Protocol title: Expectations and experiences of postnatal care at hospitals and birth centres in the UK: a protocol for qualitative and quantitative systematic review

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Background

Key aspects of postnatal care include attention to the physical health of the mother, breastfeeding support, psychological well-being of parents, education as to what she should expect after birth and regarding infant care. Over time there have been a number of changes in postnatal care, the most evident being a reduction in length of hospital stay (Henderson and Redshaw, 2016). A hospital lying-in period of between eight to 14 days was standard in the 1950s (Rush, Chalmers and Enkin, 1989), whereas length of postnatal hospital stay for a woman with an uncomplicated vaginal birth in the United Kingdom is now often 1-2 days (Redshaw and Henderson, 2015).

A Cochrane review by Brown et al (2002) on length of postnatal hospital stay for healthy, term mothers and babies suggests that early discharge home does not appear to have an adverse effect on maternal health or breastfeeding outcomes when accompanied by a policy of offering women at least one nurse-midwife home visit post discharge. Most trials included assessments of women's satisfaction with postnatal care in hospital, and overall, while not statistically significant, women tended to favour a short postnatal stay. A trial by Waldenström et al (1987) also reported that, following early discharge, fathers were more involved in early care of the infant. The Cochrane review has not been updated since 2002 and the current state of the evidence regarding the impact of length of postnatal hospital stay is unclear, particularly regarding current UK postnatal care policy and practice.

More choice around place of birth means that women may have more variation in what is defined as 'hospital' in the immediate postnatal period, for example, stand-alone birth centre in comparison to a hospital maternity unit. Content of care has also changed. Maternal health observations, feeding support and parental education all remain priorities but there are limits to what can be achieved during a short stay. In addition, national guidance recommends that women are asked about their emotional wellbeing at every contact, that they have an initial assessment of needs and individualised plan of care (NICE Postnatal care guidelines) which require time. Better Births: Improving outcomes of maternity services in England (The National Maternity Review, 2016) acknowledges that postnatal care needs to be resourced appropriately and that women should have access to their midwife (and where appropriate obstetrician) as they require after having had their baby.

The need to invest in postnatal care arises from the knowledge that it is the most commonly criticised aspect of care by women as evidenced in the National Maternity Survey reports and publications arising from secondary analysis of survey data (Redshaw et al 2006; Redshaw and Heikkila 2010; Redshaw and Henderson 2015; Henderson and Redshaw 2017). However, we do not know if this is related to unmet expectations, poor experience of birth or afterwards, emotional or physical well-being of the women reporting their experiences.

As 'hospital' postnatal care has been decreasing in duration and also changing its focus, identifying the changes in maternal expectations, experiences and satisfaction may provide important insights to what aspects of care need to be improved for future services.

Review objectives:

- The main aim of this review is to comprehensively report on women and their families' expectations and experiences of the immediate postnatal care received in hospitals and birth centres including both alongside units and free-standing maternity units.
- To report on women's satisfaction with hospital/birth centre postnatal care and how it relates to expectations and experience.
- To identify gaps and changes in postnatal care provided to women who delivered in hospitals and birth centres in the UK.

Review method

This review will be prepared and conducted according to the PRISMA checklist (PRISMA 2009). We will incorporate findings from different research methods: qualitative, quantitative and mixed method design studies.

Selection of studies and review inclusion criteria:

We will consider studies for their eligibility for inclusion in this review if they fulfil the following criteria:

Study designs: studies of the following designs will be included:

- Qualitative studies: interviews (individuals or focus groups), participant and non-participant observation studies and documentary analyses.
- Quantitative studies: RCTs, cross-sectional studies, retrospective or prospective survey-based studies and observational cohort studies design will be included.
- Mixed method studies: Studies using both quantitative and qualitative methods, for example the open text responses within survey studies.
- No studies will be excluded based on their design.

Reviews, editorials, commentaries and reports will be identified during screening but used solely to identify additional studies that are not retrieved by the searches.

Type of participants:

- We will consider studies for inclusion in this review if they included women with low risk pregnancies as defined by the NICE 2017 guidelines (NICE 2017), who gave birth in hospitals or birth centres in the UK.
- We will include studies on postnatal care in hospital and birth centres involving partners or fathers.
- We will include studies with findings collected from both women and their partners even if women's data cannot be retrieved separated.

- If studies have data on both low and high risk pregnancies, only information relevant to the low risk group will be extracted (if feasible).
- Studies of women of all ages, parity, ethnic background and mode of delivery will be included.

Objective of included studies:

- The specific objectives of the included studies will include presenting data on women's expectations, satisfaction and experiences of their immediate postnatal care in hospital or birth centre.

Study setting:

- We will only include studies that focused on early postnatal care in hospitals and birth centres in the UK.

Review exclusion criteria:

We will apply the following exclusion criteria:

- We will exclude studies conducted on women with high risk pregnancies as defined by the NICE 2016 guidelines on Antenatal Care (NICE 2017).
- Studies involving women with various or unknown pregnancy risks when separating data for low risk women is not feasible.
- Studies reporting on other aspects of hospital birth care such as birth plan, choices of pain relief unless also including data about postnatal care.
- Studies involving healthcare professionals in relation to aspects of postnatal care will be excluded unless also including data focussing on women's or families' experience.
- Studies on aspects of community postnatal care for women who chose home birth will be excluded.
- Studies conducted outside the UK and published before 1970 will be excluded.

Review outcomes:

Primary outcome:

- Women's and families' expectations, satisfaction and experiences of postnatal care received in hospital or birth centres.

Secondary outcome:

- None

Search strategy and study selection

We adopted the methodological component of the SPIDER (Cooke 2012) search strategy we developed sets of search terms to cover the following concepts: expectations, satisfactions and experiences of postnatal care in hospital and other birth centres in the UK.

We have developed and tested a sensitive search strategy which will be used to electronically search the following databases:

- Embase [OvidSP](1970-present)
- Medline [OvidSP](1970-present)
- PsycINFO [OvidSP](1970-present
- Applied Social Science Index and Abstracts (ASSIA)[Proquest] (1970-present)

- Cumulative Index to Nursing and Allied Health (CINAHL) plus [EBSCOHost] (1970-present)
- Science Citation Index [Web of Science Core Collection](1970-present)
- Social Sciences Citation Index [Web of Science Core Collection](1970-present)
- Grey literature searches will be conducted in the databanks of British Library EThOS, Open Grey and ProQuest Dissertations & Theses Global.

All retrieved references (title and abstract) will be screened independently by two reviewers. Full text of references considered potentially relevant will also be examined by two reviewers. Any discrepancies will be resolved by discussion. A screening checklist will be used to record in detail the reasons for excluding any full text paper which has been selected as potentially relevant through abstract and title screening.

All the retrieved references will imported to Endnote (X8) to store references, and to maintain an audit trail of screening decisions. A PRISMA flow chart will be constructed to illustrate the number of records retrieved from each database, the number of full-text papers retrieved, and the final number of studies included in this review.

Searches will be conducted in English and limited to the period from 1970 to the present.

Methodology and assessment of the included studies:

For quantitative designs we will apply a modified version of the NIH quality assessment tool for the observational cohort and cross-sectional studies (NIH 2017) which includes a total score. The tool will be used to assess included studies for generalisability and risk of bias based on recruitment, exclusion criteria applied, description of the study population (demographic, location and time period), sample size, response rate and comparability to the wider population. The tool will assess the adequacy of statistical techniques and adjustment for potential confounders and the reliability and validity of standardised measures.

For evaluating the risk of bias of qualitative studies we will use the Critical Appraisal Skills Programme (CASP) (2006). This tool has a checklist of ten questions which cover the study objectives and rationale, study methods, study design, recruitment strategies, method of data collection, information on ethical approval, and rigor of the method of analysing data and reporting of findings. Each domain is designated “yes”, “no” or “unclear”.

Two reviewers will independently assess the quality of the included studies and any discrepancies in quality rating will be resolved by discussion.

Data extraction:

We will develop two different data extraction forms, one for the quantitative studies and the second for qualitative studies. Both forms will have information relevant to the participants’ characteristics (age, parity, and ethnicity), study period, setting, inclusion and exclusion criteria, outcomes and a summary of results.

For the quantitative studies form we will extract additional data such as study design, sample size, method of data collections and method of analysing data.

For the qualitative studies we will extract the following information: recruitment strategy and sampling strategy, method of analysing data and recognized themes.

For mixed method studies, the qualitative and quantitative data will be extracted and aggregated separately using the appropriate forms.

When missing data are identified, the study authors will be approached if possible. These data will be added to the original data extraction forms.

Data analyses:

We will analyse data from qualitative and quantitative designs separately.

For quantitative studies: narrative synthesis will be implemented as we expect significant heterogeneity across studies due to design variations, populations and perhaps outcomes.

For the qualitative design studies: we will compare and contrast themes identified across included studies. We will use N-vivo 10 software to perform the thematic analysis.

Quantitative and qualitative data retrieved from mixed method studies will be synthesised separately and added to other data as appropriate.

In this review the findings from the qualitative synthesis will be used to contextualize the findings from the quantitative data.

Subgroup analysis:

We are planning to perform the following subgroup analysis were possible:

- Primiparous women versus multiparous women
- Delivery mode: spontaneous vaginal birth, assisted vaginal birth, elective caesarean section, emergency caesarean section
- Duration of postnatal stay: < 24 hours, 24 < 48 hours, 48 < 72 hours, >72 hours
- Postnatal care received in hospitals in comparison to birth centres.
- Comparisons over time: postnatal care from 1970 to 1989, 1990 to 2009, 2010 to the present.

Funding

This review will report on an independent study which is funded by the Policy Research Programme in the Department of Health. The views expressed are not necessarily those of the Department.

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Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies

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