Reviewer's report

Title: Childbirth assistance in Catalonia. An analysis of obstetric interventions in two groups of hospitals

Version: 3 Date: 28 October 2013

Reviewer: Ana Pilar Betran

Reviewer's report:

This manuscript presents and discusses the incidence of the use of certain obstetrical interventions, namely caesarean section, instrumental vaginal delivery and episiotomy in Catalonia. This is an important topic as caesarean section rates are increasing worldwide, particularly in middle- and high-income countries, to unprecedented levels despite the lack of scientific evidence indicating any substantial maternal and perinatal benefits from increasing CS rates, and some studies showing that higher rates could be linked to negative consequences in maternal and child health. Similarly, episiotomy has been shown in many settings to be performed almost as a routine intervention in all women unnecessarily.

It is particularly interesting that this analysis is conducted in the context of a governmental initiative to promote “normal birth” and decrease unnecessary interventions during childbirth implying political commitment and more sustainable population-based results.

Authors state three objectives and I think objectives 2 and 3 are the same except for women’s age which is added in the third objective.

Was there any reason to the cutoffs used for the stratum?

Compulsory revisions

• Introduction: page 4; authors described that there are 43 public hospitals in Catalonia with maternity services of which 32 received additional funding to implement the strategy supported by the government for “normal childbirth”. However in the methodology, authors mentioned that for this manuscript they include information on 44 public health hospitals with maternity services and 20 private while in the Discussion page 11, authors state “…this work identified that of the 60 hospitals included….“ Maybe authors could explain so it does not seem inconsistent to the reader. For the private hospitals, are these 20 also all private maternities in Catalonia or are there more?

• The three indicators analysed in this paper are the caesarean section rate, instrumental vaginal delivery rate and episiotomy rate and these are presented for 44 public + 20 private hospitals in the MBDS. Do these represent ALL births in Catalonia? If not, it would be good to give the percentage of the total births in Catalonia that these represent.

• Authors present the results with confidence intervals. If the data included in the
analysis are all the births in the mentioned hospitals/maternities, confidence intervals would not necessary as it is not a sample but the totality and it is not representing a larger population (or inferences to a larger population is not the objective).

• Normally, percentage of missing records for each of the variables in the study (caesarean section, instrumental vaginal delivery and episiotomy) should be provided. Authors mentioned poor recording for amniotomy and induction of labour but I don't think they report this information for the variables under study.

Discretionary revisions:

• With regard to the missing records and the population under study mentioned above, it may be useful and clarifying to have a flowchart such as the those used in the systematic reviews) showing: the total number of births, the total singleton, the missing records and the final numbers.

• Introduction, page 5. In the last paragraph authors explain the exercise of the Ministry of Health ion 2010 to evaluate the implementation of the SANC and make a general statement of the results “This assessment uncovered some improvements, but also highlighted the need for further work…” It would be very interesting if the authors were to share some concrete examples of the results, in particular related to the practices relevant for this manuscripts instead of the general statement currently written.

• As I mentioned above, it is particularly interesting that these data is analysed in the context of a governmental initiative to promote “normal birth” and decrease unnecessary interventions during childbirth. Although I understand the full strategy is published somewhere, it may be useful to the reader to present a “box” with the major policies or tactics in the strategy.

• It is interesting that (Fig 1) only 13% of all the births are “normal” as per the definition given by the authors which does not take into account any morbidity or complications unless they affect the onset of labour and/or mode of delivery. It would be an interesting addition to know any insights from authors on this low proportion.

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

Declaration of competing interests:

I declare that I have no competing interests