VU Research Portal

Health professionals and maternal health in Malawi: mortality and morbidity at district level

Beltman, J.J.

2013

Summary

This thesis is divided into two parts. The first part is comprised of studies that calculate the magnitude of maternal mortality and morbidity in a Malawian district. These studies set the basis for the second part, in which low-cost interventions to reduce maternal mortality and morbidity are described, with an emphasis on the role of health workers.

Part 1. Background: maternal mortality and morbidity in Thyolo, Malawi

Chapter 2 is a situation analysis of health services in Thyolo district at the time the studies took place. Maternal mortality was calculated at community level using the sisterhood method and compared with a prior sisterhood survey. We demonstrated that the MMR in Thyolo District did not decrease significantly between the 1989 [409 per 100 000 live births] and 2006 [558 per 100 000 live births] surveys, and may even have increased. (**chapter 3**).

In **Chapter 4,** severe acute maternal morbidity that occurred at the local level was analyzed using the newly suggested WHO criteria for maternal 'near miss'. Only 22% of the severe morbidity cases in Thyolo fulfilled these organ-based criteria, indicating that such criteria may underestimate maternal morbidity in low-resource settings.

Part 2. Actions to reduce maternal mortality and morbidity

Chapter 5 describes how permanent availability of HIV testing in maternity and labour wards could help increase uptake of HIV testing among pregnant women in order to improve maternal care and initiate PMTCT and early neonatal treatment.

Maternal morbidity review is of added value to mortality audit. **Chapter 6** describes analysis of a specific type of morbidity: hospital-based obstetric hemorrhage. This was calculated at 43.1 per 1 000 deliveries, with a case fatality rate of 4,5%. This study also elicited several substandard care factors in the prevention of hemorrhage: the limited use of oxytocin, performing caesarean sections on non-viable fetus and insufficient monitoring of pregnant women.
As a comparison with a high-income setting an assessment of maternal morbidity resulting from antepartum haemorrhage was performed in the Netherlands (**chapter 7**). Severe APH occurred in 7.3% of women with major obstetric haemorrhage. Maternal case fatality rate was 0.9%. In the Netherlands, for instance, increased risks for antepartum haemorrhage were observed for non-Western immigrants.

In **chapters 8** and **9**, the role of health care workers in improving maternal health is highlighted. In **chapter 8,** the health workers' perspectives of the management of obstetric haemorrhage were captured using focus group discussions. Causes mentioned for the high number of obstetric hemorrhage cases were: 1) the chronic lack of materials and supplies, 2) reluctance of TBAs to refer in a timely manner and absence of basic skills among TBAs, 3) the persistent lack of human resources play a major role in managing obstetric hemorrhage and 4) lack of training in obstetric care of the health care workers.

Chapter 9 describes why a human rights based approach to reduce maternal mortality may be a powerful instrument, not only for (inter)national political- and civil organisations, but also, and perhaps most importantly, for health care workers. Their power to initiate change may well be underestimated by 'higher echelons' or by themselves.