Reviewer's report

**Title:** Pain medication during labour: which pain relief do women prefer and what do women use? Part of a prospective multi-centre cohort study

**Version:** 2  **Date:** 3 June 2013

**Reviewer:** Wendy Christiaens

**Reviewer’s report:**

General comments
1. Is the question posed by the authors well defined? Yes.
2. Are the methods appropriate and well described? No, see detailed comments below.
3. Are the data sound? Yes.
4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes.
5. Are the discussion and conclusions well balanced and adequately supported by the data? The conclusions are supported by the data, but the discussion is not well balanced. See detailed comments below.
6. Are limitations of the work clearly stated? Representativity (hence generalisability to the Dutch population) is not discussed.
7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes.
8. Do the title and abstract accurately convey what has been found? No. See detailed comments below.
9. Is the writing acceptable? As I am not a native speaker, I feel not well placed to evaluate the language, but I have included some suggestions in the detailed comments below.

Detailed comments

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached)

1. In the abstract I miss information regarding the mode of data collection: survey (drop off or face to face interview), how many questionnaires at which point(s) in time etc. Mentioning (in the abstract) multi-level analysis to control for the clustering seems less important to me.

2. p. 6, line 19: Several purposive sampling methods exist. Which one has been used? Was it a kind of quota sample? More detail about the sampling procedure
(at the level of midwifery practices) would be interesting.

3. In addition it would be interesting for the reader to know more about the characteristics of the midwifery practices. The authors could for example add a table describing the characteristics of each practice, this way the reader has also an idea of the numbers in each category.

4. What were the inclusion criteria? Which criteria did midwives use to invite women to the study?

5. What impact does the exclusion of women referred to obstetrician-led care have on the results? Can they be referred because of fear of labour pain?

6. You do not claim representativity and the focus on women in midwifery led care at the onset of labour is not a problem, but this focus should be clear to the reader from the beginning of the article. For example the focus on midwifery led care could perhaps be integrated in the title of the article?

7. The paragraph describing the variables used in the study is badly written. Here you can find some suggestions, but I think it also needs restructuring: first comes a paragraph about socio-demographic and personal characteristics in which each variable is described. Next paragraph about birth and pain relief related variables, again with a clear description of each variable. Now we don’t know anything about how the question(s) about pain relief was(were) formulated, nor the answer categories if there were any.

8. The framing of the question is also important in terms of what was actually measured. Thompson and Sunol (1995) for example distinguish between ‘predicted expectations’ and ‘ideal expectations’. Predicted expectations take practical and situational restrictions into account, while ideal expectations refer to aspirations, preferences and desires in an ideal world. So, I am interested to know whether women interpreted the question as a preference taking the context into account or as an ideal. In the first case, a women planning a home birth, could not have answered pharmacological pain relief, while in the second case, she could because for her a home birth with an epidural would be the ideal well knowing that this is not possible. Did the authors check this kind of patterns in the data? If yes, how were they handled? (Thompson, A.G.H., & Sunol, R. (1995). Expectations as determinants of patient satisfaction – Concepts, theory and evidence. International Journal for Quality in Health Care, 7, 127–141.)

9. Table 2: I am not used to this kind of presentation with crude and adjusted OR. However I noticed quite a difference between the crude and adjusted OR of ethnic background. How should this be interpreted? In table 4 the same accounts for the Ors for planned place of birth and parity.

10. The authors do not take a critical stance towards the Dutch maternity care system or the care providers side of the story. More specifically I think the discussion section would benefit from a discussion about whether the finding that only one quarter of the group preferring pharmacological pain relief, actually experienced pharmacological pain relief, might be an indication of an unmet
need. I doubt that women have just changed their mind. Perhaps it is more likely that they did not get what they wanted because they had little control over the decision about pain relief, or because it was not available. This should at least be a recommendation for further research.

Involvement in decision making and satisfaction with the experience of childbirth is mentioned in the background section, so it would be nice to feedback to this.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. I feel somewhat uncomfortable with the sentence: “It may be useful for care providers to assist women in keeping an open mind towards the approach to pain management that they will require in labour.”

   a) The message is not quite clear to me… are care providers recommended to be open to women’s preferences whatever they are (for or against pain relief), or to discourage women to use pain relief, or to encourage women to use pain relief, or to encourage women to be open to their care provider about their wish to have pain relief?

   b) Does this sentence suggest that asking for pain relief is pretty much considered as ‘not done’ by some care providers in some care contexts?

   c) ‘That they will require’ gives a remarkable twist to the sentence. I am not sure how to interpret it. It seems to suggest that women should not decide too much in advance and just wait and see how the delivery goes. But perhaps I am reading too much between the lines here. Please clarify.

2. p. 5; Line 9: “continuous support of the care-giver”. I would suggest to add the partner, or leave the caretaker (professional or informal) unspecified and say continuous support tout court.

3. p. 6 line11: ‘their preferred use and…” I would reformulate this into ‘their prenatal preferences regarding pain relief and actual use of…”.”.

4. p. 7, line 19: Data on…. Were used in the analyses as …”?

5. p. 7, line 23 at the end: the level of education…. Not the highest level of education. Highest can be deleted from the sentence.

6. p. 8; line 4, a ‘ is lacking after parous.

7. P. 8, line 7: “Women were asked to express which preference they had if they would use pharmacological pain relief during labour”. I am not a native speaker, but this sentence does not sound right. I would reformulate… e.g.: women were asked to express their preference regarding pain relief during labour.

8. Next sentence… I would replace ‘told that they would have to be referred to …’ by ‘informed about referral to obstetrician-led care if ….’

9. Next sentence “for the analyses regarding women who used their preferred method of pain relief, age and….”.
10. p. 8, line 16, “no method at al”
11. p. 9, line 5, We used (needs a capital).
12. P. 9, line 14: reformulate sentence into ‘...2398 individuals filled in both the second and third questionnaire’.
13. p. 9, line 16, figure 2 should probably be figure 1.
15. Since women who did not prefer pharmacological pain relief may have preferred to use non-pharmacological pain relief or no pain relief at all, I would suggest to rename the category which is now called ‘non-pharmacological’ into for example ‘no or non-pharmacological pain relief’, also in the tables, because this is quite confusing.
16. In the results section a clear distinction should be made between three categories:
   • Women preferring no pain relief
   • Women preferring non-pharmacological pain relief
   • Women preferring pharmacological pain relief
   In addition in comparisons it must be clear which group is compared to which group.
17. Title: ‘preferred use of pharmacological pain relief’ is not clear.
18. Title: ‘using the preferred pharmacological pain relief and associations with age, level of … ‘ is not clear.
19. p. 11, line 3-4: compared to women who were parous, … when they had preferred to.” I do not understand this sentence.
20. p. 11, line 21: feel less secure? Instead of be less secure.
21. p. 14, line 2: Our large study do provides…

Discretionary Revisions (which are recommendations for improvement but which the author can choose to ignore)

1. The title seems to suggest that the paper is only about women who labored with pain relief. I would recommend the author to broaden the scope and include women who labored without pain relief, which is in fact the large majority in the population subject to this study. For example: Dutch women’s preferences and experiences with pain medication during labour.
2. I do not understand why planned place of birth was derived from the perinatal registration form instead of being asked in the questionnaire.

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

**Declaration of competing interests:**

No conflict of interest.