Reviewer's report

Title: Listening to women's voices: the experience of giving birth with paramedic care in Queensland, Australia

Version: 0 Date: 25 Apr 2019

Reviewer: Rachel Rowe

Reviewer's report:

This paper reports a study aiming to explore and describe women's experience of unplanned birth in an out-of-hospital setting in Queensland, Australia. While the authors report some interesting findings, I have a number of concerns which need to be addressed before this paper can be considered for publication. Briefly, more information needs to be provided about the context for this research, including the organisation of maternity services in Queensland and much more detail on the research evidence relevant to this topic; a clear aim of the study, with research questions or objectives, needs to be outlined; the methods section needs some revisions; the discussion and conclusion need rewriting to provide a more critical and thoughtful interpretation of the study findings, including strengths and limitations, and a more nuanced consideration of what can be concluded from this study.

My detailed comments are as follows:

1. Title:
   i. I think this should be revised to include the phrase "...in Queensland, Australia." as the setting for this research is important.

2. Abstract:
   i. Needs revising to reflect changes in the light of comments below.

3. Highlights:
   i. Add, "in Queensland, Australia" to point 1.
   ii. May need revision to reflect changes in the light of comments below.

4. Background:
   i. As it stands the background section provides insufficient contextual information for this study. First, the decision to situate the topic of the study, unplanned out-of-hospital birth or 'birth before arrival', in the context of other births "occurring in unplanned or unexpected ways" seems odd - I'm not sure
what these other births are. I would recommend removing the first paragraph entirely and starting with an explanation that there are different settings in which women may choose to plan birth, moving on to explain that a proportion of women who plan to give birth in a hospital or birth centre setting end up giving birth before they arrive at their intended birth setting. Describe what it means to give birth before arrival, i.e. the woman might be alone, with a partner, or with a paramedic; she might be at home, in a car at the side of a road or in the hospital car park.

ii. Some indication of the extent of the problem needs to be provided, i.e. how many women give birth before arrival each year? In Queensland? In Australia? Elsewhere? What is known about the characteristics of these women and their birth outcomes? The reader needs to know why this is an important topic and to be able to situate this study in the relevant evidence. The authors cite two studies on 'born before arrival', but a quick Google Scholar search identified at least ten potentially relevant studies.

iii. Is there any other evidence on women's experience of unplanned out-of-hospital birth? If so, this evidence should be referred to. If not, this is important to note since it establishes a gap in the evidence. Why is it important in this context to investigate women's experience?

iv. This study was conducted in Queensland, Australia. Most readers will have no knowledge of the organisation of maternity services in Queensland. Some information therefore needs to be provided about the clinical and service context for the decision-making and experience of the women in this study. How many women give birth in Queensland? What are their options for birth and where do most women give birth? Are there issues with location of available birth settings in relation to where women live which might impact on women's decision-making in relation to when to go to hospital in labour, e.g. are there significant populations who live a long way from hospital?

v. This section needs to end with a clear summary of the rationale for the study and an explicit description of what this study aimed to do. If there were specific research questions (referred to on page 6 at line 4), these also need to be stated here.

5. Methods:

i. Much of the section on "learning through birth stories" is not really about methods. Some sentences present information that could only be known in retrospect, after data collection, e.g. "the birthing stories often revealed power relations and patterns of oppressive behaviour that are influenced by gender". Other sentences justify the use of narrative enquiry from a feminist perspective and aren't strictly speaking about how the study was conducted. Instead a simple statement about the methodological approach taken is
needed, e.g. something like "This study used qualitative interviews, conducted and analysed using a narrative inquiry approach from a feminist perspective, to explore women's experience of unplanned out-of-hospital birth". In fact, some of the information in these two paragraphs might better be incorporated into the background section, as rationale for the methodological approach used, leading up to the aims and objectives.

ii. At the bottom of page 5 and top of page 6 the authors refer to inclusion criteria used to identify participants in order to ensure that participants had experiences that were relevant to the research questions. As referred to above it would be helpful to know what these research questions were. It's not clear to me how the first three inclusion criteria stated might relate to the research questions - presumably the first two were for practical/ethical reasons. I assume that the criterion that women "had an unplanned out-of-hospital birth" excludes planned home birth and planned unassisted or 'free birth', both of which are planned out-of-hospital birth. However, under "Participants" it is stated that none of the women had planned an unassisted or free birth. This doesn't need stating if this was an exclusion criterion. Some clearer description of inclusion/exclusion criteria would be helpful.

iii. Please state when recruitment and data collection took place. It would also be helpful to know if the 22 participants simply represent the first 22 women who volunteered to take part in the study or whether any selection was conducted. For instance, was there any attempt to explicitly seek variation in women's experience or in characteristics likely to be associated with experience (maximum variation sampling)?

iv. The section on participants is not about methods and should form the first sub-section of the Results section. The information that all participants were from Queensland and had originally booked for a hospital or birth centre birth seems unnecessary given that these were inclusion criteria.

v. The section on the narrative interview would be better titled "Data collection". Again the focus needs to be on describing the methods used. So, "women… were asked to give a verbal account of their birth experience" rather than "women… gave a verbal account…". Where did interviews take place? Who conducted the interviews? I would suggest that the authors should try and avoid jargon and instead give clear information about how interviews were conducted such that the study could be replicated by others. For example, the sentence "Narrative understanding informed how interviews were constructed, lived, analysed and interpreted" will not be informative for many readers. What does this mean in practice? The authors refer to "questions or prompts" used to elicit balanced information. Was this an interview topic guide? How was this developed? It would be helpful to see the topic guide or some examples of questions and prompts used.
vi. The subheading "Rigour" is unnecessary. Again, I would just like to know what was done. When was the 'members check' carried out? Was this an extra question at the end of the interview or were interview transcripts given to participants so they could check and add to them later? What were these "supplemental findings" and how were they incorporated? I'm not clear about the relevance of the "audit trail" - how was it used - why it is important?

vii. The subheading "narrative analysis" should be simply "Analysis". I don't understand the first sentence - again this looks like jargon. Some more detail would be helpful here. The authors present a generic description of how to carry out qualitative analysis, but I am interested in what they actually did, e.g. how did the researcher become "fully immersed and actively engaged in the data"? How were initial codes grouped into themes - could some examples be given here? Also, how do the themes presented in the results section fit in with the overarching "birth knowledge" theme? Were there any 'deviant cases'? How were these managed? Was any qualitative software package used to support analysis (if so, this needs to be described and a reference provided) or was it done in some other way?

6. Results:

i. The first sub-section here should describe the participants and their characteristics, which is important context for the findings. Any socio-demographic information about the women, in addition to age and parity, should be presented here. I would also be interested to see what settings the women were planning to give birth in (hospital vs birth centre). Is distance relevant here? Was any information collected about the distance women had to travel to get from home to hospital? Did they all give birth at home with a paramedic? I'm surprised that none of the women gave birth elsewhere (e.g. in a car) or unattended by any paramedic.

ii. Any information on the length of interviews should also be presented here.

iii. I am unclear what the final sentence in the first paragraph under "Results" means. What are "the results" referred to in this sentence?

iv. How do the subheadings used in this section refer to or fit with the overarching "birth knowledge" theme? Perhaps some signposting could be used here to explain how the results are going to be presented.

v. Quotations are generally used well to support the findings, but is would be helpful to have at least a participant ID for each one and, if possible without identifying women, some contextual information, e.g. multiparous/primiparous woman.
vi. There are lots of references to previous birth experience - I was left wondering how the experience of the four primiparous women fed into these findings, if at all.

vii. Under the subheading "The gatekeepers" the first paragraph could helpfully be incorporated into the Background section to give context about the process in Queensland for women going into hospital in labour. Was the term 'gatekeepers' used by women or do you mean that you, as authors, used this term?

7. Discussion & conclusions

i. The first sentence of the discussion is not justified by the findings presented in this paper. Quantitative studies of women who give birth before arrival would be required, and some have been carried out, in order to provide evidence on whether most women in this group are multiparous, have a precipitate birth or lack antenatal care. There is no reason to think that the women who volunteered to take part in this small, purposively sampled qualitative study in one state in Australia are representative of all women who have an unplanned out-of-hospital birth. This is not to say that their experiences are not informative, but the authors need to take much more care when considering their results and the implications not to overstate their findings.

ii. It would be helpful if the discussion could start with a brief statement of the key findings of this study, followed by a consideration of these findings in the context of other evidence. Currently this seems superficial.

iii. There also needs to be a critical consideration of the strengths and limitations of this study. I am sceptical that the participants in this study are representative of all women who give birth before arrival. All appear to have given birth at home with a paramedic. Their experience, as presented in this paper, seems remarkably homogeneous - that of women who were confident in their ability to give birth naturally, had a strong desire to avoid medicalisation and to remain at home for as long as possible.

iv. In my view the authors should consider the limitations of their study more carefully and present more nuanced and cautious conclusions. The research reported does not and cannot "dispel the myths of unplanned out-of-hospital birth". It does highlight the ways in which some women in Queensland might unintentionally increase their chances of having an unplanned out of hospital birth, and some of their motivations for doing so, and in that way it is informative, but these women are almost certainly a sub-set of women who give birth before arrival and should be considered as such.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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