



Review Article

Midwives' experiences and perceptions of midwife-led continuity of care models in low-and middle-income countries: A qualitative evidence synthesis

Hilde Tinderholt Myrhaug^{a,*}, Berit Mortensen^a, Susan Kyomuhendo Munabi-Babigumira^b, Anne Kaasen^a, Aase Serine Devold Pay^{a,c}, Florence Naab^d, Alison McFadden^e, Tine Schauer Eri^a, Sara Rivenes Lafontan^a

^a Department of Nursing and Health, Promotion, Faculty of Health Sciences, Oslo Metropolitan University, Oslo, Norway and Research Group Midwifery Sciences, Oslo Metropolitan University, Norway

^b Department of Health and Functioning, Western Norway University of Applied Sciences, Norway

^c Department of Gynaecology and Obstetrics, Baerum Hospital, Vestre Viken Hospital Trust, Norway

^d School of Nursing and Midwifery, College of Health Sciences, University of Ghana, Ghana

^e Mother and Infant Research Unit, School of Health Sciences, University of Dundee, Scotland, UK

ARTICLE INFO

Keywords:

Midwife-led continuity of care models
Midwifery
Facilitators
Barriers
Low-and middle-income countries
Qualitative research

ABSTRACT

Background: There is a need to scale-up midwife-led continuity of care (MLCC) in low- and middle-income countries (LMICs), where midwives are the key to successful implementation. There is limited knowledge about their experiences and perceptions of MLCC models.

Aim: To explore midwives' experiences and perceptions of working with MLCC models in LMICs, their views of barriers to and facilitators of MLCC models, including to assess our confidence in the evidence.

Methods: Two information specialists conducted systematic searches in eight databases from year 2000 until June 2024. The methodological quality of the included studies was assessed using a modified version of the Critical appraisal tool (CASP). We conducted a thematic analysis and used Grading of Recommendations Assessment, Development and Evaluation Confidence in the Evidence from Reviews of Qualitative Research (GRADE CERQual) approach to assess our confidence in each review finding.

Results: This synthesis included five studies exploring midwives' experiences and perceptions of MLCC in LMICs. Three analytic themes were generated: Equity and access; professional development and recognition; and enhancing midwifery practices and policies. In addition, we identified ten associated sub-themes that were assessed by GRADE CERQual. These findings varied from moderate to very low confidence.

Conclusion: While midwives highlighted the benefits of continuity of care, they identified essential components for successful implementation of MLCC in LMICs including reducing structural and geographical barriers, the continuous need for sustained capacity building and learning, and optimal resource allocation and availability. Findings assessed as low or very low confidence need to be explored further.

Statement of significance

Issue

This qualitative evidence synthesis explores midwives' experiences and perceptions of midwife-led continuity of care (MLCC)

models in low and-middle income countries (LMICs).

What is already known

Research suggests that MLCC improves quality of care. There is a lack of research that explores the confidence of evidence on midwives' experiences of MLCC in LMICs.

What this paper adds

* Corresponding author: Hilde Tinderholt Myrhaug, Department of Nursing and Health Promotion, Faculty of Health Sciences, Oslo Metropolitan University, P.O. Box 4, St. Olavs plass, 0130 Oslo, Norway.

E-mail address: hitimy@oslomet.no (H.T. Myrhaug).

<https://doi.org/10.1016/j.midw.2025.104565>

Received 27 September 2024; Received in revised form 14 July 2025; Accepted 7 August 2025

Available online 8 August 2025

0266-6138/© 2025 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Our study highlights the importance of reducing structural and geographical barriers to accessing care, the value of continuity of care, the need for continuous learning, and proper resource allocation for the successful implementation of MLCC. We have moderate confidence in these findings, which were also supported by user representatives from LMICs.

Introduction

Around 2.5 million newborns die annually and almost 800 women died daily related to pregnancy and childbirth in 2020, mainly in low- and middle-income countries (LMICs) (WHO 2023; UNICEF, 2024). A substantial increase in coverage of midwife-delivered interventions could avert 41 % of maternal deaths and 39 % of neonatal deaths by 2035 (Nove et al., 2021). Midwife-led continuity of care (MLCC) is recommended by the World Health Organization (WHO) in settings with well-functioning midwifery programmes to ensure quality antenatal, perinatal and postnatal care (WHO, 2016, 2018, 2022, 2024), despite implementation challenges in high income countries (HICs) (Middlemiss et al., 2024). The MLCC model refers to care from the same midwife or small team of midwives during pregnancy, birth, and the postnatal period (ICM, 2021). More systematic and contextual evidence is needed to understand implementation of continuity of care in various settings (Middlemiss et al., 2024).

Evidence from implementing MLCC models in LMIC is still scarce but recent reviews found improved quality of care during pregnancy and childbirth, and maternal- and newborn outcomes (Fikre et al., 2023; Adnani et al., 2025). However, the lack of enabling factors such as midwifery education, collaboration between stakeholders (donors, practitioners, local communities, government, and professional organisations), and supportive leadership prevent successful implementation of MLCC in LMICs (Michel-Schuldt et al., 2020; Sangy et al., 2023). Additional barriers to MLCC are related to societal and genders norms (Blomgren et al., 2023). Despite these challenges, there is a growing interest in implementing MLCC in these settings, due to the demonstrated positive effects (Bradford et al., 2022; Cibralic et al., 2023; Fikre et al., 2023; Sandall et al., 2024), including identified cost savings (Sandall et al., 2024).

Midwives integrated within a system are crucial to the successful implementation of MLCC (Renfrew et al., 2014). There is a need to synthesise qualitative research providing insights into their perspectives of MLCC in LMICs (Blomgren et al., 2023; Sandall et al., 2024) and to assess the confidence in the evidence.

The aim of this qualitative evidence synthesis (QES) was to explore midwives' experiences and perceptions of working with MLCC models in LMICs, their views of barriers to and facilitators of MLCC models in these settings, and to assess our confidence in the evidence.

Methods

The protocol for this QES was prospectively registered with PROSPERO (CRD42023423847). It adheres to the Enhancing transparency in reporting the synthesis of qualitative research (ENTREQ) reporting guideline (Tong et al., 2012) and follows Cochrane guidance for conducting QES (Noyes et al., 2023). User representatives from Ghana, Palestine and Norway participated in the development of the protocol and commented on the manuscript before submission. However, they did not take part in the analysis. Their involvement are described in the guidance for reporting of patient and public involvement (GRIPP2) (Staniszewska et al., 2017) in health and social care research (Supplementary file 1).

Inclusion criteria

Studies were eligible for inclusion if they met the following criteria:

Types of studies: Studies that used qualitative designs to collect and analyze data. Mixed-methods studies were included if the qualitative findings were reported separately from the quantitative results. We included full-text peer reviewed studies only. We considered sampling of studies; however, we retrieved few relevant studies and included all that met our inclusion criteria.

Population: Studies that included certified midwives (ICM, 2017) or referred to their participants as midwives, working in an LMIC. If other health care professions were included as participants, at least 50 % had to be midwives. Studies where most of the participants were other health care professionals or midwifery students were excluded.

Topic of interest: Studies that included work experiences and/or perceptions of MLCC, and views of barriers to and facilitators of MLCC models among midwives in LMICs were included. Studies that used other synonyms for MLCC such as caseload and "know your midwife" were also included. Other health care professions might contribute to the care, but the midwives (a small group of midwives) were in charge and coordinated the care. We took a broad perspective and included studies not only where midwives were providing MLCC at the time of the research, but also those who had relevant perspectives on MLCC such as those with previous experience of MLCC, or who worked alongside midwives providing MLCC or who were planning to implement MLCC.

Context: Studies that included continuity in at least two maternal care stages; antenatal, intrapartum and/or postnatal care (Bradford et al., 2022) in LMICs (The World Bank, 2024) provided at hospitals /health facilities (public or private) and/or in communities.

Search methods

The electronic literature search was conducted by information specialists in Medline (Ovid), Embase (Ovid), Maternity & Infant Care (Ovid), CINAHL (EBSCOhost), Web of Science (Core Collection), Scopus, African Journal Online (AJOL) and Lilac from year 2000 until June 2024. The search strategy is in Supplementary table S1. Additionally, we searched reference lists of included studies and contacted experts in the field.

Study selection and data extraction

Pairs of reviewers independently screened titles and abstracts for relevance using the Rayyan research collaboration platform (Ouzzani et al., 2016). Relevant studies were independently assessed in full text by two reviewers and included if they met the eligibility criteria. Disagreements were resolved by discussion among the authors. We contacted study authors for more information, if necessary.

The first author extracted data on characteristics of included studies (e.g., author(s), year of publication, aim, data collection, analysis), characteristics of population (sample size, profession, years of experiences), characteristics of phenomenon of interest (MLCC during all the stages, terms used of MLCC), and context (country, rural, urban, MLCC provided in primary, secondary, and tertiary levels of health care). Data were cross-checked by co-authors.

Methodological quality assessment

Pairs of reviewers independently critically appraised the included studies for methodological quality using a modified version of CASP Qualitative Research Checklist (NIPH, 2024). This checklist includes eight questions (Supplementary table S2). We did not exclude studies based on the methodological assessment but used this information to assess confidence in the evidence using the Grading of Recommendations Assessment, Development and Evaluation-Confidence in the Evidence from Reviews of Qualitative research approach (GRADE-CERQual) (Lewin et al., 2018).

Data management, analysis and synthesis

We used thematic synthesis to analyze and synthesize the data. This analysis consists of three stages: line-by-line coding of relevant findings from the included studies, organization of the codes into descriptive themes and lastly, abstraction of descriptive themes to develop analytical themes (Thomas and Harden, 2008). Initially, five reviewers (HTM, BM, SKM-B, TSE, SRL) independently extracted relevant data from the included studies and generated tentative codes. Similarities and differences between codes were identified and a revised set of codes developed using NVIVO version 20. The revised codes were then grouped into descriptive themes and analytic themes were subsequently developed.

The whole review team were involved in discussions during the analysis.

Reflexivity

Several of the team members have previous experience from research, work and midwife-led continuity of care in a variety of settings in LMICs. All co-authors are positive towards MLCC, however we strived to analyse, interpret and assess the confidence of findings conscientiously and to critically reflect on the usefulness of these findings.

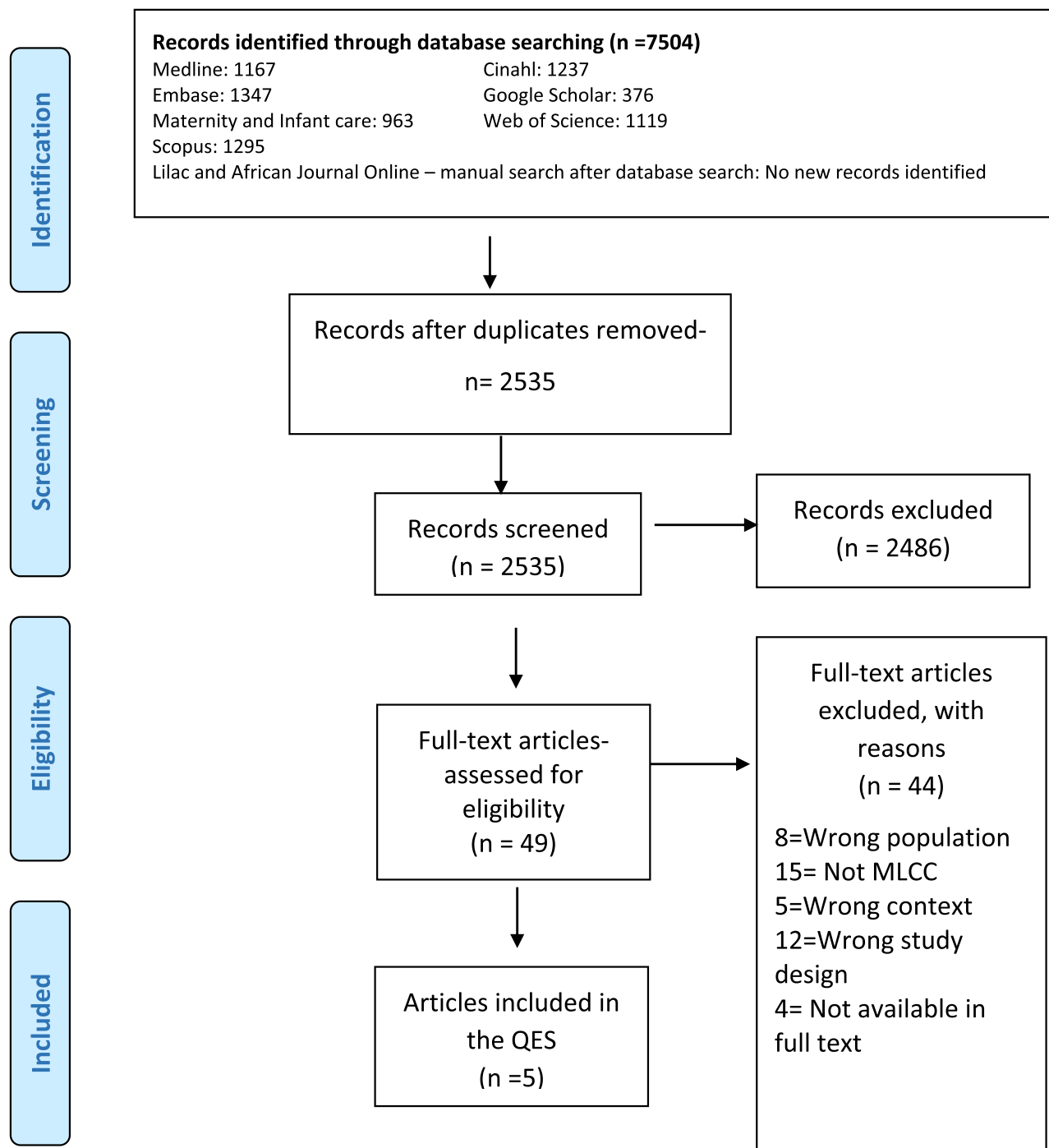


Fig. 1. Selection of articles.

Assessment of confidence in the review findings

Two reviewers (HTM, SKM-B) used the GRADE CERQual approach to assess confidence in each review finding (Lewin et al., 2018) based on the four key components: methodological quality of included studies,

coherence of the review finding, adequacy of the data contribution to a review finding, and relevance of the included studies to the review question. We made a judgment about the overall confidence in the evidence supporting each descriptive theme and indicated our confidence as high, moderate, low, or very low (Supplementary table S3).

Table 1

Characteristics of included studies.

Author (year)	Aim	Method (Type of data collection and analysis)	Population (sample size, profession, years of experiences, role)	Topic of interest MLCC (during all the stages)	Context (country, rural, urban, and primary, secondary, and tertiary levels of health care)
Hailemeskel et al. (2021)	To explore health care providers' perceptions and experiences related to Midwife-led continuity of care at primary hospitals in the north Shoa zone Ethiopia	Four focus group discussions including midwives and eight semi-structured individual interviews with emergency surgical officers and medical doctors. Thematic data analysis	25 midwives, 4 emergency surgical officers (IESO) and 4 medical doctors who had worked in maternal and child health units for the preceding 6 months. Informants were between 20–35 years, including 7 females and 26 males. The study participants had an average of 4.12 ± 2.31 years of working experiences	Midwife-led continuity of care (MLCC) (defined as receive antenatal, labour, birth, and immediate postnatal care from a known midwife or by a small group of midwives). MLCC not implemented in Ethiopia, but it happened only by chance.	Ethiopia. Four primary hospitals in the north Shoa zone, Amhara Regional State. In the zone, there is one referral hospital linked with 8 primary hospitals, 95 health centers and 389 health posts
Mannah et al. (2014)	To evaluate the Kenya community midwifery (CM) programme by exploring CMs and key informants' experiences of the programme to determine its contribution in improving access to skilled care; and to identify opportunities and challenges that affect women's access to skilled care.	In-depth interviews Thematic framework analysis	20 community midwives (CMs); 3/20 CMs were males. They were all registered nurse-midwives aged 40–60 years. Sixteen (80 %) of the CMs were retired midwives and four (20 %) were self-employed midwives before their recruitment. Six key informants (were the pioneers, funder, manager, coordinators and supervisors of the community midwifery program)	The CMs offered antepartum, intrapartum and postpartum services, family planning counselling and services, HIV testing, health education and management of minor ailments. The CMs were commissioned to provide care within the community and were attached to health facilities where they could refer their clients to.	Kenya. Two districts in Western and Central provinces with low utilization of skilled birth attendance (25.3 %), high fertility rate (5.6) and a high incidence of teenage pregnancy (15 %).
Nabirye et al. (2024)	To explore the perceptions of women and midwives regarding the quality of care in four midwife-led birth centres (MLBCs) in Uganda.	Focus group discussions and individual interviews. Used appreciative enquiry that focuses on identification of positive successes and enables participants to suggest solutions to the existing problems. Thematic analysis	16 midwives working in MLBCs and eight women who had used MLBC services. Sociodemographic profile of the participants is not reported.	MLBCs scope of services includes childbirth, family planning, reproductive health, antenatal and postnatal care. MLBCs are legally acceptable places of health care and are identified as maternity homes. Midwives are legally permitted to own and operate MLBCs	Uganda. Four privately-owned MLBCs. The MLBCs in Uganda are mostly situated in rural settings, standalone, privately owned units with variable funding mechanisms
Pappu et al. (2023)	To explore the willingness within the healthcare system to support a greater role for midwifery centres in maternity services.	Individual semi-structured interviews Qualitative content analysis according to Elo and Kyngäs	55 midwives, midwifery educators and third-year midwifery students. Midwives ($n = 27$), mean age 34, mean 3 years of employment; Midwifery educators ($n = 19$), mean age 49, mean 10 years of employment; Midwifery students ($n = 9$), mean age 21, 0 years of employment. The midwives had a minimum qualification a three-year Diploma in Nursing and a one-year Diploma in Midwifery. Most of them had an additional six-month post-basic midwifery qualification.	A midwifery center is a healthcare facility that provides antenatal, labor and postpartum care for women and new-born. It is rooted in midwifery philosophy and practices a midwifery-centred model of care.	Bangladesh. Participants were recruited from across Bangladesh and were working or studying in 17 different health-care facilities and 17 educational institutes. The healthcare facilities were located in both rural and urban areas, while the educational institutes were located in larger cities
Saleem et al. (2015)	To explore the experiences and perceptions of midwives practicing the midwifery-led care model	Semi-structured questionnaires The Creswell's six steps of content analysis	10 midwives, aged 25–55 years old, 80 % were qualified midwives, 5–30 years of working experience	Maternity care to women during the antenatal, intrapartum, and postnatal periods. At site 1: The midwives provided antenatal services under the supervision of an obstetrician- births were conducted by doctors under training. At site 2: Women received antenatal care from the midwives under obstetric supervision and midwives conducted the births.	Pakistan. Two private facilities of women and children hospital in Karachi.

Results

Search and selection

The literature search yielded 7504 citations. After removing duplicates, 2535 citations were assessed on title and abstract and 2486 citations were not relevant. The remaining 49 citations were screened in full text level. Forty-four of these studies were excluded, which resulted in the inclusion of five qualitative studies (Fig. 1).

Description of included studies

The five included studies were conducted in Ethiopia (Hailemeskel et al., 2021), in Kenya (Mannah et al., 2014), in Bangladesh (Pappu et al., 2023), in Pakistan (Saleem et al., 2015) and in Uganda (Nabirye et al., 2024) (Table 1). One study (Saleem et al., 2015) included only midwives, while the four remaining studies included other health care participants as well. In total, 98 midwives and 50 other participants (e. g., emergency surgical doctors, medical doctors, managers of community midwifery programs, midwifery educators, third-year midwifery students and users of MLCC) participated in the four studies. The midwives were mainly female, aged 25–60 years with 3–30 years working experience. The MLCC models were provided during pregnancy, childbirth and post-partum (Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015) in rural (Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023) and urban settings (Pappu et al., 2023; Saleem et al., 2015). In two studies, the midwives worked at private facilities (Nabirye et al., 2024; Saleem et al., 2015). Some of the midwives in the study of Hailemeskel (Hailemeskel et al., 2021) had experience of continuity of care, but this was not part of standard practice. We were uncertain if the midwives of Pappu et al., 2023 (Pappu et al., 2023) had experienced continuity of care, but we received no response from the authors.

When reporting the findings from the included studies, we refer to “midwives” despite four of the studies also included other participants (Tabel 1). However, the midwives led the care and were in the majority among the included studies.

Quality assessment

The five included studies were overall of high (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024) to moderate (Pappu et al., 2023; Saleem et al., 2015) methodological quality (Table 2).

Findings from the thematic synthesis

The three analytic themes developed were: equity and access; professional development and recognition; and enhancing midwifery practices and policy as well as ten sub- themes (Fig. 2). Supplementary table S4 shows the development of analytic themes.

Analytic theme 1: equity and access

Accessibility challenges and geographical barriers. Midwives highlighted the obstacles posed by structural and geographical barriers when providing MLCC services in LMICs (Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023). These challenges included poor transport infrastructure and environmental hazards, particularly affecting remote and rural areas (Pappu et al., 2023; Saleem et al., 2015).

Efforts to address these challenges involved community outreach programs and deploying midwives to rural areas (Nabirye et al., 2024), but persistent issues like unsafe travel conditions at night and impassable roads exacerbated the difficulty of reaching mothers in need:

We are called when it is already late at night. Insecurity is a very big problem and the escort that was to be allocated for me, I have never seen him. Now you would really want to go to attend them (to women) but you will look for escort but nowhere to get one (Mannah et al., 2014).

Table 2
Methodological quality assessments of included studies.

Questions	Hailemeskel et al., 2021	Mannah et al., 2014	Nabirye et al., 2024	Pappu et al., 2023	Saleem et al., 2015
1. Are the setting/s and context described adequately?	Yes	Yes	Yes	Yes	Yes
2. Is the sampling strategy described and is this appropriate?	Yes	Yes	Yes	Yes	Yes
3. Is the data collection strategy described and justified?	Yes	Yes	Yes	Yes	Unclear
4. Is the data analysis described and is this appropriate?	Yes	Yes	Yes	Yes	Yes
5. Are the claims made/ findings supported by sufficient evidence?	Yes	Yes	Yes	Yes	Yes
6. Is there evidence of reflexivity?	Unclear	Unclear	Yes	No	No
7. Does the study demonstrate sensitivity to ethical concerns?	Yes	Yes	Yes	Yes	Yes
8. Any other concerns?	Unclear	No	No	Unclear	Unclear

Socioeconomic and cultural influences. Withing the context that MLCC was implemented, midwives perceived that cultural norms, religion and economic factors significantly shaped women’s maternity care decisions and experiences (Mannah et al., 2014; Pappu et al., 2023; Saleem et al., 2015). They noted that traditional practices and gender roles often determined their access to care during pregnancy and childbirth:

The decision for seeking healthcare services is mainly made by male members of the household, husbands in particular. When husbands see that women are still treated badly at a health facility they do not want to pay for their wives to be treated there. (Pappu et al., 2023).

The midwives also reported that poverty and lack of information were substantial barriers to provide MLCC, and women tended instead to rely on traditional birth attendants or home births:

I once had a woman with complication, I suffered a lot. They are poor, there is no money, you have no vehicle, the place is so deep in the village, I really suffered.... (Mannah et al., 2014).

Resource allocation and availability to support MLCC models. The midwives highlighted the significance of optimal resource allocation and availability to support MLCC models (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015). Resource constraints compromised the quality of care leading to long waiting times and limited availability of services. The midwives were also concerned about the financial burden of their work and the low pay for their expertise:

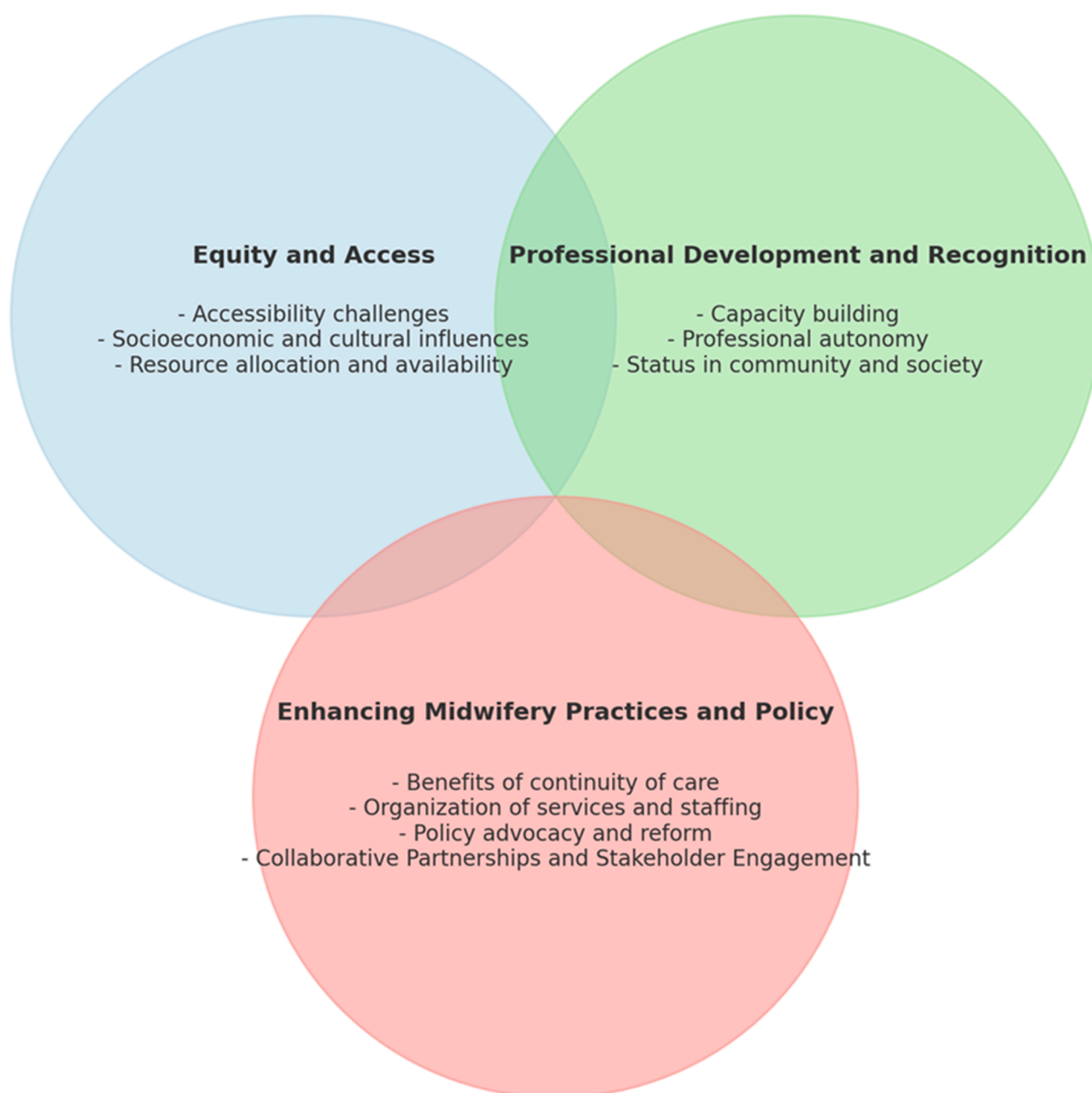


Fig. 2. Analytic themes and Sub-Themes.

Initially the services of the community midwives (CM) were meant to be voluntary services but then again it was not easy for the midwife to continue volunteering, so they charge some fee. You see, their children need food on the table and if they have to do that as a full-time job, how will they feed their children? (Mannah et al., 2014).

Additionally, challenges such as lack of equipment, the lack of refrigeration for vaccines and life-saving drugs further hindered effective service delivery:

I do antenatal clinics but I feel inside me that I am not doing it completely because the other things like de-worming, prevention of malaria. I don't do it because I don't have them. Even for vaccines and oxytocin I send them to Government of Kenya facility, I don't have a fridge, you see (Mannah et al., 2014).

However, successful strategies such as task-shifting where retired midwives were employed to serve the community; and establishing

mini-clinics within their homes were used to address resource constraints among midwives working with MLCC:

Like CMs at times you can be called in the home. So you carry a kit and assess the woman and if you see there is no complication you conduct the delivery at home. You work and their relatives are around to support them (Mannah et al., 2014)

In another study (Nabirye et al., 2024), affordable user fees and flexible payment systems enabled the midwives to provide affordable MLCC. Other facilitators mentioned in this study was the availability of government support and external funding.

They [women] are never overwhelmed with the costs because they feel more of the service here is more of free....as compared to government facilities....like, you see after delivery here, they get some pieces of clothes (Nabirye et al., 2024).

Analytic theme 2: professional development and recognition

Capacity building and continuous learning. The midwives identified capacity building and continuous learning as essential components of effective midwifery-led care (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015).

Once we get a midwife, we first train all our midwives ... we have our tradition of how we treat our mothers. So, after the training ... they know how to build relationships with clients (Nabirye et al., 2024).

They emphasized the importance of ongoing training programs and mentorship initiatives in enhancing their skills and confidence:

With support from XXXX, we then embarked on retraining and updating these CMs so that some who had lost skills are encouraged and retrained to conduct deliveries again (Mannah et al., 2014).

However, challenges such as inadequate training opportunities and lack of skill updating hindered their scope of practice and could lead to demotivation:

Well, I need training because since our first training in 2005, nobody has trained me again. I want to continue to be updated even though I am old, you know (Mannah et al., 2014)

Professional autonomy. Midwives emphasized the importance of professional autonomy within MLCC (Hailemeskel et al., 2021; Mannah et al., 2014; Pappu et al., 2023; Saleem et al., 2015). They described varying experiences regarding the influence of MLCC on their autonomy and practice:

I will be happy if we have a model of care that will allow us to work more autonomously, a model of care that allows midwives to work on all competencies (Hailemeskel et al., 2021).

Some midwives felt empowered by the opportunities for working independently while utilizing their full scope of practice:

I would like to work with midwife-led continuity of care in the future as it is the ideal way I would like to practice and the care I want to be able to provide, as it gives me more confidence and autonomy in my work (Hailemeskel et al., 2021).

However, others experienced a lack of autonomy when their tasks were limited to supporting doctors to provide maternity care prior to MLCC being implemented:

Here [in the facility], we [midwives] are not working fully independently; we are working under the supervision of our instructors [obstetricians]. We practice whatever is suggested and done by the obstetrician (Saleem et al., 2015).

Midwives also reported tension between MLCC and the medical model, which often undermined their professional autonomy:

Some healthcare providers are practicing the upright position... Because they cannot move away from their previous medical model habits" (Pappu et al., 2023).

Status in community and society. Midwives discussed societal and community factors influencing their practice, including the appreciation of their role and status (Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015). Some encountered challenges in gaining recognition for their expertise in their professional environment, underscoring the need for greater societal recognition and support for midwifery-led care initiatives (Pappu et al., 2023; Saleem et al., 2015):

Being a midwife, I want the institution to have a system where the [women] would come for registration by giving our names personally.

There should be a status of the midwife where we could provide maternity care independently (Saleem et al., 2015).

"The government doesn't seem to support our work. They never give us enough money and are slow to implement our recommendations" (Pappu et al., 2023).

While others (Mannah et al., 2014; Nabirye et al., 2024), felt appreciated by their community:

"I feel recognised somehow because before they would not even recognize me as a midwife, in the community. They only knew me as a nurse but not as a midwife. So I feel that I am recognized being a community midwife, I am happy" (Mannah et al., 2014)

Analytic theme 3: enhancing midwifery practices and policies

Benefits of continuity of care. The midwives emphasized the benefits of continuity of care for both mothers and midwifery practice (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023). The midwives stressed the importance of building trust with women to ensure respectful and dignified care, highlighting the critical role of MLCC models in enhancing the overall childbirth experience:

It will be great for the women to always have the same midwife in her pregnancy life and it will be very good for her to know the midwife before having the baby. Because knowing the midwife that looked after her during the childbirth process will help the women to feel safe and trust on the providers (Hailemeskel et al., 2021).

They noted the positive impact on fostering strong provider-patient relationships, providing individualized, respectful, culture-sensitive care in a humane manner, reducing interventions, and potentially improving health outcomes:

It's a special birth center and we are really trying to show that we can do something different and have really good outcomes....that having good outcomes is not about having big fancy machines..it's about having real midwifery models of care. (Nabirye et al., 2024).

Collaborative partnerships and stakeholder engagement. The midwives recognized the value of forging partnerships with various stakeholders to address the complex challenges in maternal and newborn healthcare (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015):

We were supported by a number of partners... A few of the CMs have been provided with delivery kits, stethoscopes, blood pressure machines and so on (Mannah et al., 2014).

Community engagement, including health education, collaboration with traditional birth attendants, and community leaders, was particularly valued for fostering trust and cultural understanding within local communities:

...so putting them [TBAs] at the centre, we created a birth centre that is really for the community...So, they bring them to the facility and we offer a small pay so they get compensated for every person that they bring to the facility (Nabirye et al., 2024)

Organization of services and staffing. The midwives suggested that to deliver effective MLCC, it is essential to consider the midwife-to-client ratio and ensure that services were adapted to ensure consistent follow-up by the same midwife from antenatal to postnatal stages (Hailemeskel et al., 2021).

They also suggested that working in rotation might not ensure continuity of care and consistent follow-up by the same midwife from antenatal to postnatal stages (Hailemeskel et al., 2021):

...we midwives are assigned from ANC up to PNC and work in a rotation (shift) in every six month period; we are not following the same mothers from ANC up to PNC (Hailemeskel et al., 2021)

Policy advocacy and reform. Midwives reported that institutional rules and regulations that limit midwives' scope of practice, regulatory requirements such as costly licensing of midwives, the medical model, and hierarchy in the medical profession were barriers that interfered with the implementation of MLCC (Hailemeskel et al., 2021; Mannah et al., 2014; Nabirye et al., 2024; Pappu et al., 2023; Saleem et al., 2015):

"They are also required to register with the regulatory body. The registration fee with the nursing council is about 10,000 Ksh per year.....So that has been a barrier" (Mannah et al., 2014).

The midwives suggested that policy changes and guidelines for implementation would need to be instituted before MLCC could be implemented:

Development of higher-level policy and guidelines that can support this model is the most important (Hailemeskel et al., 2021).

Confidence in the review findings

Of the ten descriptive themes subjected to confidence assessment, we graded five findings as moderate confidence, four findings as low confidence and one finding as very low confidence. None of the findings were graded as high. The main reason for downgrading was adequacy, due to few included studies. Results and explanations for GRADE CERQual assessments are presented in Table 3.

Discussion

This QES identified midwives' experiences and perceptions of barriers to and facilitators of MLCC models in LMICS. We included five studies where most of the participants were midwives. Through a thematic synthesis ten sub- themes and three analytic themes were developed: equity and access; professional development and recognition; and enhancing midwifery practices and policy.

To ensure equity in maternal health, all women and their newborn should have accessible, good-quality services, with adequate resources, and a competent workforce providing continuity in services across communities and facilities (Renfrew et al., 2014). MLCC models can ensure equity in maternal health by improving accessibility to midwives who are educated, regulated, and supported (Bradford et al., 2022; Renfrew et al., 2014).

We identified both enablers and barriers to equity and access that impacted women's access to good-quality adequately resourced services. Access was facilitated by deploying midwives to provide continuity of care in communities in rural Kenya and Uganda (Mannah et al., 2014; Nabirye et al., 2024). Nevertheless, some midwives described challenges when transportation for referral was needed (Mannah et al., 2014). For midwives working within systems where services are poorly integrated and without lifesaving support such midwives' concerns must be addressed, otherwise they will find it too risky working autonomously within MLCCs. In a Palestinian MLCC, the midwives were integrated into the governmental health care system, and their base at the hospitals facilitated referrals when needed (Mortensen, 2020). Obtaining safe transportation for midwives reaching out to women's homes, especially at night, was also challenging and reported in previous literature (Filby et al., 2016).

Socioeconomic status and cultural norms were perceived by midwives as influencing rural women's ability to access MLCC in secondary health facilities. In addition, women depended on a male family member's support, which has been described as a barrier to midwife-led care (Sangy et al., 2023). In our review, midwives who provided care in rural Kenya and Uganda described how MLCC facilitated acceptance of

Table 3
GRADE CERQual assessments.

Summary of review finding	GRADE-CERQual assessment of confidence in the evidence	Explanation of GRADE-CERQual assessment	Studies contributing to the review finding
1. Accessibility challenges and geographical barriers: Midwives highlighted the obstacles posed by structural and geographical barriers when providing MLCC services in LMICs (Mannah et al., 2014, Pappu et al., 2023, Nabirye et al., 2024).	Moderate	Downgraded due to minor concerns for relevance	Mannah et al., 2014, Pappu et al., 2023, Nabirye et al., 2024
2. Socioeconomic and cultural influences: Withing the context that MLCC was implemented, midwives perceived that cultural norms, religion and economic factors significantly shaped women's maternity care decisions and experiences (Saleem et al., 2015, Mannah et al., 2014, Pappu et al., 2023).	Low	Downgraded, due to minor concerns of quality, relevance and adequacy.	Saleem et al., 2015, Mannah et al., 2014, Pappu et al., 2023
3. Resource allocation and availability to support MLCC models: The midwives highlighted the significance of optimal resource allocation and availability to support MLCC models (Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021, Mannah et al., 2014, Nabirye et al., 2024). Resource constraints and understaffing compromised the quality of care, leading to long waiting times and limited availability of services (Pappu et al., 2023, Saleem et al., 2015).	Moderate	Downgraded due to minor concerns of quality and coherence	Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021, Mannah et al., 2014, Nabirye et al., 2024
4. Capacity building and continuous learning: The midwives identified capacity building and continuous learning as essential components of effective midwifery-led care (Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021).	Moderate	Downgraded due to minor concerns of quality	Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021, Mannah et al., 2014, Nabirye et al., 2024

(continued on next page)

Table 3 (continued)

Summary of review finding	GRADE-CERQual assess-ment of confidence in the evidence	Explanation of GRADE-CERQual assessment	Studies contributing to the review finding
et al., 2021, Mannah et al., 2014, Nabirye et al., 2024). They emphasized the importance of ongoing training programs and mentorship initiatives in enhancing their skill and confidence (Mannah et al., 2014).			
5. Professional autonomy: Midwives emphasized the importance of professional autonomy within MLCC (Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021, Mannah et al., 2014). Some midwives felt empowered by the opportunities for working independently while utilizing their full scope of practice while others experienced lack of autonomy when their tasks were limited to supporting doctors to provide maternity care (Saleem et al., 2015).	Low	Downgraded due to minor concerns of quality and relevance and moderate concerns of adequacy.	Pappu et al., 2023, Saleem et al., 2015, Hailemeskel et al., 2021, Mannah et al., 2014
6. Status in community and society: Midwives discussed societal and community factors influencing their practice, including the appreciation of their role and status (Mannah et al., 2014, Pappu et al., 2023, Saleem et al., 2015, Nabirye et al., 2024). Some encountered challenges in gaining recognition for their expertise in their professional environment (Pappu et al., 2023).	Low	Due to minor concerns of quality, coherence and adequacy	Mannah et al., 2014, Pappu et al., 2023, Saleem et al., 2015, Nabirye et al., 2024
7. Benefits of continuity of care: The midwives emphasized the benefits of continuity of care for both mothers and midwifery practice (Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al.,	Moderate	Downgraded due to minor concerns of relevance and adequacy	Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al., 2021, Nabirye et al., 2024

Table 3 (continued)

Summary of review finding	GRADE-CERQual assess-ment of confidence in the evidence	Explanation of GRADE-CERQual assessment	Studies contributing to the review finding
2021, Nabirye et al., 2024). They noted the positive impact on fostering strong provider-patient relationships, providing individualized, culture sensitive care in a humane manner, reducing interventions and potentially improving health outcomes (Mannah et al., 2014).			
8. Collaborative Partnerships and Stakeholder Engagement: The midwives recognized the value of forging partnerships with various stakeholders to address the complex challenges in maternal and newborn healthcare (Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al., 2021, Saleem et al., 2015, Nabirye et al., 2024). Community engagement, including health education, collaboration with traditional birth attendants and community leaders, was particularly valued for fostering trust and cultural understanding within local communities.	Moderate	Downgraded, due to minor concerns of quality	Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al., 2021, Saleem et al., 2015, Nabirye et al., 2024
9. Organization of services and staffing: The midwives suggested that to deliver effective MLCC, it is essential to consider the midwife-to-client ratio and ensure that services were adapted to ensure consistent follow-up by the same midwife from antenatal to postnatal stages. They also suggested that working in rotation might not ensure continuity of care and consistent follow-up by the same midwife from antenatal to postnatal stages (	Very low	Due to serious concerns of adequacy and relevance	Hailemeskel et al., 2021

(continued on next page)

Table 3 (continued)

Summary of review finding	GRADE-CERQual assessment of confidence in the evidence	Explanation of GRADE-CERQual assessment	Studies contributing to the review finding
Hailemeskel et al., 2021). 10. Policy Advocacy and Reform: Midwives reported that institutional rules and regulations that limit midwives' scope of practice, regulatory requirements such as costly licensing of midwives, the medical model, and hierarchy in the medical profession were barriers that interfered with the implementation of MLCC (Saleem et al., 2015, Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al., 2021, Nabirye et al., 2024). Midwives suggested that policy changes and guidelines for implementation would need to be instituted before MLCC could be implemented (Hailemeskel et al., 2021).	Low	Downgraded, due to minor concerns of quality, relevance and adequacy.	Saleem et al., 2015, Mannah et al., 2014, Pappu et al., 2023, Hailemeskel et al., 2021

midwives because they worked in the community (Mannah et al., 2014; Nabirye et al., 2024). By understanding and respecting cultural norms through community knowledge midwives were able to tailor care to women's needs which are core values in the Quality Maternal and Newborn Care (QMNC) framework (Renfrew et al., 2014).

Our synthesis described how lack of basic equipment, human resources and fair remuneration hampered the provision of continuous support and person-centred care. Optimal working conditions and available basic resources like water, gloves, sanitation, and medication are essential for providing quality health care. Economic factors were found to be key barriers to quality midwifery care as midwives received low or no salaries and had to depend on informal payments, reflecting gender-based discrimination (Bohren et al., 2024; Filby et al., 2016).

Midwives requested support for capacity building and continuous learning opportunities as essential to providing good quality care, exercising autonomy and their full scope of practice. Some midwives felt empowered by working within a MLCC system where their skills were trusted (Nabirye et al., 2024), while others felt their autonomy was restricted (Pappu et al., 2023; Saleem et al., 2015). For midwives considering working within a MLCC model, some believed that continuous learning opportunities would increase their confidence and autonomy (Hailemeskel et al., 2021). However, others doubted they would receive enough support from a hierarchical medical system (Pappu et al., 2023). Midwives in our findings called for comprehensive strategies and leadership to ensure continuous professional development (Mannah et al., 2014; Pappu et al., 2023; Saleem et al., 2015). An analysis of midwives' experiences in relation to WHO's conceptual framework revealed that quality education, regulation, training, and a

supportive environment would make midwives feel competent to provide midwife-led care (Michel-Schuldt et al., 2020; WHO, 2018).

Midwives' views of the benefits of continuity of care were widely positive in our review.

Continuity of care was perceived to facilitate trusting woman – midwife relationships and improve women's satisfaction and health outcomes, which is consistent with current literature on the effects of MLCC (Cibralic et al., 2023; Sandall et al., 2024). The implementation of MLCC enabled midwives to provide dignified and respectful care and prevent disrespect and abuse (Mannah et al., 2014; Nabirye et al., 2024), which is one of the reasons why women avoid seeking care during pregnancy and childbirth in LMICs (Bohren et al., 2015; Shakibazadeh et al., 2018).

The midwives in our review identified the need for collaborative interdisciplinary partnerships and stakeholder engagements to provide respectful and quality care through MLCC. A supportive system ensuring skills, division of roles and resources among care providers is described as a core component in the QMNC framework to enable best practice for all women and babies (Renfrew et al., 2014). Our QES also found insufficient staffing of skilled midwives in overcrowded facilities was perceived as another barrier to enabling continuity of care. This is described in the literature as a deep-rooted challenge related to the gender dynamics (Bohren et al., 2024; Filby et al., 2016), which could be solved through policy change, partnerships, and sufficient funding. Analysing such societal normative gender expectations was requested in a recent review on barriers for implementing MLCC in HIC (Middlemiss et al., 2024). Thus, midwifery as a female profession seem to face some similar gendered challenges that needs to be addressed globally. The United Nations Population Fund (UNFPA) called on countries to invest in midwives to save lives and improve health outcomes (United Nations Population Fund, 2021).

Implication for research

Due to the few included studies, there is clearly a need for rigorous qualitative research on midwives' views and experiences of MLCC across a wide range of LMICS, before new reviews are conducted. Conducting feasibility studies and an extensive mapping of the local barriers to and facilitators for MLCC can be useful before adapting MLCC to a local context (McFadden et al., 2020; McInnes et al., 2020).

Strengths and limitations

This QES followed rigorous methods to report, synthesize and assess the confidence of review findings (Noyes et al., 2023; Tong et al., 2012). A comprehensive search conducted by experienced librarians in eight databases strengthened the internal validity of this QES. The methodological quality of the five included studies varied from high to moderate quality. None of the findings were assessed as having high confidence, however, five findings were assessed as having moderate confidence, four findings low confidence and one finding as having very low confidence. Importantly, the contributions from the Palestinian, Ghanaian, and Norwegian user representatives and their support on our findings, increased the relevance of this QES.

However, this QES has some limitations, mainly the few included studies. This downgraded our confidence of findings related to adequacy. The findings from the five different countries and contexts provided valuable and diverse insights. It is important to note that in three studies (Mannah et al., 2014; Nabirye et al., 2024; Saleem et al., 2015), participants reported actual experiences of MLCC while two studies reported views before MLCC implementation (Hailemeskel et al., 2021; Pappu et al., 2023). Another limitation is that LMICs in Europe and South America are not represented, which decreases the relevance to these contexts. Lastly, studies published in other languages than English and Scandinavian were not included in this review, which may impact transferability the results to other language settings.

Conclusion

This QES aimed to explore midwives' experiences and perceptions of working with MLCC models, and their views of barriers and facilitators to MLCC models in LMICs. The findings highlight the importance of reducing structural and geographical barriers to accessing care, the benefits of continuity of care, the need for sustained capacity building and continuous learning, and optimal resource allocation and availability as essential components for successful implementation of MLCC in LMICs. However, findings assessed as low or as very low confidence, such as the midwife to client ratio and professional autonomy need to be explored in further qualitative research to strengthen the confidence and the use of these findings.

Ethics approval

Not applicable, this is a systematic review of published qualitative studies.

Funding sources

We received no funding to conduct this review.

CRediT authorship contribution statement

Hilde Tinderholt Myrhaug: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Berit Mortensen:** Writing – review & editing, Writing – original draft, Visualization, Validation, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Susan Kyomuhendo Munabi-Babigumira:** Writing – review & editing, Writing – original draft, Validation, Software, Methodology, Investigation, Formal analysis, Conceptualization. **Anne Kaasen:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Formal analysis, Data curation, Conceptualization. **Aase Serine Devold Pay:** Writing – review & editing, Methodology, Data curation, Conceptualization. **Florence Naab:** Writing – review & editing, Formal analysis, Conceptualization. **Alison McFadden:** Writing – review & editing, Writing – original draft, Validation, Methodology, Formal analysis, Data curation, Conceptualization. **Tine Schauer Eri:** Writing – review & editing, Writing – original draft, Validation, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Sara Rivenes Lafontan:** Writing – review & editing, Writing – original draft, Validation, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors would like to thank information specialists Elisabeth Karlsen and Kari Kalland at Oslo Metropolitan University who performed the literature searches. We appreciate valuable comments and shared experiences from the user representatives from Palestine (Meme Khaled), from Ghana (Koiwah Koi-Larbi from Action on preeclampsia Ghana (APEGCH), and from Norway (Aida L. Thomassen from Barselopprøret and Lena Engelsen from Landsforeningen 1001 dager).

Supplementary materials

Supplementary material associated with this article can be found, in

the online version, at [doi:10.1016/j.midw.2025.104565](https://doi.org/10.1016/j.midw.2025.104565).

References

- Adnani, Q.E.S., Nurfitriyani, E., Merida, Y., Khuzaiyah, S., Yulilania, O., Susanti, A.I., Adepoju, V.A., Hashim, S.H., 2025. Ninety-one years of midwifery continuity of care in low and middle-income countries: a scoping review. *BMC. Health. v. Res* 25, 463. <https://doi.org/10.1186/s12913-025-12612-0>.
- Blomgren, J.G.S., Erlandsson, K., Wagoro, M.C.A., Namutebi, M., Chimala, E., Lindgren, H., 2023. Maternal health leaders' perceptions of barriers to midwife-led care in Ethiopia, Kenya, Malawi, Somalia, and Uganda. *Midwifery* 123. <https://doi.org/10.1016/j.midw.2023.103734>.
- Bohren, M.A., Iyer, A., Barros, A.J.D., Williams, C.R., Hafzirani, A., Arroyave, L., Filippi, V., Chamberlain, C., Kakakian-Khasholian, T., Mayra, K., Gill, R., Vogel, J.P., Chou, D., George, A.S., Oladapo, O.T., 2024. Towards a better tomorrow: addressing intersectional gender power relations to eradicate inequities in maternal health. *Eclinicalmedicine* 67. <https://doi.org/10.1016/j.eclinm.2023.102180>.
- Bohren, M.A., Vogel, J.P., Hunter, E.C., Lutsiv, O., Makh, S.K., Souza, J.P., Gülmezoglu, A.M., 2015. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. *PLoS. Med* 12 (6), e1001847. <https://doi.org/10.1371/journal.pmed.1001847>.
- Bradford, B.F., Wilson, A.N., Portela, A., 2022. Midwifery continuity of care: a scoping review of where, how, by whom and for whom? *PLOS. Glob. Public* 2 (10), e0000935. <https://doi.org/10.1371/journal.pgph.0000935>.
- Cibralic, S., Pickup, W., Diaz, A.M., Kohlhoff, J., Karlov, L., Stylianakis, A., Schmied, V., Barnett, B., Eapen, V., 2023. The impact of midwifery continuity of care on maternal mental health: a narrative systematic review. *Midwifery* 116 (103546). <https://doi.org/10.1016/j.midw.2022.103546>.
- Fikre, R.G.J., Teklesilasie, W., Gerards, S., 2023. Effectiveness of midwifery-led care on pregnancy outcomes in low- and middle-income countries: a systematic review and meta-analysis. *BMC. Pregnancy. Childbirth* 23 (1), 386. <https://doi.org/10.1186/s12884-023-05664-9>.
- Filby, A., McConville, F., Portela, A., 2016. A systematic mapping of barriers in low and middle income countries from the provider perspective. *PLoS. ONE* 11 (5). <https://doi.org/10.1371/journal.pone.0153391>.
- Hailemeskel, S., Alemu, K., Christenson, K., Tesfahun, E., Lindgren, H., 2021. Health care providers' perceptions and experiences related to midwife-led continuity of care-A qualitative study. *PLoS. ONE. [Electronic. Resour.* 16 (10), e0258248. <https://doi.org/10.1371/journal.pone.0258248>.
- International Confederation of Midwives (ICM), 2017. International Definition of the Midwife. https://www.internationalmidwives.org/assets/files/definitions-file/s/2018/06/eng-definition_of_the_midwife-2017.pdf.
- International confederation of midwives (ICM), 2021. Position statement- midwife-led continuity of care (MLCC). https://www.internationalmidwives.org/assets/files/statement-files/2021/09/ps2021_en_midwife-led-continuity-of-care-mlcc.pdf.
- Lewin, S.B.A., Glenton, C., Munthe-Kaas, H., Rashidian, A., Wainwright, M., Bohren, M. A., Tunçalp, Ø., Colvin, C.J., Garside, R., Carlsen, B., Langlois, E.V., Noyes, J., 2018. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. *Implement. Sci.* 13 (2). <https://doi.org/10.1186/s13012-017-0688-3>.
- Mannah, M.T., Warren, C., Kuria, S., Adegoke, A.A., 2014. Opportunities and challenges in implementing community based skilled birth attendance strategy in Kenya. *BMC. Pregnancy. Childbirth* 14, 279. <https://doi.org/10.1186/1471-2393-14-279>.
- McFadden, A., Gupta, S., Marshall, J.L., Shinwell, S., Sharma, B., McConville, F., MacGillivray, S., 2020. Systematic review of barriers to, and facilitators of, the provision of high-quality midwifery services in India. *Birth* 47 (4). <https://doi.org/10.1111/birt.12498>.
- McInnes, R.J., Aitken-Arbuckle, A., Lake, S., Hollins Martin, C., MacArthur, J., 2020. Implementing continuity of midwife carer - just a friendly face? A realist evaluation. *BMC. Health. v. Res* 20 (1), 304. <https://doi.org/10.1186/s12913-020-05159-9>.
- Michel-Schuldt, M., McFadden, A., Renfrew, M., Homer, C., 2020. The provision of midwife-led care in low-and middle-income countries: an integrative review [Review]. *Midwifery* 84, 102659. <https://doi.org/10.1016/j.midw.2020.102659>.
- Middlemiss, A.L., Channon, S., Sanders, J., Kenyon, S., Milton, R., Prendeville, T., Barry, S., Strange, H., Jones, A., 2024. Barriers and facilitators when implementing midwifery continuity of carer: a narrative analysis of the international literature. *BMC. Pregnancy. Childbirth* 24, 540. <https://doi.org/10.1186/s12884-024-06649-y>.
- Mortensen, B., 2020. Making midwifery matter-the introduction of a midwife-led continuity model of care in occupied Palestine. <https://www.duo.uio.no/bitstream/handle/10852/73994/PhD-BeritMortensen-2020.pdf?sequence=1>.
- Ouzzani, M.H.H., Fedorowicz, Z., Elmagarmid, A., 2016. Rayyan — a web and mobile app for systematic reviews. *Syst. Rev* 5 (210). <https://doi.org/10.1186/s13643-016-0384-4>.
- Nabirye, R.C., Mbalinda, S.N., Epuitai, J., Nawag, F., Namyalo, S.N.A., Bazirete, O., Hughes, K., Lopes, S.C., Turkmani, S.F.M., Homer, C.S.E., 2024. Perceptions of quality of care in midwife-led Births Centres (MLBCs) in Uganda: why do women choose MLBCs over other options? *Women Birth* 37. <https://doi.org/10.1016/j.wombi.2024.101612>.
- Nove, A., Friberg, I.K., Bernis, L.d., McConville, F., 2021. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: a lives saved tool modelling study. *Lancet. Glob.* 9 (1), e24–e32. <https://www.sciencedirect.com/science/article/pii/S2214109X20303971>.
- Norwegian Institute of Public Health., 2024. Accessed 25.06.2024. Critical assessment of methodological limitations of included studies. <https://www.fhi.no/ku/oppsummerert-forskning-for-helsetjenesten/metodeboka/oppsummering-av-kvalitative-studier/critical-assessment-of-methodological-limitations-of-included-studies/?term=>.

- Noyes, J.B.A., Cargo, M., Flemming, K., Harden, A., Harris, J., Garside, R., Hannes, K., Pantoja, T., Thomas, J., 2023. Chapter 21: Qualitative evidence. <https://training.chrane.org/handbook/current>.
- Pappu, N.I., Oberg, I., Byrskog, U., Raha, P., Moni, R., Akhtar, S., Barua, P., Das, S.R., De, S., Jyoti, H.J., Rahman, R., Sinha, G.R., Erlandsson, K., 2023. The commitment to a midwifery centre care model in Bangladesh: an interview study with midwives, educators and students. *PLoS. ONE*. [Electronic. Resour. 18 (4), e0271867. <https://doi.org/10.1371/journal.pone.0271867>.
- Renfrew, M.J., McFadden, A., Bastos, M.H., Campbell, J., 2014. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. *Lancet* 384 (9948), 1129–1145. [https://doi.org/10.1016/S0140-6736\(14\)60789-3](https://doi.org/10.1016/S0140-6736(14)60789-3).
- Saleem, Z., Jan, R., McIntyre, H., Amin Rattani, S., Sikandar, R., 2015. Midwives' perception about their practice in a midwifery-led care model in Karachi. *Pak. Br. J. Midwifery* 23 (3), 200–207. <https://doi.org/10.12968/bjom.2015.23.3.200>.
- Sandall, J., Fernandez Turienzo, C., Devane, D., Soltani, H., Gillespie, P., Gates, S., Jones, L.V., Shennan, A.H., Rayment-Jones, H., 2024. Midwife continuity of care models versus other models of care for childbearing women. *Cochrane. Database. Syst. Rev.* (4). <https://doi.org/10.1002/14651858.CD004667.pub6>.
- Sangy, M.T., Duaso, M., Feeley, C., Walker, S., 2023. Barriers and facilitators to the implementation of midwife-led care for childbearing women in low-and middle-income countries: a mixed-methods systematic. *Midwifery* 122, 103696. <https://www.sciencedirect.com/science/article/pii/S0266613823000992>.
- Shakibazadeh, E., Namadian, M., Bohren, M.A., Vogel, J.P., Rashidian, A., Pileggi, V.N., Madeira, S., Leathersich, S., Tuncalp, O., Oladapo, O.T., Souza, J.P., Gulmezoglu, A. M., 2018. Respectful care during childbirth in health facilities globally: a qualitative evidence synthesis [Review]. *Bjog-Int. J. Obstet. Gynaecol.* 125 (8), 932–942. <https://doi.org/10.1111/1471-0528.15015>.
- Staniszewska, S., Brett, J., Simera, I., Seers, K., Mockford, C., Goodlad, S., Altman, D.G., Moher, D., Barber, R., Denegri, S., Entwistle, A., Littlejohns, P., Morris, C., Suleman, R., Thomas, V., Tysall, C., 2017. GRIPP2 reporting checklists: tools to improve reporting of patient and public involvement in research. *BMJ* 358, j3453. <https://doi.org/10.1136/bmj.j3453>.
- The World Bank, 2024. World Bank country and lending groups. Retrieved 03.10.2023 from. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>.
- Thomas, J., Harden, A., 2008. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC. Med. Res. Methodol* 8 (45). <https://doi.org/10.1186/1471-2288-8-45>.
- Tong, A.F.K., McInnes, E., Oliver, S., Craig, J., 2012. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC. Med. Res. Methodol* 12 (1). <https://doi.org/10.1186/1471-2288-12-181>.
- UNICEF, 2024. Levels and Trends Child Mortality-Report 2023: Estimates Developed by the United Nations Inter-agency Group for Child Mortality Estimation. <https://data.unicef.org/resources/levels-and-trends-in-child-mortality-2024/>.
- United Nations Population Fund, 2021. WHO, International Confederation of Midwives. The State of the World's Midwifery 2021. <https://www.unfpa.org/publications/sowmy-2021>.
- World Health Organization (WHO), 2023. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division. World Health Organization. <https://www.who.int/publications/i/item/9789240068759>.
- WHO, 2024. Transitioning to midwifery models of care: global position paper. <https://www.who.int/publications/i/item/9789240098268>.
- WHO, 2016. WHO recommendations on antenatal care for a positive pregnancy experience. <https://www.who.int/publications/i/item/9789241549912>.
- WHO, 2018. WHO recommendations intrapartum care for a positive childbirth experience transforming care of women and babies for improved health and well-being. <https://apps.who.int/iris/bitstream/handle/10665/272447/WHO-RHR-18.12-eng.pdf>.
- WHO, 2022. WHO recommendations on maternal and newborn care for a positive postnatal experience. <https://www.who.int/publications/i/item/9789240045989>.