Author’s response to reviews

Title: Defining and describing birth centres in the Netherlands - a component study of the Dutch Birth Centre Study

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Author’s response to reviews:

Heather Whitford

BMC Pregnancy and Childbirth

Re: Manuscript ID: PRCH-D-16-00883

Leiden, March 15, 2017

Dear Ms Whitford,

Enclosed please find our revised version of Manuscript ID: PRCH-D-16-00883, entitled "Identification and description of birth centres in the Netherlands - Results of the Dutch Birth Centre Study". As proposed by both reviewers, we changed this title into a more appropriate one:
“Defining and describing birth centres in the Netherlands - a component study of the Dutch Birth Centre Study”

Thank you for giving us the opportunity to revise and resubmit this manuscript. We appreciate the time and detail provided by the reviewers.

The suggestions and comments are answered below, organized by reviewer. We have highlighted the changes in the text of the manuscript, for the ease of your review. We rewrote parts of the discussion. The findings of our study were more considered in an international perspective with references to key studies.

Kind regards,

On behalf of all authors,

Marieke Hermus, RM, MS

Editor Comments:

Reviewer reports:

Reviewer 1: This was a clear and potentially useful study, but its relevance and value will be enhanced by drawing more fully on the international literature on the topic to ensure that this work to define and describe the characteristics of Dutch birth centres has international comparability and value. Detailed recommendations are provided below.
Abstract: this provides a reasonably clear overview.

Consider using the word mapping in the title to make clear the type of survey.

Reply: Reviewer 2 also suggested a change in the title. We changed the title of this manuscript into a more appropriate one: Defining and describing birth centres in the Netherlands - a component study of the Dutch Birth Centre Study.

Keywords - I recommend you add midwifery unit and midwife-led unit as these are commonly used.

Reply: We added these key words.

Introduction

This is clear and readable.

On line 111, suggest you use a different term from 'coarse' - e.g., basic

Reply: We changed the term ‘coarse’ into ‘basic’.

A little more information on the context is needed for the international readership. Please add some detail about the health system - e.g. National Health Service, Insurance Based, Maternity professionals employed, status, positions and roles of midwives?

Reply: We added a box (see page 30) with information about the Dutch maternal health system.
Methods

These were succinct but clear overall.

Line 121 is confusing. Was this not sent to all hospitals? Why one?

Reply: We understand the confusion and rephrased this sentence. (see line 128 to 131)

Findings

It would be helpful to clarify the meaning of independent midwife as used here, as in a country like the UK this would distinguish a midwife working outside the NHS, with private payment from a midwife (the majority) employed within the NHS. This might be tackled in the background section where I have recommended some data to clarify the health/maternity care system and role and status of midwives in the Netherlands. This issue is important for international comparisons - which would be one of the key values of this study - as in some other countries a birth centre might be midwifery managed, but the midwives not categories as independent community midwives. I think this is a particularity of the Dutch midwifery system and would be important to clarify for the international readership and for comparison of definitions.

Reply: We added information about the Dutch maternity system in box 1.

Discussion

Currently, this is the weakest part of the article and needs more development to enhance its value and international relevance.
In particular, there is a lack of reference to the international literature on definitions and features of birth centres/midwifery units (likewise, in the background this is only mentioned in passing and some key studies are not cited.

Overall, there is a lack of reference to key evidence relevant to the study. For example, the Birthplace in England birth centre definitions study. This is important in that currently, the article appears to have a relatively narrow reference point, whereas it has potential to have more international usefulness, particularly to support international comparisons of outcomes.

Reply: We rewrote parts of the discussion. The findings of our study were more considered in an international perspective with references to key studies. (see page 16).

On lines 385-393 there is discussion about the issue of travel time but this reads as somewhat contradictory. The evidence that distance is not associated with adverse outcomes is acknowledged and yet the discussion still seems to suggest that this should be treated as a problem. Relevant literature, such as the Birthplace in England analysis of transfer data, the Danish research by Overgaard on freestanding midwifery units and the Canadian literature should be referred to. The Birthplace in England study, for example, shows that average travel time from freestanding midwifery units in England was high, yet FMUs were found to have the optimum outcomes.

Reply: We rewrote this part of the discussion on travel time. (see lines 418 to 431)

Reviewer 2: This paper reports a study, conducted as part of the Dutch Birth Centre Study (DBCS), aiming to define and describe birth centres in the Netherlands. It is of interest, particularly to those working in maternity care and research in the Netherlands, but also potentially to a wider audience interested in the development of 'midwifery-led' settings for care around the world. I have a number of detailed comments, but briefly:
* The aim of the study, specifically relating to this paper rather than as it relates to the DBCS, needs to be more clearly stated.

* The presentation of the methods and results need to be more clearly aligned with the aim of this paper

* More care needs to be taken with the presentation, discussion and interpretation of small numbers

* The discussion of the results needs a clearer structure with more consideration of the international context

My detailed comments are as follows:

A. Major comments

1. Introduction:

i. The authors give a useful introduction to the birth centre concept, the Dutch context and the rationale for this study. They clearly state that the study reported in this paper was carried out as an essential early component of the DBCS. For the purposes of the DBCS the aim was clearly to develop a standard definition of a birth centre for use in the Netherlands and identify the birth centres. As I see it, this paper should therefore focus on describing how that definition was derived, presenting the definition(s) and describing the characteristics of the identified Dutch birth centres. A clear statement to this effect at the end of the introduction would be helpful I think to orient the reader. This may appear to be a subtle reframing, but is helpful I think when considering how the methods and results are presented later.

Reply: We rephrased the aim:
This study is part of the Dutch Birth Centre Study and aimed to develop a standard definition of birth centre for use in the Netherlands in order to identify all Dutch birth centres and to describe their characteristics. (see lines 106 to 108)

Following on from this point, the title of the paper itself could also be improved. As it stands it reads as if it may be presenting the results of the DBCS. Perhaps something like "Defining and describing birth centres in the Netherlands: a component study of the Dutch Birth Centre Study" would be more appropriate.

Reply: We changed the title of this manuscript into a more appropriate one. “Defining and describing birth centres in the Netherlands - a component study of the Dutch Birth Centre Study”

2. Methods:

i. I think it would be helpful to give an 'overview' statement at the start of this section describing the methods used in the development of the birth centre definition (primary data collection using questionnaires and interviews; literature review and a consensus process) before going on to describe the specific data collection tools.

Reply: We added this ‘overview’ statement at the start of this section. (see lines 110 to 112)

ii. The next two sections read as if they are sub-sections of a report on the development of the DBCS, rather than part of the methods section for a paper describing how the Dutch birth centre definition was derived. Some of the information in the section headed "Identification and selection process of Birth Centres" is relevant, in that it describes the process by which potential/presumed birth centres were contacted and data were collected, but references to "the study" are confusing because the refer to the DBCS.
Reply: We changed this section into a more appropriate method section for the development of the definition of a birth centre.

The final sentence in this section relates to selection of study centres for the DBCS and is not relevant here.

Reply: We moved this final sentence to the data collection tools section and rewrote parts of this section. (see lines 142, 143)

3. Results:

i. The couple of sentences are helpful as a starting point to describe the process of identifying potential and presumed birth centres. I think it would be helpful to explain what was not "birth centre-like" about the 47 units which were no longer considered as potential birth centres after the short digital survey.

Reply: We added information about their reason for exclusion in the first section of the Results. (see lines 201 to 206)

It may also make sense to include here the information in the first two sentences under "Selection of birth centres" on page 11 about response to the DBCQ.

Reply: We moved this information on response to a more appropriate section. (see lines 207, 208)

ii. I was puzzled by the definition of freestanding birth centre which states that it is "…located separate from a hospital with obstetric services or on its hospital grounds." Does this mean that a birth centre which is in the grounds of a hospital with obstetric services IS or IS NOT
freestanding? In the UK a birth centre in the grounds of a hospital with obstetric services would not be classified as freestanding, but would be 'alongside'.

Reply: No, a birth centre on the grounds of a hospital with obstetric services is called an alongside birth centre (in line with the situation in the UK). We rephrased the definition. (see lines 252,253)

iii. The definition of an alongside birth centre is also confusing. Presumably in order to be alongside it should be "located separate from an obstetric unit" but in, or in the grounds of, a hospital with obstetric services, not just any hospital. This is not clear in the definition.

Reply: We made it more clear in the definition. (see lines 242, 243) Two freestanding birth centres are located in a hospital, but a hospital without obstetric services. In case of referral, the woman has to be transferred by car or ambulance from the hospital without obstetric services to one with an obstetric unit.

iv. As in the Methods section, some of the subsection "Selection of birth centres" reads like part of a report on the DBCS (e.g. "Based on data received from the DBCQ and alignment with the agreed to definition of birth centre for the Netherlands, 19 respondents were excluded from the study because they did not fit the criteria"). The essential information here should be that 27 out of the 46 presumed birth centres appeared to fit the definition and their managers were interviewed.

Reply: We rephrased this subsection. (see lines 262 to 266: Nineteen of the 46 presumed birth centres were excluded because they were not midwifery managed. Twenty seven presumed birth centres appeared to fit the definition based on the answers of the DBCQ. Their managers were interviewed and these locations were visited to confirm the fit of the definition and to obtain additional data)
v. I would also like to see more information given here about the reasons why the remaining 19 birth centres did NOT fit the definition. For any given definition it may be as instructive to know about those which do not fit as it is to see the characteristics of those that do.

Reply: Reasons for exclusion of these 19 birth locations were added. (see lines 252 and 253). They appeared not to be midwifery managed.

It may also be of interest to understand the range of service provision available.

Reply: This information is shown in Table 2.

vi. The sub-section on the characteristics of the birth centres is interesting, but would be easier to read with sub-headings.

Reply: We added the sub-headings ‘establishment, location, facilities to support physiological birth, staffing ,Family centred care, philosophies and finance and legal entity’, to make this section easier to read.

It is quite long and could be shortened without much loss of important content.

Reply: We shortened it where possible.

vii. I am concerned about the presentation of percentages for the characteristics of the birth centres, both in text and in tables. The numbers here are VERY small and it is therefore potentially misleading to present percentages. This is particularly inappropriate where percentages are used to compare different types of setting. It is NOT correct to say, for example, that higher percentages of alongside and freestanding birth centres described ‘minimal pharmacological pain management’ as an important philosophy, compared with on-site birth centres (as is stated on page 15). Where the numbers being compared are 3/3, 10/14 and 3/6, it is
not appropriate to say that 100% and 71% are higher than 50%. I would prefer not to see percentages at all in this section, but it may be acceptable when used to describe the birth centres as a group, (e.g. 17 birth centres (74%) had no medical equipment in sight).

Reply: We agree on this. We added a column with the total number and its percentage for Table 2 and Table 3 and removed the percentage in the columns based on the outcomes of the three different locations.

4. Discussion & conclusions

i. The Discussion and Conclusions would benefit from a clearer structure and focus, e.g. Main findings; Consideration in the light of other relevant literature (e.g. other international definitions); Strengths and limitations; Implications for policy/practice/further research. Some of this is covered in the discussion, but I would like to see more discussion of other relevant literature.

Reply: We rewrote parts of the discussion. The findings of our study were more considered in an international perspective with references to key studies.

The second paragraph on page 18 does not appear to fit comfortably in this paper and has no supporting references.

Reply: We removed this part of the discussion.

B. Minor comments

1. Sometimes (e.g. in the first paragraph of the abstract) the word birth centre (singular) is used where birth centres (plural) would make more sense.
Reply: We changed this in the manuscript where appropriate.

2. Some of the statements about birth centres in the introduction (e.g. "In general, birth centres focus on childbirth being a family event…") could do with a supporting citation.

Reply: We rephrased that statement and added references for support. (see lines 67 to 70)

3. In lines 77-8 on page 4 it is stated that "Out of home birth can take place within a hospital setting or in a birth centre location outside a hospital". This doesn't seem quite correct. Surely some (if not most) birth centres are in a hospital.

Reply: There are different options for ‘out of home’ as a possible location to give birth. This can be ‘in a hospital’ (on the obstetric unit, in a birth centre or in another room in the hospital) or in ‘a birth location outside the hospital’ (a freestanding birth centre, or another birth location than home but not in the hospital).

We revised this sentence.

4. I am intrigued by the sentence in lines 94-96 that "not all locations that call themselves birth centre[s] in the Netherlands are places where women can actually give birth". This never seems to be explicitly explained, although there is some indication of what this might mean in the discussion section. Could this be clarified?

Reply: We added examples of birth centres in the Netherlands where it is not possible to give birth with a reference in the introduction section. (see lines 98 to100)

5. The sentence at lines 120-122 doesn't seem to make sense. Was the short digital survey really only sent to the chair of obstetricians associated with "one of the hospitals in the Netherlands…"?
Reply: No, it was sent to the chair of every group of obstetricians associated with each of the 98 hospitals with maternity care in the Netherlands. We revised this sentence. (see lines 123 to 126)

6. I'm not clear what is meant by "… other than de identified birth centres" in line 163.

Reply: We revised this sentence. (see line 172)

7. I don't understand what is meant by "At this point, the definition of birth centre was more context specific developed by developing conditions that should be met for various elements identified." Lines 206-8, page 10.

Reply: We removed this line because it did not contribute to this section.

8. There is an error in the heading of Table 3 - it should read "Important or very important…"

Reply: We revised this heading. (see line 592)