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Midwifery continuity of care in the Nordic countries – a scoping review protocol

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Abstract

Objective: To provide a protocol for a scoping review aimed to map, identify, analyze and describe studies on women and their infants receiving Midwifery Continuity of Care in the Nordic countries.

Introduction: Midwifery Continuity of Care (MCoC) throughout pregnancy, birth, and the postnatal period has been associated with improved outcomes and higher satisfaction of care among women. In the Nordic countries standard care during pregnancy, birth and postpartum is organized within primary care (private or regional), hospital care and fragmented with few different care options. The evidence regarding MCoC in the Nordic countries is scarce, in particular regarding targeted care for vulnerable women within a structured continuity of care model.

Inclusion criteria: Original studies published in peer-reviewed academic journals with any study design from Nordic countries including Midwifery Continuity of Care will be included.

Methods: Literature searches of electronic bibliographic databases will be conducted by an information specialist in CINAHL, PubMed, Embase.com, CENTRAL via Cochrane Library Online and PsycInfo. The results will be summarized in a findings table. An analysis will identify, describe, and categorize recurring patterns to provide a structured overview of key concepts.

Introduction

Midwifery Continuity of Care (MCoC) is a model in which the same midwife or a small team of midwives provides care during pregnancy, labor and birth, and the postnatal period, with referrals to specialist obstetric care when required. Several studies have demonstrated positive effects of MCoC with a reduced need for medical interventions and improved outcomes for women and their babies (Sandall et al, 2024). Furthermore, women have reported increased feelings of control, safety, trust for their care providers and satisfaction with care compared to standard care (Sandall et al, 2024; Hildingsson et al, 2021; Williams et al, 2010; Fernandez Turienzo et al, 2021).

In the Nordic countries, standard care during pregnancy, birth and the postnatal period is fragmented, and the choices are few for women and midwives due to centralized care. The fragmented model of care has been criticized for posing challenges to women's ability to make informed choices and actively participate in decision-making during pregnancy and childbirth (Keedle et al, 2020; McLachlan et al, 2016). Existing research regarding MCoC in the Nordic countries indicates potential benefits of this model of care (Lundborg et al, 2025; de Wolff et al, 2025), but the evidence is scarce. In particular, a significant knowledge gap exists regarding targeted care for vulnerable women within a structured continuity of care model.

A scoping review is an increasingly used approach for reviewing existing literature and identifying knowledge gaps. It can be a useful tool for mapping and synthesizing the width of research within a specific field. Additionally, it can provide valuable insights for guiding future studies (Peterson, 2016).

Midwifery Continuity of Care (MCoC) has been described using various terms, including caseload midwifery, team midwifery, and midwifery group practice. Conducting a scoping review is relevant in order to gain an overview of existing research and to identify gaps in this field. By mapping relevant studies conducted in the Nordic countries, a scoping review can provide valuable insights into the potential benefits of MCoC for all women and especially women with fear of birth and other vulnerable groups.

Aim/research question

To map, identify, analyze and describe studies on women and their infants receiving Midwifery Continuity of Care in the Nordic countries.

Methods

Eligibility criteria

Studies from Nordic countries including Midwifery Continuity of Care will be considered eligible. No language or publication date limitations will be applied. All study designs are eligible. Conference abstracts will be excluded.

Table 1. Eligibility criteria for inclusion of studies

	Include
Population	Women in the Nordic countries receiving MCoC during pregnancy, birth and postpartum, who may experience vulnerability (for example due to fear of childbirth, emotional or mental ill health, tokophobia, socioeconomic status, ethnicity or cultural background).
Intervention	Midwifery Continuity of Care (MCoC), where women are cared for by the same midwife or a small team of midwives throughout pregnancy and labor, with or without period after birth.
Comparison	Standard maternity care- antenatal, intrapartum and postpartum/postnatal care (public or private).
Outcome	<p>Fear of birth, feelings of safety, health care accessibility, experiences, decision making, autonomy and maternal satisfaction (measured by scales or investigated qualitatively), bonding, breastfeeding duration, hospital length of stay</p> <p>Neonatal outcomes: Apgar score, gestational week, birth weight, stillbirth, admission to NICU, umbilical pH, hyperbilirubinemia</p> <p>Obstetrical maternal outcomes: use of antibiotics, induction of labour, episiotomy, augmentation with oxytocin, use of pain relief, mode of birth, postpartum hemorrhage, perineal tears, postpartum infection.</p>

Information sources

We will search CINAHL Complete (EBSCOHost, Inception to present), PubMed (National Library of Medicine, 1946-present), Embase.com (Elsevier, 1947-present), CENTRAL via Cochrane Library Online (Wiley, Issue 1 of 12 2025) and PsycInfo (EBSCOHost, Inception to present).

Search strategy

The search strategies will be developed in collaboration with an information specialist. A combination of relevant keywords and thesaurus terms will be applied. The preliminary search strategy is available in Supplement 1.

The search strategy will include combinations and variations of the following keywords:

Table 2. Key words to be used (for MeSH terms/thesaurus terms and key words in abstract and title)

PICO	Keywords
Population: Women in the Nordic countries receiving MCoC during pregnancy, birth and postpartum	Nordic, Sweden, Swedish (+ similar terms for Nordic countries) Pregnancy, maternal, intrapartum, postpartum, antenatal
Intervention: Midwifery Continuity of Care, throughout pregnancy, labor, with or without the period after birth.	Caseload midwifery, continuity of care, caseload, midwifery-led, team
Comparison: Standard care (antenatal, intrapartum and postpartum/postnatal care)	Relevant comparisons if available will be screened in the selection process.
Outcome: Fear of birth, feelings of safety, decision making, autonomy, maternal satisfaction.	Fear, anxiety, childbirth, birth, tokophobia, experience, feelings, safety, emotion, decision-making, disadvantage, immigrant, mental health, vulnerability.
Maternal and neonatal outcomes	
Study design: All types of studies	No study design terms or filters will be applied.

For included studies, a citation search will be conducted. Reference lists will be checked to find additional relevant references.

Study records

We will consider original studies published in peer-reviewed academic journals.

Selection process

Following the search, all identified publications will be collated and uploaded into Covidence (Covidence systematic review software). Duplicates will be removed. Titles and abstracts will be screened by two independent reviewers for assessment according to the inclusion criteria for the review.

The full text of the selected publications will be uploaded to Covidence and be assessed in detail against the inclusion criteria by two independent reviewers. To avoid conflict of interest, reviewers will not screen, do full text review or risk of bias assessment of articles they have authored or co-authored.

Any disagreements that may arise between the reviewers at each stage of the selection process will be resolved through discussion within the research group. The results of the search and the selection process will be reported in full in the final scoping review and presented in a PRISMA flow diagram.

Data collection/data items

Data available on the intervention and outcomes of interest together with relevant contextual information will be extracted from included studies. How the intervention (midwifery continuity of care) is reported in the literature may vary. Outcomes of interest are listed below. As the scoping review aims to get an overview of the outcomes of midwifery continuity of care, there is no prioritization listing of outcomes. Data extraction and charting will take into account variations of how interventions and outcomes may be expressed in the literature. Additional relevant characteristics of included studies will be extracted such as country and study design.

Table 3. Intervention and data outcome to be extracted

Intervention data to be extracted	Outcome data to be extracted
Midwifery Continuity of Care, throughout pregnancy, labor, and/or the period after birth.	Fear of birth, feelings of safety, health care accessibility, experiences, decision making, autonomy and maternal satisfaction (measured by scales or investigated qualitatively), bonding, breastfeeding duration, hospital length of stay
Variations of terminology may contain: Caseload midwifery, continuity of care, caseload, midwifery-led, team	Neonatal outcomes: Apgar score, gestational week, birth weight, stillbirth, admission to NICU, umbilical pH, hyperbilirubinemia Obstetrical maternal outcomes: use of antibiotics, induction of labour, episiotomy, augmentation with oxytocin, use of pain relief, mode of birth, postpartum haemorrhage, perineal tears, postpartum infection.

Risk of bias/critical appraisal

Risk of bias assessment will be conducted using Latitudes Networks platform (Latitudes Network, 2025) to identify assessment tools for evidence synthesis. The selection of checklists will be made based on study design, with suggested preliminary checklists below.

- Prompts for appraising qualitative research
- RoB 2 (RCTs)
- ROBINS-E and ROBINS-I (cohort studies)

Data synthesis

The results will be presented in the form of a summary of findings table for included studies. Furthermore, an analysis will be conducted in order to identify, describe and analyze, and categorize recurring patterns within the included studies to provide a structured overview of key concepts. This can be characterized as a basic thematic analysis as described by Pollock et al. (2023). If applicable, an evidence gap map will be created to visualize the findings to highlight the research landscape, for which aspects of our research question studies are available and where there are gaps (Miake-Lye, 2016).

Dissemination

We aim to publish the scoping review in a relevant peer-reviewed journal.

Funding

This study will receive no funding.

Conflict of interest

The authors report no conflicts of interest.

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Supplement 1 Search strategy

The search strategy documentation is to be cited as below, for protocol or publication in journal as appendix. The documentation is structured according to PRISMA 2020, international standard for systematic reviews. Please note that the information specialist delivers the parts required for search strategy documentation, additional method information may also be required.

See PRISMA 2020 for further information:

<http://prisma-statement.org/>

<http://prisma-statement.org/Extensions/Searching>

Information specialist: Maria Björklund, Library & ICT, Faculty of Medicine, Lund University, Sweden

Databases

No language restrictions or publication date restrictions were applied.

CINAHLComplete (Cumulative Index to Nursing and Allied Health Literature; EbscoHost, inception to present)

Date of search: January 28, 2025

Caseload midwifery- continuity of care

#1 ((MH "Midwifery+") OR (MH "Midwifery Service+")) OR ("caseload midwifery" OR "continuity of care" OR Continuity N3 care OR (pregnan* OR maternal OR primary OR antenatal OR intrapart* OR intra-part* OR postpartum OR post-partum OR postnatal) AND (midwi* AND (continuity OR caseload)) OR Midwi* AND "continuity of care" OR Midwi* AND "one-to-one" OR Midwi* AND (team OR lead* OR group* OR model*) OR "lead maternity carer" OR Collaboration N3 "maternity care" OR community* N3 "continuity of care" OR primary midwife-led care OR Caseload women)

55455 records

Nordic context

#2 (Sweden OR Swedish OR Norway OR Norwegian OR Denmark OR Danish OR Finland OR Finnish OR Iceland* OR Nordic OR Scandinavia*)

114736 records

Fear/anxiety, vulnerable groups

#3 ((Fear OR anxiety) AND (birth* OR childbirth)) OR tokophobia OR tokophobia OR experience* OR feeling* OR safe* OR trauma OR emotion* OR satisf* OR decision-making OR autonomy OR vulnerab* OR socio-economic OR disadvantage* OR immigrant* OR migrant* OR mental health OR depress* OR barrier* OR access* OR aurora

2108200 records

Combination caseload+ geographic filter + vulnerable groups

#4 #1 AND #2 AND #3

908 records

Filter Source type: Academic journals

895 records

Annotation CINAHL:

All fields is default in search if no field is specified. All fields was chosen to maximize sensitivity in search.

If block with vulnerable groups is added to search, relevant publications are not retrieved. In CINAHL it could therefore be rational to keep the search as broad as possible.

PubMed (National Library of Medicine, 1946-present)

Date of search: January 21, 2025

Caseload midwifery- continuity of care

#1 (((("midwifery"[MeSH Terms]) OR ("midwifery/organization and administration"[MeSH Terms])) OR ("continuity of patient care"[MeSH Terms]))) OR ("caseload midwifery"[Title/Abstract] OR "continuity of care"[Title/Abstract] OR (Continuity[Title/Abstract] AND care[Title/Abstract]) OR (pregnan*[Title/Abstract] OR maternal[Title/Abstract] OR primary[Title/Abstract] OR antenatal[Title/Abstract] OR intrapart*[Title/Abstract] OR intra-part*[Title/Abstract] OR postpartum[Title/Abstract] OR post-partum[Title/Abstract] OR postnatal[Title/Abstract]) AND (midwi*[Title/Abstract] AND (continuity[Title/Abstract] OR caseload[Title/Abstract])) OR Midwi*[Title/Abstract] AND "continuity of care"[Title/Abstract] OR Midwi*[Title/Abstract] AND "one-to-one"[Title/Abstract] OR Midwi*[Title/Abstract] AND (team[Title/Abstract] OR lead*[Title/Abstract] OR group*[Title/Abstract] OR model*[Title/Abstract]) OR "lead maternity carer"[Title/Abstract] OR (Collaboration[Title/Abstract] AND "maternity care"[Title/Abstract]) OR (community*[Title/Abstract] AND "continuity of care"[Title/Abstract]) OR primary midwife-led care[Title/Abstract] OR Caseload women[Title/Abstract])

338009 records

Nordic context

#2 (((((((Sweden[Title/Abstract] OR Swedish[Title/Abstract] OR Norway[Title/Abstract] OR Norwegian[Title/Abstract] OR Denmark[Title/Abstract] OR Danish[Title/Abstract] OR Finland[Title/Abstract] OR Finnish[Title/Abstract] OR Iceland*[Title/Abstract] OR Nordic[Title/Abstract] OR Scandinavia*[Title/Abstract])) OR (Sweden[MeSH Terms])) OR (Norway[MeSH Terms])) OR (denmark[MeSH Terms])) OR (finland[MeSH Terms])) OR (iceland[MeSH Terms])) OR ("scandinavian and nordic countries"[MeSH Terms])

346351 records

Fear/anxiety, vulnerable groups

#3 ((Fear[Title/Abstract] OR anxiety[Title/Abstract]) AND (birth*[Title/Abstract] OR childbirth[Title/Abstract])) OR tokophobia[Title/Abstract] OR tokophobia[Title/Abstract] OR experience*[Title/Abstract] OR feeling*[Title/Abstract] OR safe*[Title/Abstract] OR trauma[Title/Abstract] OR emotion*[Title/Abstract] OR satisf*[Title/Abstract] OR decision-making[Title/Abstract] OR autonomy[Title/Abstract] OR vulnerab*[Title/Abstract] OR socio-economic[Title/Abstract] OR disadvantage*[Title/Abstract] OR immigrant*[Title/Abstract] OR mental health[Title/Abstract] OR depress*[Title/Abstract] OR barrier*[Title/Abstract] OR immigrant*[Title/Abstract] OR aurora[Title/Abstract] OR access*[Title/Abstract]

5444487 records

Combination caseload+ geographic filter + vulnerable groups

#4 #1 AND #2 AND #2

3809 records

Annotation PubMed:

Title/abstract field were searched in PubMed in combination with MeSH terms to balance number of results.

Embase.com (Elsevier, 1947-present)

Date of search: January 28, 2025

Caseload midwifery- continuity of care

#1 'midwifery'/exp OR 'caseload'/exp OR (('caseload midwifery' OR 'continuity of care' OR (continuity NEAR/3 care) OR ((pregnan* OR maternal OR primary OR antenatal OR intrapart* OR 'intra part*' OR postpartum OR post-partum OR postnatal)) AND midwi* AND (continuity OR caseload) OR (midwi* AND 'continuity of care') OR (midwi* AND 'one-to-one') OR (midwi* AND

(team OR lead* OR group* OR model*)) OR 'lead maternity carer' OR (collaboration NEAR/3 'maternity care') OR (community* NEAR/3 'continuity of care') OR primary) AND 'midwife led' AND care OR caseload) AND women)

114444 records

Nordic context

#2 'sweden'/exp OR 'denmark'/exp OR 'norway'/exp OR 'iceland'/exp OR 'finland'/exp OR 'scandinavia'/exp OR sweden:ab,ti OR swedish:ab,ti OR norway:ab,ti OR norwegian:ab,ti OR denmark:ab,ti OR danish:ab,ti OR finland:ab,ti OR finnish:ab,ti OR iceland*:ab,ti OR nordic:ab,ti OR scandinavia*:ab,ti

412784 records

Fear/anxiety, vulnerable groups

#3 (fear:ab,ti OR anxiety:ab,ti) AND (birth*:ab,ti OR childbirth:ab,ti) OR tokophobia:ab,ti OR experience*:ab,ti OR feeling*:ab,ti OR safe*:ab,ti OR trauma:ab,ti OR emotion*:ab,ti OR satisf*:ab,ti OR 'decision making':ab,ti OR autonomy:ab,ti OR vulnerab*:ab,ti OR 'socio economic':ab,ti OR disadvantage*:ab,ti OR immigrant*:ab,ti OR 'mental health':ab,ti OR depress*:ab,ti OR barrier*:ab,ti OR access*:ab,ti OR migrant*:ab,ti OR aurora:ab,ti

7277220 records

Combination caseload+ geographic filter + vulnerable groups

#4 #1 AND #2 AND #3

1364 records

#8 #7 AND [embase]/lim NOT ([embase]/lim AND [medline]/lim)

184 records

#9 #8AND ('article'/it OR 'article in press'/it OR 'review':it)

45 records

Annotation Embase:

Title/abstract and Emtree terms were searched in combination.

PsycInfo (EbscoHost, inception to present)

Date of search: January 28, 2025

Caseload midwifery- continuity of care

#1 ("caseload midwifery" OR "continuity of care" OR Continuity N3 care OR (pregnan* OR maternal OR primary OR antenatal OR intrapart* OR intra-part* OR postpartum OR post- partum OR postnatal) AND (midwi* AND (continuity OR caseload)) OR (Midwi* AND "continuity of care") OR (Midwi* AND "one-to-one") OR (Midwi* AND (team OR lead* OR group* OR model*)) OR "lead maternity carer" OR Collaboration N3 "maternity care" OR community* N3"continuity of care" OR primary midwife-led care OR Caseload women)

15199 records

Nordic context

#2 (Sweden OR Swedish OR Norway OR Norwegian OR Denmark OR Danish OR Finland OR Finnish OR Iceland* OR Nordic OR Scandinavia*)

209380 records

Fear/anxiety, vulnerable groups

#3 ((Fear OR anxiety) AND (birth* OR childbirth)) OR tokophobia OR tokophobia OR experience* OR feeling* OR safe* OR trauma OR emotion* OR satisf* OR decision-making OR autonomy OR vulnerab* OR socio-economic OR disadvantage* OR immigrant* OR migrant* OR mental health OR depress* OR barrier* OR access* OR aurora

2694955 records

Combination caseload+ geographic filter + vulnerable groups

#4 #1 AND #2 AND #3

797 records

Filter Source type: Academic Journals, Peer reviewed

764 records

Annotation PsycInfo:

All fields is default in search if no field is specified.

CENTRAL via Cochrane Library Online (Wiley, Issue 1 of 12, January 2025)

Date of search: January 28, 2025

#1 MeSH descriptor: [Midwifery] explode all trees
560 records

#2 MeSH descriptor: [Midwifery] explode all trees and with qualifier(s): [organization
& administration - OG] 21 records

#3 "caseload midwifery"
33 records

#4 "continuity of care"
842 records

#5 Continuity AND care
2577 records

#6 (pregnan* OR maternal OR primary OR antenatal OR intrapart* OR intra-part* OR
postpartum OR post-partum OR postnatal)
718004 records

#7 midwi* AND (continuity OR caseload)
241 records

#8 #6 AND #7
223 records

#9 (Midwi* AND "one-to-one")
0 records

#10 Midwi* AND (team OR lead* OR group* OR model*)
6914 records

#11 "lead maternity carer"
2 records

#12 collaboration AND maternity care
348 records

#13 community AND "continuity of care"
286 records

#14 primary midwife-led care OR Caseload women
133 records

#15 #1 OR #2 OR #3 OR #4 OR #5 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR
#14
9585 records

#16 (Sweden OR Swedish OR Norway OR Norwegian OR Denmark OR Danish OR Finland OR Finnish OR Iceland* OR Nordic OR Scandinavia*)

81948 records

17 ((Fear OR anxiety) AND (birth* OR childbirth)) OR tokophobia OR tokophobia OR experience* OR feeling* OR safe* OR trauma OR emotion* OR satisf* OR decision-making OR autonomy OR vulnerab* OR socio-economic OR disadvantage* OR immigrant* OR mental health OR depress* OR barrier* OR access* OR migrant* OR aurora

1676165 records

Combination caseload+ geographic filter + vulnerable groups

#18 #15 AND #16 AND #17

901 records of which 491 are reviews, 369 trials (exported to EndNote/Covidence), 37 protocols

Annotation Cochrane:

All fields is default in search if no field is specified.

Total number of records from database searches before deduplication

Combination caseload+ geographic filter + vulnerable groups: 5882 records