Reviewer's report

Title: Indications, timeliness, and outcomes of Caesarean delivery in first-line referral facilities in Afghanistan: A chart review

Version: 1 Date: 26 October 2011

Reviewer: Patricia Bailey

Reviewer's report:

This is a well written paper on an important topic with a particularly good discussion section.

Minor essential revisions
1. Under the Results section and subheading Type of cesarean, indications, and partograph use, second paragraph that begins with “Maternal indications…”: the percentages in the text do not reflect the percentages in Table 1. It appears the table was updated but the text was not.

Minor issues not for publication
1. Under the Results section and subheading Type of cesarean, indications, and partograph use, first paragraph that begins with “Overall…”: the numbers/percentages cited at the end of this paragraph did not print correctly (could have been my printer).
2. Under the Discussion section and subheading Improving the quality of care, 3rd paragraph, last sentence: the word ‘finding’ needs an ‘s’.
3. Under the Discussion section and subheading Methodological issues, first paragraph, 5th line, the word Afghanistan is misspelled. Same paragraph, 4th sentence, I would suggest using the term “dropping” instead of “the elimination of”. Same paragraph and last sentence appears to have a couple of words left out – the last clause maybe should read “these facilities are likely to underperform compared to the facilities remaining in the sample.” But it might help to clarify what you mean by “underperform” – are you referring generally to the provision of EmONC services? Same section, 2nd paragraph, 2nd sentence the word “none” should be followed by “was” not “were.” Same section, 2nd paragraph, last sentence: was the word “first” omitted? Should it read -- “However, it is also true that Afghan women are less likely to seek medical care for their first delivery: only 14% of first births in Afghanistan in 2006 were institutional deliveries”?
4. Under the Discussion section, first paragraph Raising CS rates, last sentence: maybe this last sentence could be re-crafted so that “including a lack of blood transfusion” isn’t so awkward.

Discretionary revisions
1. An interesting additional analysis for those 16 facilities that reported no C/S in the last 3 months, especially for those that reported ‘no indication’ or no woman had arrived for whom a cesarean was indicated, would be to assess their readiness to provide C/S had there been a patient (did they have an OT, a physician with surgical skills, anesthetist, anesthesia machine, anesthesia, etc.?). I realize there were only 3 cases with ‘no indication,’ but it might be interesting to see exactly what was missing in the other 13 as well.

2. Abstract, under subheading Methods, first line: is the term “designated” the best choice? Perhaps “expected to function or perform” might be a better choice? It would be a bit clearer that the government expects certain facilities to perform at a specific level, but not all are functioning at that level.

3. It appears that the analysis about the completion of the partograph was based on all cases (both emergency and non-emergency cesareans). Does it make more sense to do this analysis only on emergency cases? Those women, for example, with a prior C/S might not have gone into labor and therefore shouldn’t be included in the denominator.

4. In Table 1 it was interesting that the authors divided the cases into emergency and non-emergency cases rather than emergency and elective. Was this a decision made by the authors or is this how the practitioners actually filled in the patient charts – “non-emergency case”? Perhaps the authors could explain why they chose these categories.

5. Under the Discussion section, 2nd paragraph, the authors discuss the advantages of conducting CEmONC trainings at lower level facilities. This recommendation has a lot of merit but would these lower level facilities have the volume of patients suffering from major obstetric complications? Perhaps authors should emphasize simulation training, or training with manikins?

6. Same paragraph, middle of paragraph: “The existing CEmONC facilities are a bare minimum.” It might be worthwhile to support this assertion with statistics such as the ratio of CEmONC to 500,000 population.

7. Same section (Discussion), 3rd paragraph. The authors point out that the data reflect public sector only, but are you also implying that there is a significant private sector in Afghanistan?

8. Same section (Discussion), 2nd paragraph under subheading Differences by facility level: would it be helpful to state whether survival varied by type of C/S (emergency vs. non-emergency)?

9. Same section (Discussion), 3rd paragraph under Methodological Issues: these 173 cases should certainly not be construed as representative of all women in Afghanistan (how representative they are of women who deliver by cesarean is a different question), but I think their lower parity and higher rate of ever use of contraception suggest evidence of selection bias – women who access EmONC services are probably more urban, less poor, more educated, etc.

10. Discussion, subheading Improving the quality of care, 3rd paragraph: authors may want to soft peddle the suggestion that the few labor inductions and instrumental deliveries lead health workers to perform C/S too early. The weight
of the evidence is to the contrary – the delays are substantial and can be extensive. But in theory, it is true that the lack of options and poor usage of the partograph can lead to premature decisions to operate.

11. The authors may want to mention that another “advantage” of the chart review is to identify poor quality of reporting and documentation, and therefore, increased attention to improving the completion of birth registers, medical charts, etc.

12. No discussion of VBAC? Is anyone trained to perform VBAC?

13. Section Methods, 4th paragraph: as stated in the text, it sounds like the 6 doctors and 38 midwives were trained over the course of 1 week to use module 8 – was that true, or were the 42 health workers trained to complete all the needs assessment modules over the course of the week?

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests.