases a family loosing their only bread-winner. As obstetrics is all about ensuring an optimal pregnancy outcome, it is important that all health care providers rendering care to pregnant women be familiar with the causes of maternal deaths in South Africa, as well as existing strategies to prevent these tragic events.

All deaths during pregnancy, childbirth and puerperium are notifiable events in terms of the National Policy Health Act, Number 116 of 1990. The National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD), appointed by the Minister of Health, is responsible for the confidential enquiry into maternal mortality in South Africa.

The third report of this committee reporting on maternal deaths for the period 2002-2004 was published in June 2006. It is a comprehensive 331 page document, discussing all the causes of maternal deaths as well as the avoidable factors in detail for all levels of care. It is a very valuable and unique document, as it gives us a picture of what is happening in South Africa with data for all nine provinces. All the information discussed in this article is contained in this document.

Definitions
Maternal death is defined as the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Direct causes of maternal deaths are defined as deaths resulting from obstetric complications of the pregnancy state (pregnancy, labour and puerperium), from interventions, omissions, incorrect treatment or from a chain of events resulting from any of the above.

Indirect causes of maternal deaths are defined as deaths resulting from previous existing disease, or disease that develop during pregnancy and which were not due to direct obstetric causes, but which were aggravated by the physiological effects of pregnancy.

Coincidental causes are defined as deaths from unrelated causes which happen to occur in pregnancy or the puerperium, while unknown causes are defined as deaths during pregnancy or the puerperium where an underlying cause was not identified.

Avoidable factors
In many cases of maternal deaths, there are circumstances identified, that if they were different, might have prevented mothers from dying. Some of the avoidable factors are things that patients did or did not do, while others are things that the health care system did or did not do.

The most important patient orientated avoidable factors are patients not seeking care.

Table 1: Five most common causes of maternal mortality in South Africa

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Non-pregnancy related infections</td>
<td>37.8%</td>
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<tr>
<td>Complications of hypertension</td>
<td>19.1%</td>
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<tr>
<td>Obstetric haemorrhage (ante partum and post partum)</td>
<td>13.4%</td>
</tr>
<tr>
<td>Pregnancy-related sepsis</td>
<td>8.3%</td>
</tr>
<tr>
<td>Pre-existing maternal disease</td>
<td>5.6%</td>
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</tbody>
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The leading cause of maternal deaths was non-pregnancy related infections. AIDS is the biggest problem in this category, and hopefully the roll-out of anti-retroviral drugs will reflect positively in the next report. The most common direct cause of maternal deaths are hypertension, followed by obstetric haemorrhage, pregnancy related sepsis and pre-existing maternal disease.
medical help when experiencing symptoms, followed by undergoing unsafe abortions and not booking for antenatal care.

As far as the health care system is concerned, lack of specific health care facilities, lack of appropriately trained staff and transport problems between institutions are the three main avoidable factors.

The most common avoidable factors amongst health care workers are substandard management, problem with recognition of diagnosis, resuscitation, initial assessment of the patient, and delay in referring the patient. Substandard management was a problem in 27.8% of maternal deaths.

The role of the midwife
Midwives are crucial people in the health care system and play a very important role in the management of pregnant patients. All pregnant patients who deliver within the health care sector will be managed initially by a midwife. All pregnant patients who book for antenatal care will be seen and followed up by a midwife. It is therefore crucial that midwives realize the crucial role they have to fulfill in the lives of pregnant women in South Africa.

All health care workers involved in the care of pregnant patients should know what the important causes of maternal deaths are and what avoidable factors have been identified. If we do not know what the problems are, then it will not be possible to take the necessary steps to prevent mothers from dying because of pregnancy. The “Saving Mothers” report published by the department of health is a document that must be read by all midwives, as this document contains all the information needed to create a safer environment for childbearing women.

The “Saving Mothers” report makes ten recommendations intending to prevent maternal deaths. These recommendations are shown in Table II. It is very important that every midwife identify the recommendations applicable to the level where she functions.


Table II: Recommendations published in the “Saving Mothers” report 2002-2004

1. Protocols on the management of important conditions causing maternal death must be available and utilized appropriately in all institutions where women deliver. All midwives and doctors must be trained on the use of these protocols.
2. All post partum women and their babies with complications (at any site) and the number of unsafe abortions must be reduced
3. Criteria for referral and referral routes must be established and utilized appropriately
4. Emergency transport facilities must be available for all pregnant and post partum women
5. Staffing and equipment norms must be established for each level and for every health institution concerned with the care of pregnant women
6. Blood for transfusion must be available at every institution where caesarean sections are performed
7. Contraceptive use must be promoted through education and service provision and the number of unsafe abortions must be reduced
8. Correct use of the partogram should become the norm in each institution conducting births. A quality assurance program should be implemented, using an appropriate tool
9. Skills in anaesthesia should be improved at all levels of health care particularly at level 1 hospitals
10. Women, families and communities at large must be empowered, involved and participate actively in activities, projects and programmes aimed at improving maternal and neonatal health as well as reproductive health in general

Table III: Conditions requiring protocols

- Hypertensive disorders in pregnancy
- Obstetric haemorrhage
- Septic abortion
- Puerperal infections
- Communicable Diseases: STI’s including HIV and AIDS, TB and Malaria
- Resuscitation: Maternal and neonatal
- Non communicable diseases: Diabetes mellitus and cardiac disease in pregnancy

Every antenatal clinic and every health care facility where pregnant women deliver must have protocols on the management of all the important conditions causing maternal mortality in South Africa. Protocols should be drawn up specifically for every institution on an individual basis, as the management of the same condition will differ from institution to institution depending on the level of care and available resources. Although the protocols might be different between institutions, the guidelines will be the same for all health care facilities. Guidelines contain the principles of managing a certain condition, while the protocol is the detailed instructions or “recipe” on how the principles in the guidelines should be applied. Table III is a list of the conditions of which protocols should be available.

Having guidelines and protocols is essential, but that is not enough. Continuous training and revision of these protocols are essential in all institutions. Post partum haemorrhage drills are essential in keeping staff alert and competent in managing this condition. When a post partum haemorrhage is happening, management must be immediate and not wait for a protocol to be first found and then studied.

Midwives in the antenatal clinic play a very important role in preventing maternal mortality, as the antenatal clinic should not only be a place where blood pressure is measured, urine is checked and the SF is measured. It should also be a place where midwives communicate with their patients, informing them about the importance of fetal movements, vaginal bleeding, abdominal pain and other symptoms that must alarm the patient to seek medical help. It is of cardinal importance that observations are being done meticulously and that it is correctly interpreted. Patients with risk factors or other problems should be identified and informed of their situation and then be referred or managed appropriately without unnecessary delays.

Conclusion
As “A mother is she who can take the place of all others, but whose place no one else can take” (Cardinal Mermillod), and every child should have its own mother raising it, we cannot be unaffected by the current situation of three maternal deaths in South Africa every day. Midwives are the most important group of health care workers that can impact on this problem, as every single pregnant woman who book for antenatal care will be seen by a midwife.

We know why mothers die. We know what avoidable factors there are when mothers die. We know what to do to prevent the majority of these tragic deaths. We must just do it.

References