Reviewer's report

Title: Public and private pregnancy care in Reggio Emilia Province: an observational study on appropriateness of care and delivery outcomes

Version: 1 Date: 23 September 2013

Reviewer: serena donati

Reviewer's report:

The research question posed by the authors is important within the context of its field. In fact, in Italy antenatal care is mainly run by private gynaecologists and this has resulted in an over-medicalization of assistance. Also, there are few experiences of evaluation studies that compare outcomes between private and public health assistance even though this is not the first Italian population based study in this field. In fact the Istituto Superiore di Sanità implemented several population based surveys investigating appropriateness of care among representative samples of women who gave birth in Italy comparing outcomes between private and public health assistance.

References of the most recent ISS surveys are:


Percorso nascita e immigrazione in Italia a cura di L. Lauria e S. Andreozzi Rapporti ISTISAN 11/12 available at:
http://www.iss.it/binary/publ/cont/11_12_web.pdf

Major compulsory revisions:

1. The observational population based study design described in the methods section is appropriate for the study objectives. Nevertheless I have some concerns regarding the study population selection also presented in fig.1. Through record linkage between Birth Certificates DB and Family and Birth Certificates DB authors identified 2504 women who received public assistance, 3618 who received private assistance and 856 with not consistent classification. It is not clear how the authors are confident that all women whose records don’t link with the Family and Reproductive Health Clinics have been assisted in the private sector. How can they exclude that part of them received prenatal care for instance in the hospitals? Authors should explain better the selection procedure in order to exclude selection bias among groups.

2. Moreover authors should specify how they have diversified physiologic from pathologic pregnancies in the 2 study groups. Did they select both according to the information collected through the Birth Certificate DB or for the Public Assistance group have been used information collected through the Family and Birth Certificates? A different selection criteria could in fact be a source of bias because information retrieved from Family and Birth Certificates are much more
reliable than those obtained by Birth Certificates DB.

All these aspects should be clearly described in the methods section.

3. In the introduction section pag.4 fourth paragraph, the authors refer to the SNLG pregnancy guidelines (reference n. 8, the URL is lacking in the bibliography) stating they indicate that only three ultrasound scans should be performed. On the contrary, the guideline recommends only two US. Authors should better explain that in Italy there is a National Decree (adding the reference of the Decreto Bindi) for exemption from payment of the ticket during pregnancy which includes 3 ultrasounds scans, while the recent national guideline recommends only two US.

4. In the same sentence authors should update reference n.6 because the 2010 CEDAP report is now available. I would add at the end of the sentence “..in 2010 (instead of 2009) had more than 3 ultrasound tests, on average 5.3 per birth without differences between physiological and pathological pregnancies”

5. On page 14, authors discuss the strong association between CS and delivery hospitals but I don’t see the corresponding data in the result section. As far as I know Emilia- Romagna is the only Italian Region who officially adopted the new SNLG pregnancy guidelines, I would therefore mention this information in the second paragraph of page 14 as a good practice in order to reduce inappropriateness.

6. In the results section on page 10, authors present interesting data related to Robson CS classification. Why do they consider class 2 and 4 as a whole? Separate analysis would be interesting if the available numbers allow it.

7. In table 1 pag 20, the numbers referring to the newborn presentation seem to have some mistakes: "other presentations" numbers and percentages should be checked and corrected.

8. Table 3: why did authors not adjust also the model on CS for women’s citizenship? Foreign women in Italy report a small number of US compared, but they also undergo less often a CS compared to Italian women.

9. Table 4: the title should be improved, for example: Rates of CS by Robson classification and sdj OR of CS for each class. In the footnote the asterisk is missing. I would love to receive separate OR for classes 2a/2b and 4a/4b.

10. In the conclusion section the last sentence supports in a too optimistic way that the diffusion of the guidelines could reduce inappropriate use of the study outcomes. On the contrary, the publication/implementation of guidelines is not automatically liable for any change in clinical practice. I would suggest to delete the word “dramatically” from the sentence and replace the verb “control” with “contribute in controlling”.

11. References are often not properly provided and/or reported and therefore authors should check them carefully. List below are some inconsistencies:

a. In the first line of the discussion reference 6 and 12 should be added to
reference 11.

b. In the third line of the interpretation paragraph reference 20 is related only to the Emilia-Romagna context. Authors should add reference 21 (the URL is not correct) and the following: L'interruzione volontaria di gravidanza tra le donne straniere in Italia A cura di Spinelli A. et al Rapporti ISTISAN 06/17Istituto Superiore di Sanità.

c. In the second paragraph on page 13, the authors summarize the results of two Cochrane Reviews (references 9 and 10). The number 9 is an old review and should be replaced with the following: Sandall J et al Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews 2013, Issue 8 Art. No: CD004667.

d. Moreover the two mentioned studies (references 24 and 25 to be deleted) in the last paragraph of pag.13 are already included in the Cochrane Systematic Review (reference 9) and therefore their results should not be described again. I would only save and improve the last sentence: “A population based Italian survey also found that the risk of undergoing more than 3 US and CS was higher for women assisted by private gynaecologists compared to public family and reproductive health clinics or midwives”.

e. Reference n.4 on page 13 should be rectified adding –“second part” to the title and the URL should be added.

f. Reference n. 1 should also be updated with the new Euro Peristat Health Report of 2010.

g. on page 7 references 10 and 11 are wrong and should be replaced with number 10 and 11

h. In the last paragraph of the introduction section on page 4, reference n. 11 and 12 should be together at the end of the first sentence because they both refer to the national surveys results. On the contrary the reference of the model promoted by the Health authority is lacking (Accordo Conferenza Stato-Regioni, Decreto Fazio)

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

Quality of written English: Not suitable for publication unless extensively edited

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'