Reviewer's report

Title: Direct versus indirect measurement techniques for the measurement of blood loss after delivery

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Reviewer: Johannes Duvekot

Reviewer's report:

The study described in this manuscript was performed in the KEM hospital in India, a medium-sized general hospital.

The English is good. The manuscript is written quite well. It is an easy study and is written down clearly.

Use other key words like pregnancy, postpartum blood loss and not postpartum hemorrhage, because this is not the main issue here.

There is some surprise about the low number of complications (manual removal of the placenta, PPH more than 1000 mL etc.).

Obviously this study was performed in a setting and population not comparable to Western settings and populations.

Title:

The title is too general. Mention in the title which two methods the study compares.

Abstract:

Make the conclusions section shorter.

Background:

Good and to the point. An example of the calibrated receptacle should be illustrated with a picture.

Methods:

Good. Describe the randomization process in little more detail as the power calculation. Use a Consort Statement. What was the gestational age to be included, from 28 till 43 weeks?

Describe the usual protocol to prevent PPH and how was active management performed or was that up to the birth attendant. Who was doing the delivery? Midwives or gynaecologists?

Mention the approval of the medical-ethical board and the trial number here too.

Mention the inclusion and exclusion criteria more clearly. Was there a minimal age to participate? Is it allowed in India to include women of 17 years?

Results:
What were the reasons to perform a CS before labour? Did no women have an emergency C-section?

Why did so many women get an episotomy?

How is it possible that only 6/900 women had manual removal of the placenta?

Mention the mean hemoglobin levels before and after delivery. You could put them in a table.

Were no labours induced? Did all start spontaneously? How many were augmented?

Did 7 babies die during delivery? Was it not possible to perform an emergency CS?

Were there no ventouse deliveries?

Discussion:

Speculate on the fact that blood loss was only measured after delivery of the baby. When did suturing of the episiotomy start, after one hour or immediately after delivery of the placenta?

Make a set of strong and weak points of this study and try to explain them.

Although the mean blood loss measured with the direct method is greater, this is not true for smaller quantities. Make a difference between the results of more or less than 500 mL or 400 mL. Was there also an visual calculation made?

Less that 200 mL the direct method is less, is that significant, make a description in which quantities the different methods differ significantly.

References:

Fine.

Tables:

Table 2: I guess Misoprostol and Carboprost is only used to treat PPH.

See also the results comments.

Figures:

Figure 2: what is on the y-axis? Make categories of 500-1000 and more than 1000 mL. I would be more interested in a continuous line or scatter plot.

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

Quality of written English: Acceptable

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