Reviewer's report

Title: Postoperative outcome of caesarean sections and other major emergency obstetric surgery by clinical officers and medical officers in Malawi.

Version: 1 Date: 16 February 2007

Reviewer: Johanne Sundby

Reviewer's report:

General
The paper is indeed very interesting and the findings should be published as soon as possible. The show one way forward for obtaining very important development goals.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract
I think this paper does not really validate the advantages or disadvantages of delegation of surgery, but it evaluates the use of non-surgeons.
It is a prospective study, it should be stated also in the abstract.

I am not sure if one should use the term medical officers, as I have heard malawian clinical officers use that term for themsselves; maybe it is better to use the term medical doctors or physicians.

Introduction
page 3, avoid "brain drain" slang language, explain what you mean
Indeed, the issue of physician and nurses travel to other countries could be exemplified in this paper, how many are there, how large is the gap

Page 4. The training of clinical officers could be described a little more in detail, so that we understand clearly what level of competence they actually have.

Methods: I assume that elective cesarian sections were not included, or that they were few altogether. Can you say something about that?
Page 5. top: change to: We also assessed the competence of the two types of professionals that were the performing surgeons, by noting information about the institution....etc
Outcome measures could be operationalized some more. What were the data sources that you used. How were they operationalized?

Results.
Page 6. instead of "did their internship" say "had done their internship", I assume this was something in the past.....
9 % admitted no post-internship surgical experience - explain how you get this result, were these officers very new in their job, or did they perform surgery after many years of no surgery.....this is important to clarify.

Discussion
The middle paragraph on page 8 seem to introduce some issues that could have been addressed in the results section

and the last para on the same page seems to belong to the methods section, on how you actually trained the data collectors. A discussion of the validity or bias of your results, though, belong in the discussion and could have been a bit more formalized. You probably didn't do any formal validity test, but you may say something about your "gut feeling" validity. Also, the outcome data (tables) do not show a totally perfect outcome for maternity care for any of the performers, neither medical doctors nor clinical officers manage to avoid maternal and newborn deaths; and this issue should also be brought up; what are the overall conditions that make outcomes so poor; and what are the real challenges that Malawi faces if they were to scale up access to emergency obstetric care on a general basis (how well do you assume the general access to/ CS coverage /seems to be?)
Page 9- the major cause of maternal death for this series, relating to deaths only of those who had cesarian section, I assume. How does this compare to the main causes of maternal deaths in all cases in Malawi, also those who do not get c.s.?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The study is decriptive and informative. It doesn't attempt to discuss the medical/political implications of choosing one strategy (Medical officers) to another (medical doctors), but of course this debate is very important. This paper delivers evidence that if you actually train people to do the surgery, they can do it equally well - and given better overall health sector conditions, there is scope for improvement even for both types of providers. I assume that the medical doctors in this study are generalists, and not OB/GYN specialists, and that implies that they do not have specific surgical skills, as may be the case for some of the clinical officers. The paper doesn't address the type of decision making that comes ahead of surgery, like indication and timing of the intervention. I see that this is not part of the data, but the need to find out more about this, could be addressed.

Discretionary Revisions (which the author can choose to ignore)

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of outstanding merit and interest in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.