Reviewer's report

**Title:** Predictors of extra care among magnesium sulphate treated eclamptic patients at Muhimbili National Hospital, Tanzania.

**Version:** 1  **Date:** 11 November 2010

**Reviewer:** Justus Hofmeyr

**Reviewer's report:**

The report describes a retrospective analysis of data from women with eclampsia treated at a referral hospital over a year. The main focus is factors associated with the need for 'extra care', as defined by the authors.

1. The question posed by the authors is well defined.
2. The methods are appropriate and well described.
3. The authors acknowledge limitations in the data due to the retrospective nature of data collection.
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
5. It is not clear from the report the extent to which data were missing.
6. Some limitations of the work are stated.
7. The authors acknowledge published work upon which they are building.
8. The title and abstract accurately convey what has been found.
9. The writing is acceptable

The manuscript could be improved by added attention to the interpretation of the findings. Some examples are:

A. "Since three quarters of the women were referred from district hospitals where MgSO4 should be available, it is questionable if effective pre-referral management of eclampsia with MgSO4 is offered to these mothers." It would be useful to support this statement with data or an estimate of the number of women who did or did not receive MgSO4 prior to referral.

B. It would also be interesting to know how many of the women referred from other hospitals initially developed eclampsia at home, and whether the high rate of altered consciousness may have occurred at home rather than at the referral hospital. It may be worth mentioning whether women admitted initially to peripheral hospitals may have been from a more rural and poor background and therefore took longer to reach hospital after developing eclampsia.

C. "Strikingly, we found a tendency towards increased need for extra care in ICU if"
the patient came through other hospitals as compared with when she came
directly from home. For example, an unadjusted risk for extra care was more
than five times if the patient was referred from a private hospital. This
association, however, seems to be wholly explained by the condition of
the patient on admission to MNH (as indicated by the level of consciousness),
time
taken from the first fit to delivery and mode of delivery."

It may be that lower-risk cases of eclampsia were managed at the peripheral
hospitals, and only those with more severe morbidity were referred to the central
hospital. Similarly referrals from private hospitals may have been biased towards
the more complicated cases.

D. The fact that abdominal delivery was associated with more need for extra care
may indicate that abdominal delivery tended to be used in women with more
complications, rather than that abdominal delivery predicted the need for
extended care. The use of a nasogastric care, one of the definitions of extra care,
may have been due to the surgery rather than to the severity of the eclampsia. It
could be questioned whether use of a nasogastric tube is a good indicator of
extra care.

E. It is important to mention the possibility of bias towards referral of more
complex cases with respect to the mortality reported, as this may be based on a
patient group selected for referral because of high-risk factors.

**Level of interest:** An article whose findings are important to those with closely
related research interests

**Quality of written English:** Needs some language corrections before being
published

**Statistical review:** Yes, but I do not feel adequately qualified to assess the
statistics.

**Declaration of competing interests:**

'I declare that I have no competing interests.