Reviewer's report

**Title:** The influence of both individual and area based socioeconomic status on temporal trends in Caesarean sections in Scotland 1980-2000

**Version:** 1  **Date:** 15 November 2010

**Reviewer:** Dolores Ruiz

**Reviewer's report:**

I think this is a really interesting study, but I have some comments. I will divide them into "Major Compulsory Revisions" and "Minor Essential Revisions".

**MAJOR COMPULSORY REVISIONS**

1. The background is too poor. It is necessary to introduce well the issue before starting with the specific study. What is seen in other countries? What is the most suitable option for the mother when she goes to hospital? Are there differences between private and public hospitals?

2. Methods part, first paragraph. I do not know if choosing the occupational social class of father (or mother if the one of the father is not on the form) is the best way to register the social class. Why the authors have not chosen the social class of the mother in all cases? Or why they have not constructed the best social class between the one of the mother and the father, which is called the household social class? I think this part needs more explanation.

3. Methods part, 6th paragraph. What kind of occupations are classified as Undetermined social class? Or this term is referring to people who do not have an occupation? It is important to clarify this.

4. Methods. Why the authors do not do a multilevel analysis? I think the multilevel analysis would be the best way to consider the hierarchic position of individual and post code variables. If you do a multilevel logistic regression using individual and post code variables in the same level, you are not taking into account that they are variables of two different contextual levels.

5. Results. It is not relevant information related to the individual characteristics of women? I mean, maybe it would be interested to show the OR of individual variables in the models, and then it would be possible how age, parity, marital status... are associated to caesarean section rates.

6. Discussion, third, 5th and 6th paragraphs. Individual social class and area deprivation capture different dimensions of deprivation, and this is why a multilevel approach would be better in this case.

7. Tables 2 and 3. It is important to explain that the resulting odds ratios compares the bottom of the social hierarchy to the top. This is explained in methods, but a table has to be understood by itself.

**MINOR ESSENTIAL REVISIONS**
8. Abstract. In the background part, I consider important to say in which way the elective caesarean section rates have been shown to be linked to area deprivation in England. Is this a positive association or a negative one?

9. Methods part, second paragraph. I consider important to explain the percentage which suppose the missing values due to the not available postcode of the address. The Caesarean rates of these missing values were similar to the rest?

10. Methods part, third paragraph. Do you explorer another individual characteristics? Is not the country of origin of the mother, for example, also important when they have to choose a cesarean section?

11. Methods part, last paragraph. Why is necessary to stratify by whether or not the mother had had a previous caesarean section? It has to be explained.

12. Conclusions. Maybe the authors wanted to say “a decrease in inequalities” instead of “an increase in inequalities”?

13. Tables 2, 3 and 4. I consider important to specify in the title that SC is social class and AD area deprivation.

**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