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Scoping review protocol: exploration of the barriers and facilitators to the uptake of early postnatal contraception

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ABSTRACT

Introduction It is well documented that many women do not desire a short interpregnancy interval. Medical societies, government agencies and leaders in the field recommend that contraception should be part of maternity care. Short spaced and unplanned pregnancies increase the chances of mortality and morbidity in the mother and child. The WHO recommends a 24-month interpregnancy interval; however, short pregnancy intervals remain common. The goal of this scoping review will be to explore barriers and facilitators to the uptake of early postnatal contraception. A review of globally published literature relating to the implementation of a postnatal contraception service provision globally will be carried out which will highlight evidence gaps, strengths and weaknesses of studies associated with uptake and known barriers and facilitators to the uptake of early postnatal contraception.

Methods and analysis This scoping review will be conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews. The search strategy aims to locate both published and unpublished studies. An initial limited search of PubMed and CINAHL was undertaken to identify articles on the provision of postnatal contraception. The search strategy will be adapted for each included database CINAHL, SCOPUS, MEDLINE, PROSPERO and COCHRANE from 1 January 1993 to 1 January 2023 and reviewed by two reviewers. The data will be analysed and presented in tables, diagrams and text.

Ethics and dissemination Ethical approval is not required. This review is a retrospective review of widely and publicly available evidence. The review findings will be disseminated via publication in peer-reviewed journals, as part of a PhD thesis and conference presentation.

Scoping review question What are the barriers and facilitators to early postnatal contraception provision and uptake?

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This scoping review will follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines for the conduct of scoping reviews, ensuring openness and rigour.
⇒ The extraction and synthesis of data will be both published and unpublished data from all countries with access to contraception, CINAHL, SCOPUS, MEDLINE, PROSPERO and COCHRANE databases will be searched.
⇒ An appraisal of the methodological quality of studies is not a requirement of a scoping review; however, a quality appraisal of the included research articles will be conducted to gather insights into the types, sources and quality of the evidence around the barriers and facilitators to early postnatal contraception provision and uptake.
⇒ The review will be limited to English language publications, which may bias some of the studies that are published in other languages.
⇒ The search dates listed below have been chosen due to the number of research studies published prior to this date being low in number.

INTRODUCTION

The aim of this scoping review will be to explore barriers and facilitators to the uptake of early postnatal contraception. A review of globally, published literature relating to the implementation of a postnatal contraception service will be carried out. This will highlight any gaps in evidence, strengths and weaknesses associated with uptake and known barriers and facilitators to the uptake of early postnatal contraception. This review aims to inform areas for future research and potential intervention development to reduce unintended pregnancies.

It is well documented that many women do not desire a short interpregnancy interval (IPI).[1 2] Medical societies, professional bodies, government agencies and leaders in the field of family planning recommend that contraception should be part of maternity care.[3–10] The faculty of sexual and reproductive health has the target auditable outcome of 50% of postnatal women choosing long-acting reversible contraception (LARC) prior to hospital discharge, with 97% given a choice of appropriate contraceptive methods within 7 days of birth.[3] Local review of women requesting abortions highlighted that one in four requesting an abortion were pregnant within the preceding 12 months. It was observed that none used LARC methods and

only half had used any contraception.[11] Further evidence suggests that young women and women from vulnerable groups are generally less likely to attend sexual health establishments and General Practitioner (GP) surgeries for contraceptive advice, increasing the risk of unintended pregnancy.[12] The need for effective contraception services among younger mothers was highlighted in a trial evaluating the Family Nurse Partnership programme in England, which found 66% of teenage mothers had a subsequent pregnancy within 2years of their first birth.[13] This supports national sexual and reproductive strategies to promote the offering and administration of effective contraception, particularly for vulnerable groups of women including teenagers, women living in increased social deprivation and poverty or those who are at an increased likelihood of a pregnancy in the future.[5–10]

The WHO recommends a 24-month IPI for all women[14]; however, short pregnancy intervals remain common. Short spaced and unplanned pregnancies increase the chances of mortality and morbidity in the mother and child.[15] A systematic review and meta-analyses reported association with short IPI and pre-eclampsia, preterm birth, small for gestational age (SGA) and low birth weight.[16–20] In low-income countries, there was a 40% reduction in maternal mortality when contraception uptake was increased immediately following birth.[21] The initiation of postnatal contraception in the immediate postnatal period is a recognised practice in the middle-income to high-income countries such as the UK and America with some parts of India offering postnatal contraception as part of maternity care.[22] Initiatives to improve the uptake of postnatal contraceptives have been carried out in lower-income countries such as Tanzania with a focus on teaching healthcare professional to be skilled in the counselling and fitting of contraceptive methods especially postnatal intrauterine devices.[22] These initiatives have shown an improvement in uptake and services continue to develop. However, the service provision in the UK remains inconsistent between health boards and National Health Service Trusts and short IPI remain common in the UK, with around 1 in 13women presenting for an abortion or birth conceived within a year post partum.[23] A recent study in Edinburgh identified 96.7% of women did not plan to conceive in the first year post partum and 42.8% would use LARC if it was available prior to discharge from hospital.[15] The aim of early postnatal contraception is to support women to make informed decisions relating to their fertility including the avoidance of unintended pregnancies.[24]

A local service evaluation (n=2309) following targeted intervention of increasing staff awareness, training and implementation of the offering and availability of postnatal contraception showed an increase in the uptake of contraception prior to discharge home from 4% prior to the intervention of increased staff training to 12% following the intervention, with 40% of women receiving their contraception of choice (progestogen-only pill, injectable) in the community prior to final discharge from maternity services. Although early postnatal contraception uptake had improved only 4% of women received LARC such as postpartum intrauterine coils (PPIUC) and subdermal implants.[25] This is supported by two evaluations in Lothian maternity hospitals of the provision of immediate intrauterine contraception following birth and women's experiences of accessing PPIUC[26 27] they reported that uptake for PPIUC was 5% of all vaginal births with 96.1% of those requesting PPIUC successfully receiving it. It further reported that complications were extremely rare and that PPIUC could be a useful intervention to prevent unintended and closely spaced pregnancies.

Despite the growing and emerging evidence that the offer and administration of early postnatal contraception is safe, there is still a limited amount of evidence to support its implementation within complex health systems such as the NHS. In view of this, a review of the literature relating to the implementation of a postnatal contraception service provision will be carried out, which will highlight evidence gaps, strengths and weaknesses of studies associated with uptake of short and long acting and permanent methods of contraception. This scoping review will explore barriers and facilitators to the uptake of an early postnatal contraception, identifying gaps in the evidence to inform areas for future research and potential intervention development to reduce unintended pregnancies.

A preliminary search of PubMed and CINAHL, Cochrane Database of Systematic Reviews and JBI Evidence Synthesis was conducted with no current or ongoing systematic reviews or scoping reviews identified. Following a Prospero search, a meta-synthesis of barriers and facilitators to the use of LARC in primary care has been identified, and a systematic review of immediate PPIUC in Ethiopia which differs from this scoping review which will aim to identify papers relating the immediate postnatal period only. A systematic literature review protocol for contraceptive choices among postnatal individuals was highlighted in the Prospero search, this has since been withdrawn. Further scoping reviews were identified on women's sexual health in the postnatal period[28] and a scoping review on determinants of unmet need for family planning among women of reproductive age in low-income and middle-income countries.[29]

Medical Subject Headings (MeSH)

Family planning, Contraception, Postpartum or Postnatal period, Inter pregnancy interval, LARC.

Eligibility criteria (Participants, Concept, Context)

Participants	Concept	Context
Women and birthing people of childbearing age. Healthcare professionals working with maternity, obstetrics and gynaecology services. Postnatal contraception implementation frameworks	Barriers and facilitators to the uptake of early postnatal contraception	Women and birthing people

Types of sources

This scoping review will consider both experimental and quasi-experimental study designs including randomised controlled trials, non-randomised controlled trials, before and after studies and interrupted time-series studies. In addition, analytical observational studies including prospective and retrospective cohort studies, case-control studies and analytical cross-sectional studies will be considered for inclusion. This review will also consider descriptive observational study designs including case series, individual case reports and descriptive cross-sectional studies for inclusion.

Qualitative studies will also be considered that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, qualitative description, action research and feminist research. In addition, systematic reviews that meet the inclusion criteria will also be considered. Text and opinion papers will also be considered for inclusion in this scoping review.

METHODS

The proposed scoping review will be conducted in accordance with the Joanna Briggs Institute methodology for scoping reviews.[30] The search strategy will aim to locate published and unpublished studies. An initial limited search of PubMed (N=1342, search dates 1 January 1993–1 January 2023) and CINAHL (N=352, search dates 1 January 1993–1 January 2023) was undertaken to identify articles on the provision of postnatal contraception.

Patient and public involvement

None.

The search strategy, including all identified keywords and index terms, will be adapted for each included database and/or information source. The reference list of all included sources of evidence will be screened for additional studies. Two reviewers will be involved in this search.

Keywords/index terms/subject search

Postnatal or post-natal or Postpartum or Puerperium or Perinatal or peri-natal or Caesarean or Cesarean section or Vaginal or Birth or delivery AND	Contraception or Contraceptives or Family Planning or Birth control or Fertility control or Reproductive control AND	Provision or Uptake or Motivate* or Barrier* or Facilitator* or Experience* or View* or Implementation

Searches: Data extraction from 1993 to 2023:

- General databases to be used for subject and keyword search—CINAHL, Medline SCOPUS.
- Public databases to be used for Subject and keyword search—Google Scholar and PubMed.
- Public Guidelines to be included from RCOG, FSRH, NICE, WHO, RCM.
- Midwifery Journals and opinion piece articles to be included within the subject and keyword searches.
- Grey Literature such as Policy statements, government reports, thesis and dissertations to be included within the searches.

Studies published since 1993 will be included from all countries with access to contraceptives. The search dates of 1 January 1993 to 1 January 2023 have been chosen due to the number of published studies prior to this date being low in number. The initial search identified there has been an increase in published studies within the last 10 years and limited studies published prior to 1993.

Types of studies to be included

Inclusion dates	1January 1993–present day of search 2023
Location:	All countries with access to early postnatal contraception
Language:	Full text available in the English language
Study design:	All studies (both qualitative and quantitative but not limited to)

Exclusion

Systematic review, meta-synthesis and meta-analysis.

Study/source of evidence selection

Following the search, all identified citations will be collated and uploaded into EndNote V.20 and duplicates removed by the first reviewer. Following the search by the first reviewer, titles and abstracts will then be screened by the second reviewer for assessment against the inclusion criteria for the review. Review records by title then abstract and those not relevant to the research question are excluded. The two reviewers will independently review abstracts and will be blind to each other's decisions. Potentially relevant sources will be retrieved in full and their citation details imported. The full text of selected citations will be independently reviewed in detail against the inclusion criteria by two reviewers, and again be blind to each other's decisions. Reasons for exclusion of sources of evidence at full text that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the selection process will be resolved through discussion, or with an additional reviewer.

Data extraction

Data will be extracted from papers included in the scoping review by two or more independent reviewers using a data extraction tool developed by the reviewers using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Review (PRISMA-ScR) checklist.[31] The data extracted will include study details (citation, codes), research aims (research question, theoretical approach data collection methods), study population, concept, context, study methods including analysis methods and outcomes,

key findings relevant to the review question and limitations identified by the study authors and the review team. Authors of studies reporting unclear or missing data will be contacted for clarification. These data extraction tables will initially be piloted with five papers following which their ability to extract the key data will be reviewed by the project team. Data will be collected and archived in a form that allows future access and data sharing.

Data extraction tables will be completed by the lead review author and 10% will be independently checked by the second author. Disagreements will be discussed; if they cannot be resolved, a third study reviewer will provide a final decision. If there is concordance between the lead and second authors following the 10% consistency check, no further papers will be checked. If there is disagreement between the lead and second authors, then all papers will be independently checked by the second author. Data extraction tables will be completed in Microsoft Excel. Both quantitative and qualitative papers will be extracted and synthesised in tabular form to present the findings.The draft data extraction tool will be modified and revised as necessary during the process of extracting data from each included evidence source. Modifications will be detailed in the scoping review. Any disagreements that arise between the reviewers will be resolved through discussion, or with an additional reviewer/s. If appropriate, authors of papers will be contacted to request missing or additional data, where required.

Data analysis and presentation

The proposed review will analyse the data extracted, which will identify the objective of this scoping review is to assess the extent of the literature to explore barriers and facilitators to the uptake of an early postnatal contraception, identifying gaps in the evidence to inform areas for future research and potential intervention development to reduce unintended pregnancies.

The results of the search and the study inclusion process will be reported in full in the final scoping review and presented in a PRISMA-ScR flow diagram as well as the PRISMA checklist. Additionally, a free online software for managing systematic/scoping reviews 'COVIDENCE'[32] will be used to manage this review.

The findings of this review will be presented in tables, diagrams accompanied by a narrative text, they will be grouped according to the primary themes that emerge to aid synthesis and distillation of findings. The data extraction table produced will include:

1. Author(s).
2. Year of publication.
3. Origin/country of origin.
4. Aims/purpose.
5. Type of study.
6. Studied population(s).
7. Methodology/methods.
8. Outcomes and details of these.
9. Key findings that relate to the scoping review questions.

The purpose of this scoping review is to review the findings and present an overview of the literature rather than evaluating the quality of the studies. A narrative assessment of the strength of the evidence will be presented. These will be shared via publication in a peer reviewed journal and disseminated via conference.

Risk of bias (quality) assessment

PRISMA-ScR checklist will be used to consolidate and report the quantitative and qualitative research. The lead author will quality appraise each included paper. The first 10% will be independently reviewed by the second author for consistency. Any disagreements will be discussed; if a resolution is not achieved, a third reviewer will arbitrate.

ETHICS AND DISSEMINATION

Ethical approval is not required. This review is a retrospective review of widely and publicly available evidence. The review findings will be disseminated via publication in peer-reviewed journals, as part of a PhD thesis and conference presentations.

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Contributors JC: first author of this protocol with substantial contribution in the design and overall responsibility for this work. MC: second author with substantial contribution to this protocol and scoping review. JS: primary PhD supervisor and contributor to the protocol. RC-J: PhD supervisor and contributor to the protocol. HS: PhD supervisor and contributor to the protocol.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Author note Judith Cutter: 1st Author of this protocol with substantial contribution in the design and overall responsibility for this work, Dr Michelle Cooper: 2nd Author with substantial contribution to this protocol and scoping review. Professor Julia Saunders: Primary PhD supervisor and contributor to the protocol, Dr Rebecca Cannings-John: PhD supervisor and contributor to the protocol, Dr Heather Strange: PhD Supervisor and contributor to the protocol.

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