# PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

### ARTICLE DETAILS

TITLE (PROVISIONAL)	"Just an extra pair of hands"? A qualitative study of obstetric service
	users' and professionals' views towards 24-7 consultant presence
	on a single UK tertiary maternity unit
AUTHORS	Reid, Holly; Wittkowski, A; Vause, Sarah; Heazell, Alexander

#### **VERSION 1 – REVIEW**

REVIEWER	Marian Knight
	National Perinatal Epidemiology Unit
	University of Oxford
	UK
REVIEW RETURNED	25-Oct-2017
	20 000 2011
GENERAL COMMENTS	This interesting paper identifies some of the complexities around the
	perceived advantages and disadvantages of 24-hour consultant
	labour ward presence and adds usefully to the literature on the topic.
	I have only a few suggestions for minor revisions.
	1. It would be helpful if it could be made clear in the title that this
	work was carried out in a single UK maternity unit.
	2. The paper could usefully be made a bit more accessible for non-
	UK audience by the inclusion of a bit more contextual background
	about St Mary's hospital and maternity system changes in England
	in the introduction.
	3. Can the authors comment on why they restricted their interviews
	with professionals to midwives and obstetricians? Might
	anaesthetists have had additional perspectives to contribute, for
	instance? And hospital managers?
	4. The numbers interviewed seem extremely low to have reached
	thematic saturation. Can the authors comment on how they
	assessed saturation, and why they feel saturation was reached in
	such a small sample?
	5. Linked to this, can they comment on whether they attempted to
	obtain a maximum diversity sample? They have noted their major
	limitation in that no male consultants were interviewed and no
	consultants from ethnic minorities. Can they explain why this was?
	Did this lack of diversity account for the early thematic saturation?
	6. In reading the thematic summaries I am missing the evidence to
	support the themes identified. Could the quotes included in the table
	integrated within the text so that the evidence from the interviewees
	is clear?
	15 01041 :

REVIEWER	Christopher G Fawsitt
	University of Bristol, UK
REVIEW RETURNED	15-Nov-2017
GENERAL COMMENTS	The authors investigated the views and experiences of service users and professionals towards the recent introduction of 24-7 obstetric consultant presence (24-7 CP) at a large tertiary maternity unit. Twenty individuals were interviewed (10 service users, 10 professionals), and responses were analysed jointly using an inductive thematic analysis, with five themes developed. This is an original piece of research on a controversial issue, and it arrives at a timely juncture in UK policy formulation. The paper is very well written and referenced. Some comments from me are listed below.
	<ul> <li>As per the closing statement in the introduction, the authors said this research aimed to (1) investigate the views and experiences of service users and professionals towards the recent introduction of 24-7 obstetric consultant presence (24-7 CP) at a large tertiary maternity unit, and (2) identify issues that could be improved to better both groups experience of 24-7 CP. However, in reality, the authors performed (1), and drew some of their own conclusions based on this to answer (2); so, perhaps this statement could be rephrased in line with what was actually done – perhaps the authors only need to mention (1) here?</li> <li>The recruitment strategy is poorly reported in the methods section. How were service users identified? Was there a randomised process involved or was this simply quota sampling? Was this the same for professionals? How representative are views in this case?</li> <li>Equally, the criteria for eligibility is poorly reported. If the authors set out to look at experiences, presumably only women who had experience of 24-7 CP were invited to participate (i.e., all service users before September 2014 were excluded)?</li> <li>The authors say data saturation was reached at 10 interviews; but did the authors set out to survey 10 each, or were the data saturated for both groups at 10 – 10 seems a perfectly round number for both groups to reach saturation!</li> <li>If the interview schedules changed throughout the course of the interviews; to what extent was the data collection instrument harmonised.</li> <li>From Table 1, five women were interviewed before birth, and five after. However, the research objective was to explore women's views and experiences of 24-7 CP. So, why interview some antenatally? Is experience analysed/relevant?</li> <li>Table 1, how relevant to this research are some of the variables, e.g., occupation, age of other children.</li> <li>The authors pointly analysed responses from service users and professionals from two very different interview schedules. What was the ra</li></ul>
	negative from consultants' point of view. Theme 4 is ranked as negative, yet 4.1 is highly regarded.

• The authors note that some themes are associated with both service users and professionals (themes 1 to 3), however, some of these seem very loosely associated, e.g., theme 2 is primarily developed by service users, while theme 3 is developed by
professionals. Again, would these themes have emerged if analysed separately?

# **VERSION 1 – AUTHOR RESPONSE**

2. Reviewer 1: It would be helpful if it could be made clear in the title that this work was carried out in a single UK maternity unit.

Our response: We thank the reviewer for raising this and we have now revised the title to highlight that the study was carried out on a single UK maternity unit. We now also mention the type of maternity unit in the title.

3. Reviewer 1: The paper could usefully be made a bit more accessible for non-UK audience by the inclusion of a bit more contextual background about St Mary's hospital and maternity system changes in England in the introduction.

Our response: St Mary's Hospital in Manchester in the UK is a tertiary maternity unit delivering over 9,000 babies per year. The maternity unit serves an ethnically and socially diverse population with a high-level of need. The population has high levels of deprivation and perinatal/child mortality. Maternity services in Manchester were reconfigured in 2012: two smaller adjacent units were closed and St Mary's capacity was increased. This information has been added to the Setting section in the Methods (see lines 84-90).

4. Reviewer 1: Can the authors comment on why they restricted their interviews with professionals to midwives and obstetricians? Might anaesthetists have had additional perspectives to contribute, for instance? And hospital managers?

Our response: We initially restricted our interviews to midwives and obstetricians because these groups were primarily affected by 24-7 consultant presence (i.e., all potential participants were present 24-7). Whilst we agree with the reviewer that other professionals, including anaesthetists and neonatologists, would have additional perspectives to contribute, these professional groups were not covered in this study because as previously mentioned they are not present in the maternity unit 24-7, so may not have been directly affected by changes in practice. This has been added to the Discussion as a possible limitation (see lines 461-463 and 467-470).

5. Reviewer 1: The numbers interviewed seem extremely low to have reached thematic saturation. Can the authors comment on how they assessed saturation, and why they feel saturation was reached in such a small sample?

Our response: This was a single-site study, investigating a very specific topic (i.e. the impact of introducing 24-7 CP at St. Mary's Hospital, Manchester) pertinent to a particular group of people (i.e. service users and professionals at St. Mary's). Therefore, data saturation was reached very rapidly. We noted that data saturation was definitely reached at the point at which no new information, relevant to the aims of the research, was mentioned by any participants. We can confirm that data saturation was reached after seven interviews for service users and eight interviews for professionals. The subsequent three interviews with service users and two interviews with professionals were already scheduled and hence conducted before our assessment of data saturation. Hence they served as confirmation that data saturation had been reached.

6. Reviewer 1: Linked to this, can they comment on whether they attempted to obtain a maximum diversity sample? They have noted their major limitation in that no male consultants were interviewed and no consultants from ethnic minorities. Can they explain why this was? Did this lack of diversity account for the early thematic saturation?

Our response: This lack of diversity could have contributed to the speed at which data saturation was reached – this has been added to the Discussion as a possible limitation (see lines 463-464 and 467-470). When it became apparent that the sample of professionals lacked diversity, we contacted male professionals inviting their participation, but their limited availability as well as their lack of a response to our request resulted in this lack of male participants. However, there is only one male midwife in our unit and nineteen of twenty-four Consultant Obstetricians are women.

7. Reviewer 1: In reading the thematic summaries I am missing the evidence to support the themes identified. Could the quotes included in the table be integrated within the text so that the evidence from the interviewees is clear?

Our response: We appreciate this reviewer's helpful comment. We have now integrated the supporting quotations within the text to ensure clarity of evidence and removed Table 3 that originally contained the quotations.

8. Reviewer 2: As per the closing statement in the introduction, the authors said this research aimed to (1) investigate the views and experiences of service users and professionals towards the recent introduction of 24-7 obstetric consultant presence (24-7 CP) at a large tertiary maternity unit, and (2) identify issues that could be improved to better both groups experience of 24-7 CP. However, in reality, the authors performed (1), and drew some of their own conclusions based on this to answer (2); so, perhaps this statement could be rephrased in line with what was actually done – perhaps the authors only need to mention (1) here?

Our response: We thank the reviewer for this observation. We have now amended the research objectives: 'this study aimed to a) understand how SUs and professionals at this unit viewed 24-7 CP and b) use these views to identify any issues around 24-7 CP on the maternity unit that could further improve SU and professionals' experiences.' (see line 79).

9. Reviewer 2: The recruitment strategy is poorly reported in the methods section. How were service users identified? Was there a randomised process involved or was this simply quota sampling? Was this the same for professionals? How representative are views in this case?

Our response: Eligible service users were identified by a member of the clinical team who had been briefed on the study eligibility criteria (this has been clarified in the Methods, see lines 102-103). The process was not randomised for service users, nor for professionals. As they were approached by the clinical team, they were not selected by researchers with prior knowledge. Nevertheless, we are aware that there may be an element of participation bias and some participants may have had certain motives for participating, influencing the representativeness of views; however, this is a limitation observed in most qualitative studies. This has been discussed in the Discussion (see lines 471-474).

10. Reviewer 2: Equally, the criteria for eligibility is poorly reported. If the authors set out to look at experiences, presumably only women who had experience of 24-7 CP were invited to participate (i.e., all service users before September 2014 were excluded)?

Our response: The reviewer is correct that participants prior to the introduction of 24-7 CP were not included. All service users were inpatients at the time of the interview (between March-April 2016) and therefore all had experience of the 24-7 CP at St. Mary's Hospital.

11. Reviewer 2: The authors say data saturation was reached at 10 interviews; but did the authors set out to survey 10 each, or were the data saturated for both groups at 10 - 10 seems a perfectly round number for both groups to reach saturation!

Our response: We set out to interview 10-15 service users and 10-15 professionals. However, we noted that data saturation was reached after seven interviews for service users and eight interviews for professionals. The subsequent three interviews with service users and two interviews with professionals were scheduled in advance of assessing that data saturation had been reached and served as confirmation that data saturation had been reached. Hence the round sample sizes.

12. Reviewer 2: If the interview schedules changed throughout the course of the interviews, to what extent was the data collection instrument harmonised.

Our response: The manuscript has been amended to better reflect the process of amending the interview schedules (see lines 108-111). Both interview schedules were developed after careful consultation of the existing literature and through several research group discussions. Both interview schedules were amended after piloting to include clear explanations of what 24-7 CP is and specific prompts were added, which were informed by the pilot interviews.

13. Reviewer 2: From Table 1, five women were interviewed before birth, and five after. However, the research objective was to explore women's views and experiences of 24-7 CP. So, why interview women antenatally? Is experience of 24-7 CP not limited to childbirth alone, or have antenatal services benefitted from the implementation of 24-7 CP?

Our response: Women who were interviewed in the antenatal period had all been inpatients on the antenatal ward. Women on the antenatal ward receive a daily review from a consultant obstetrician and additional reviews if there is a clinical need. Therefore, both antenatal and postnatal women could have experienced consultant-led care. This is why we included both of these groups in the sample. We have clarified this in the Participants section in the Methods (see lines 94-95).

14. Reviewer 2: Although the research objective was to explore views and experiences, it seems themes were largely shaped by views – to what extent were experiences analysed/relevant? Our response: We thank the reviewer for raising this and we agree that the participants' views were discussed more during interviews and therefore, contributed more to the themes. Although experiences may have influenced participants' views, and experiences are included in some of the quotations to support the themes, we have removed 'experiences' from the aims (see line 79) in order to emphasise this point.

15. Reviewer 2: Table 1, how relevant to this research are some of the variables, e.g., occupation, age of other children.

Our response: Demographic information is important in providing further context to the people who participated in the study. The literature suggests cultural background and the mother-father relationship may influence prospective parents' decisions around childbirth. We believed that information relating to the participants' other children would provide an idea of whether the woman had given birth before and if so, how many times and how long ago, which could influence how a women views maternity services. Occupation provides an idea of how much an individual may know about healthcare provision and the NHS workforce. We have removed the 'Educational Attainment' column from Table 1 because we realised this information largely overlaps with Occupation.

16. Reviewer 2: The authors jointly analysed responses from service users and professionals from two very different interview schedules. What was the rationale for this? Would different themes have emerged if analysed separately?

Our response: We initially analysed the service users' and professionals' responses separately, however we quickly realised that there was a significant amount of overlap in the themes identified from the service users' and professionals' responses. Due to this overlap the decision was taken to analyse all interviews together and present these joint findings. If the interviews were analysed separately and separate findings presented, there would be large amounts of repetition.

By analysing the interviews together, we could present more full, coherent themes developed through service users' and professionals' responses.

17. Reviewer 2: Figure one is informative and well put together. Although, how did the authors rank these themes/subthemes. Subtheme 2.3 (expected as standard) is ranked as positive, but perhaps should be ranked as negative from consultants' point of view. Theme 4 is ranked as negative, yet 4.1 is highly regarded.

Our response: We reviewed all of the participants' responses and memos recorded throughout the interviewing process to arrive at an overall ranking for each of the themes and subthemes in Figure 1. The themes were positioned depending on the weighting of the favourability for the subthemes. For example, subtheme 4.2 was discussed very negatively and more frequently than 4.1; therefore, the overall ranking for theme 4 is more negative. The ranking of the themes and subthemes is subjective and we are aware that others may disagree with the ranking, therefore the figure serves as a visual arrangement to compliment the Results section of the manuscript.

18. Reviewer 2: The authors note that some themes are associated with both service users and professionals (themes 1 to 3), however, some of these seem very loosely associated, e.g., theme 2 is primarily developed by service users, while theme 3 is developed by professionals. Again, would these themes have emerged if analysed separately?

Our response: Although some themes were more salient for professionals and others for service users (which is mentioned in the theme descriptions), themes 1, 2 and 3 were discussed by both service users and professionals. These themes emerged during the initial separate analysis and the final joint analysis of all interview responses.

# **VERSION 2 – REVIEW**

REVIEWER	Marian Knight University of Oxford, UK
REVIEW RETURNED	14-Dec-2017

REVIEWER	Christopher Fawsitt University of Bristol, United Kingdom
REVIEW RETURNED	29-Dec-2017
GENERAL COMMENTS	Many thanks to the authors for their thorough response. I have no other comments to add at this point.