

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	PARENTS' FIRST MOMENTS WITH THEIR VERY PRETERM BABIES: A QUALITATIVE STUDY
AUTHORS	Ayers, Susan; Arnold, Leah; Sawyer, Alexandra; Rabe, Heike; Abbott, Jane; Gyte, Gillian; Duley, Lelia

VERSION 1 - REVIEW

REVIEWER	Ross Sommers md brown university providence, RI
REVIEW RETURNED	28-Dec-2012

THE STUDY	I appreciated having the results broken down into the five themes. The design seemed strong to confirm validity of questions however the statistical results of comparing outcomes are not clear. For instance they often say some of the parents or many of the parents instead of specific amount as percentage and when possible statistical results comparing the group to confirm differences.
RESULTS & CONCLUSIONS	Quantitative results would make the outcome stronger. I am also interested why only 7 of the fathers of the 32 answered while 95% were married/cohabited. Is there something different about these fathers compared to the non-responders?
GENERAL COMMENTS	I enjoyed reading the article and hearing the personal experiences of the fathers.

REVIEWER	Roberta Durham RN, PhD Professor California State University, East Bay USA
REVIEW RETURNED	13-Feb-2013

THE STUDY	<p>This is a very interesting and well done study and I appreciate the opportunity to review this important paper that illuminates the experience of parents with infants in the NICU.</p> <p>Five themes were identified. The first describes parents' blurred recall of the birth, it would be interesting to compare the literature about the recall of parents with normal term deliveries to that of high risk.</p> <p>The third theme describes parents' first sight and touch of their babies and their "rollercoaster" of emotions during this time. In this theme the authors highlight the importance of touch to trigger and strengthen the parent-baby bond and that some parents worried that touching or holding their baby. Clinical work and behavioral research on very preterm infants does report that infants can shut down physiologically because of the stress of repeated contact, stimulation and interaction. Care needs to be clustered to avoid over stressing</p>
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	<p>premature infant so in fact parents concerns are well founded. Teaching parent behavioral cues is helpful to identify when infant is stressed. Parents do need to be included in care and an environment needs to support them as partners in care and reassured they are not interfering with care. Family conferences have done much in the clinical area to support and include parents as decision makers.</p> <p>I would like to see the authors address the impact of length of time from birth to time of interview. This time lag between initial contact with infant and time lag for interviews may have impacted parents perspectives on how they viewed their experience of first contact with infant. If infant was doing fairly well at time of interview this shifts and impacts their perspective and recollection of initial contact. If infant was having complications would also be reflected in their impressions of first contact. In other words data was not collected at time of initial contact and status of infant at X number of days at time of interview will impact findings.</p> <p>Variation in parents responses in light of a time trajectory would strengthen the paper.</p> <p>The methods section needs to be expanded. I have never heard of inter-rater reliability in a qualitative study to evaluate quality of data analysis. In fact this may violate some of the underlying principles of qualitative research which is not to measure or validate concepts but to offer rich insight and description.</p> <p>the authors state "Analysis was carried out using NVivo software"; yet it seems to me the researchers analysed the data and the data was managed with NVivo.</p> <p>Standards for critique of qualitative research include methodological rigor, descriptive vividness and heuristic relevance. I suggest the authors address some of the criteria typically used to evaluate qualitative research to strengthen their paper.</p> <p>References for research on fathers by Kathryn May and Linda Chapman may help to expand the contribution of this work in the context of fathers and Ramona Mercer's work on high risk pregnancy and family functioning after high risk pregnancy may be helpful.</p>
RESULTS & CONCLUSIONS	<p>References for research on fathers by Kathryn May and Linda Chapman may help to expand the contribution of this work in the context of fathers and Ramona Mercer's work on high risk pregnancy.</p>
GENERAL COMMENTS	<p>This is a very interesting study of parents reports of their response to initial contact with their premature infant. The categories of responses are very vivid and descriptive. The implications are relevant to the findings and important for consideration in practice. I have made some suggestions to strengthen this paper</p>

VERSION 1 – AUTHOR RESPONSE

Reviewer: Ross Sommers MD
Brown University Providence, RI

I appreciated having the results broken down into the five themes. The design seemed strong to confirm validity of questions however the statistical results of comparing outcomes are not clear. For instance they often say some of the parents or many of the parents instead of specific amount as percentage and when possible statistical results comparing the group to confirm differences. Thank you for this point. We agree that it is useful to provide information on the proportion of interviews that themes were mentioned so have added this to Table S1. We also amended the Results section so that reference to the amount of parents who mentioned a theme was removed or clarified.

Statistical comparisons between groups were not possible because of the small numbers within these groups.

As mentioned above quantitative results would make the outcome stronger. I am also interested why only 7 of the fathers of the 32 answered while 95% were married/cohabited. Is there something different about these fathers compared to the non-responders? Fathers were difficult to recruit to the project, which is consistent with other studies we have done where we have attempted to recruit couples [1]. Men are also known to be hard to engage in research using similar recruitment methods, such as surveys [2].

Because of the method of recruitment, we were not able to collect data on fathers who did not participate. We are therefore not able to examine whether fathers who did participate differed from those who did not. However, we have added this to the discussion of sample limitations (see page 18).

I enjoyed reading the article and hearing the personal experiences of the fathers.
Thank you.

Reviewer: Roberta Durham RN, PhD
Professor
California State University, East Bay
USA

This is a very interesting and well done study and I appreciate the opportunity to review this important paper that illuminates the experience of parents with infants in the NICU.

Five themes were identified. The first describes parents' blurred recall of the birth, it would be interesting to compare the literature about the recall of parents with normal term deliveries to that of high risk.

Thank you for this point. We have added brief consideration of the literature on memory and experience of birth in other situations (see page 17).

The third theme describes parents' first sight and touch of their babies and their "rollercoaster" of emotions during this time. In this theme the authors highlight the importance of touch to trigger and strengthen the parent-baby bond and that some parents worried that touching or holding their baby. Clinical work and behavioral research on very preterm infants does report that infants can shut down physiologically because of the stress of repeated contact, stimulation and interaction. Care needs to be clustered to avoid over stressing premature infant so in fact parents concerns are well founded.

Teaching parents behavioral cues is helpful to identify when infant is stressed. Parents do need to be included in care and an environment's needs to support them as partners in care and reassured they are not interfering with care. Family conferences have done much in the clinical area to support and include parents as decision makers.

We have now included this when we discuss the implications of this theme (see pages 17 and 19). Clinical implications therefore also include teaching parents to recognise cues so that touch can be enabled whilst avoiding stress on the infant.

I would like to see the authors address the impact of length of time from birth to time of interview. This time lag between initial contact with infant and time lag for interviews may have impacted parents' perspectives on how they viewed their experience of first contact with infant. If infant was doing fairly well at time of interview this shifts and impacts their perspective and recollection of initial contact. If infant was having complications would also be reflected in their impressions of first contact. In other words data was not collected at time of initial contact and status of infant at X number of days at time of interview will impact findings.

Variation in parents' responses in light of a time trajectory would strengthen the paper.

Information on time since birth and status of the infant (discharged, in NICU or deceased) was collected and we have now added this information to the method section (see page 6).

We agree that controlling for time since birth and status of the infant would be important if we were surveying parents' views quantitatively, where comparisons would be possible. However, like much qualitative research, our sample is not large enough to make meaningful statistical comparisons between groups. The proportion of parents whose babies were still in hospital (19%) or had died (6%) was so small that trying to compare frequency of themes between these parents and parents whose babies were at home would not provide any reliable information. Similarly, time since birth was measured as a continuous variable so any cut-off used to group parents into a short time vs a long time since birth would be arbitrary and the results potentially meaningless.

To address this as best we can we have added the baby's status to the quotes in the text so the reader has this information. We have done this throughout the results section and in Table S1. We have also highlighted that future research should extend these results to look at the influence of various other factors, including those you raise. This has been added to the Discussion (see page 18).

The methods section needs to be expanded. I have never heard of inter-rater reliability in a qualitative study to evaluate quality of data analysis. In fact this may violate some of the underlying principles of qualitative research which is not to measure or validate concepts but to offer rich insight and description.

The methodological and analytical approach follows that outlined by Boyatzis in *Transforming Qualitative Information* (1998), which has been widely used in health psychology research. Reliability checks are recommended by Boyatzis as part of ensuring methodological rigour. Inter-rater reliability examines whether quotes ascribed to certain themes would be similarly ascribed by a researcher unrelated to the project. It therefore measures reliability or dependability of coding (i.e. would another researcher allocate the same quote to the same theme?) as well as validity (i.e. how accurately do the themes represent the participants' accounts?).

Standards for critique of qualitative research include methodological rigor, descriptive vividness and heuristic relevance. I suggest the authors address some of the criteria typically used to evaluate qualitative research to strengthen their paper.

We think this point stems from the different approaches used for critiquing research, which often

differs between disciplines. The dimensions referred to originate from nursing research and include (i) descriptive vividness, (ii) methodological congruence, (iii) analytical precision, (iv) theoretical connectedness and (v) heuristic relevance.

We had previously critiqued the method under 'trustworthiness', which was the dimension recommended by reviewers of a previous publication arising from this study [3]. We used this dimension originally because it enabled us to consider some aspects of methodological rigour whilst staying within the recommended word count for BMJ Open. We have now changed this to the dimensions recommended by this reviewer and have added more critique and information (see page 18).

The authors state "Analysis was carried out using NVivo software"; yet it seems to me the researchers analysed the data and the data was managed with NVivo.
This has been corrected (see page 7)

References for research on fathers by Kathryn May and Linda Chapman may help to expand the contribution of this work in the context of fathers and Ramona Mercer's work on high risk pregnancy and family functioning after high risk pregnancy may be helpful.
Thank you for these recommendations. We have looked at the work you refer to and included a recent meta-synthesis [4] to expand on how our results fit with general literature on fathers' experiences (see bottom of page 17 to top of page 18).

This is a very interesting study of parents reports of their response to initial contact with their premature infant. The categories of responses are very vivid and descriptive. The implications are relevant to the findings and important for consideration in practice. I have made some suggestions to strengthen this paper

References

- 1 Parfitt Y, Ayers S. Postnatal mental health and parenting: The importance of parental anger. *Infant Mental Health Journal*, 2012; 33(4): 400-10.
- 2 Sheldon H, Graham C, Potheary N, RasullIncreasing F. Response rates amongst black and minority ethnic and seldom heard groups: A review of the literature relevant to the national acute patients' survey. 2007. The Picker Institute Europe.
- 3 Sawyer A, Rabe H, Abbott J, Gyte G, Duley L, Ayers S. Parents' experiences and satisfaction with care during the birth of their very preterm baby: A qualitative study. *BJOG* 2013; DOI: 10.1111/1471-0528.12104
- 4 Steen M, Downe S, Bamford N, Edozien L. Not-patient and not-visitor: a metasynthesis of fathers' encounters with pregnancy, birth and maternity care. *Midwifery*, 2012; 28(4): 362-71.