

ORIGINAL ARTICLE

Women's and Midwives' Perspectives on the Integrated Continuous Team Midwifery Care Model in Iran: A Qualitative Content Analysis

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ABSTRACT

Background: The integrated continuous team midwifery care model (ICTMC) is characterized by the provision of comprehensive, individualized care throughout pregnancy, childbirth, and the postpartum period. A lack of continuity and collaboration may limit the traditional model of midwifery care currently dominant in Iran. Understanding the perspectives of both mothers and midwives, helps evaluate the effectiveness of team-based midwifery care. This study aimed to explore women's and midwives' perspectives on the ICTMC in Iran.

Methods: This conventional content analysis was conducted on 16 mothers and 12 midwives who participated in continuous midwifery care in government health centers in Kashan, Iran, from December 2023 to April 2024. The participants were selected through a purposive sampling method. In this study, in-depth semi-structured individual interviews were used. Interviews continued until data saturation. All interviews were recorded and transcribed verbatim in Persian and analyzed using the Graneheim and Lundman method and MAXQDA (2020) software. The rigor of the research was ensured using Lincoln and Guba's criteria.

Results: From the data analysis, twenty-eight sub-subcategories, eleven sub-categories, three categories, and one theme emerged. The main theme of this study was "comprehensive, continuous, and up-to-date obstetrics care" with three main categories: "excellence-oriented midwifery care", "bridging the gap in midwifery care from pregnancy to postpartum", and "making pregnancy, childbirth, and postpartum a pleasant experience".

Conclusions: ICTMC can redefine the standards of midwifery care and improve its quality. Integrating this model into the current healthcare system is crucial for the future of maternity services and the health of mothers and infants.

Keywords: Continuity of patient care; Maternal health services; Midwifery; Pregnancy; Qualitative research

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INTRODUCTION

Pregnancy and childbirth are personal and emotional experiences and a significant life event for women.¹ A positive childbirth experience can lead to feelings of satisfaction and empowerment.² However, studies indicate that many women report negative childbirth experiences, recalling them as traumatic.³ Negative experiences are linked to postpartum complications, fear of childbirth, and a preference for elective cesarean sections in the future.^{4,5}

Continuous midwifery care models focus on women's needs and involve consultation with other specialists, if necessary. These models empower women through shared decision-making and the development of relationships with midwives.⁶ Mothers also report higher satisfaction with continuous care.^{7,8} A qualitative study showed that midwives' experiences improved with continuous midwifery care, and they preferred this model.⁹ Similarly, another study indicated that women who received continuous midwifery care felt empowered and secure and had positive pregnancy experiences.¹⁰ In countries like Australia and New Zealand, continuous care models are provided by midwives throughout the perinatal period.¹¹ In Iran, the healthcare system has failed to prioritize the continuous relationship between midwives and women during the perinatal period. This neglect is widespread, even though the quality of services and interactions with healthcare providers significantly influence the women's perceptions.¹² A lack of continuity in primary healthcare in public facilities often results in care from multiple providers. This fragmentation and diversity in service provision hinders the delivery of coordinated and continuous perinatal care.¹³ Research shows that while pre-pregnancy, pregnancy, and postpartum services in Iran are generally moderate, childbirth care has deficiencies.¹⁴ Iranian women often feel disempowered and dissatisfied with fragmented healthcare.¹⁵

A scoping review revealed that midwifery continuity of care in low- and middle-income countries results in fewer medical interventions, more physiological births, and higher levels of satisfaction.¹⁶ Studies also show that continuous care models are safer and more cost-effective, with fewer interventions.⁷ In addition, continuous midwifery care has been associated with better mental health in women as it reduces anxiety and depression during the perinatal period.¹⁷

Although international studies support the clinical benefits of continuous midwifery care models, little is known about women's and midwives' experiences with these models, especially in Iran's public healthcare system. This study was guided by a framework that incorporates three essential concepts.¹⁸ First, the continuity of care provides uninterrupted support during the perinatal period. Second, woman-centered care prioritizes the women's needs, preferences, and autonomy. Third, team-based practice promotes a coordinated approach to prevent care fragmentation. To our knowledge, no prior studies in Iran's government health care system have examined the experiences of women and midwives on continuous care during the perinatal period. This gap limited the implementation of evidence-based policies and the acceptance of these models in Iran. Therefore, this study aimed to describe the women's and midwives' perspectives on the Integrated Continuous Team Midwifery Care Model in Iran.

MATERIALS AND METHODS

This study is part of a larger mixed-methods study in healthcare centers in Kashan, Iran, conducted from December 2023 to April 2024. A conventional content analysis was conducted to explore the women's and midwives' perceptions of team-based, continuous perinatal care. Participants were selected through purposive sampling, ensuring diverse experience and knowledge.

In the Iranian public healthcare system,

continuous midwifery care is not provided. Pregnancy care is offered by midwives in health centers or private clinics, while different midwives and obstetricians oversee childbirth. Communication among providers is often fragmented. Public health centers operate only during morning shifts and are closed on holidays. Pregnant women lack a specific point of contact and may seek care from other hospitals or private clinics. Health center midwives and hospital midwives work separately, with no shared access to women's medical records.²⁰

Thus, in the mixed-method study, women received perinatal care from a midwifery team, including the first author (FN), two midwives from each health center in 15 public health centers (Manavi, Imam Ali, Imam Reza, Waliassr, Karim Shahi, Behravan, Sahib Zaman, Saman Hajjaj, Ketabchi, lame, Noushabad, Namaki, Pamili, Barati, and Samimi), and two hospital-based midwives on each shift work in Shahid Beheshti Hospital and Shabihkhani Hospital in Kashan, Iran. Antenatal and postnatal care were managed by a midwife at each health center, while intrapartum care was overseen by a hospital midwife, with backup coverage provided as needed. The participants of this qualitative study were midwives and mothers who experienced continuous perinatal care in the quantitative part of the mixed-method study.²¹ The team collaborated with obstetricians and other professionals, referring women if needed. Care services followed Iran's national guidelines. The team was on call every day of the week, at every hour, and an online group was provided.

The first author, who conducted the semi-structured in-depth interviews, was familiar with the interview principles and the concept of team-based, continuous midwifery care. Individual, face-to-face interviews were audio-recorded in Persian. All sessions were supplemented with field notes. Interviews were conducted in private rooms at health centers or hospitals. Each interview lasted 45 to 60 minutes. The interview guide was

developed based on research objectives and reviewed by a panel of maternal health experts, with preliminary testing conducted in three pilot interviews. Participants received explanations of the study objective and methods before enrollment. The guide included three open-ended questions: "Would you describe your perception of care received from team midwives?", "How did this model of care impact your childbirth experience?", and "What were your postpartum care experiences under this team-based approach?". For midwives, interviews began with "From your perspective, what are the key features of effective team-based midwifery care?" Follow-up probes (e.g., "Could you elaborate on that?" or "How did this compare to standard care?") were used to clarify the responses. Interviews were scheduled at participants' preferred time and location.

A total of 28 interviews were conducted with 16 women and 12 midwives. Data collection continued until data saturation was achieved. Saturation was determined by continuous comparison of new interview data with emerging content. After the 28th interview, no new content emerged beyond the existing codes. Inclusion criteria for women were nulliparous, singleton pregnancy, 18-35 years of age, low-risk pregnancy, ability to provide sufficient information, willingness to participate, and completed informed consent. Also, these women participated in the quantitative phase (first phase of the mixed-methods study) and experienced continuous perinatal care. Inclusion criteria for midwives were participating in the quantitative phase, having undergone continuous care during antenatal, intrapartum and postpartum periods, agreeing to interview, and being able to provide rich information. Participants who did not wish to be interviewed were excluded from the study.

Data collection and analysis were conducted simultaneously. Interviews were audio-recorded, transcribed verbatim, and compared to the audio for accuracy. According to the Graneheim and Lundman method, the

coding process began with the first author reading the text several times to understand its overall meaning. Then, meaning units were identified. These were words, sentences, or paragraphs that expressed ideas related to the research questions. These meaning units were abstracted into codes that reflected the content. Then, the codes were compared and grouped into subcategories, categories, and main categories based on their similarities.²² MAXQDA (2020) software facilitated data analysis. During all coding processes, the research team continuously discussed the emerging content and shared their viewpoints.

The rigor of the research was ensured using Lincoln and Guba's criteria.²³ To ensure credibility, the researcher engaged with the data over an extended period and also conducted member checking with participants. Interviews were conducted

at diverse times and locations for broad perspectives. Dependability was established with a detailed research process, confirmed by all authors. For confirmability, interviews and their categories were shared with experts for agreement. To ensure transferability, three women who had experienced team midwifery but were not part of this study confirmed the coded text.

This article is based on the doctoral dissertation approved by the Ethics Committee of Ahvaz Jundishapur University of Medical Sciences (Ethical code: IR.AJUMS.REC.1402.010). Written informed consent was obtained from all participants, with the right to withdraw at any stage. The participants were assured of confidentiality, and interviews were recorded with their permission. Audio files were securely stored on password-protected computers.

Table 1: The demographic characteristics of the participants (N=28)

Number of Participant	Role	Age (Years)	Level of Education	Employment status	Economic status
P1	Midwife	29	Bachelor's degree	Employee	Moderate
P2	Midwife	30	Bachelor's degree	Employee	Moderate
P3	Midwife	30	Master's degree	Employee	Moderate
P4	Midwife	31	Master's degree	Employee	Good
P5	Midwife	31	Bachelor's degree	Employee	Moderate
P6	Midwife	32	Bachelor's degree	Employee	Moderate
P7	Midwife	32	Bachelor's degree	Employee	Moderate
P8	Midwife	32	Master's degree	Employee	Moderate
P9	Midwife	33	Master's degree	Employee	Moderate
P10	Midwife	34	Master's degree	Employee	Moderate
P11	Midwife	34	Master's degree	Employee	Moderate
P12	Midwife	35	Master's degree	Employee	Good
P13	Woman	29	High school degree	Housewife	Poor
P14	Woman	22	University degree	Housewife	Moderate
P15	Woman	24	High school degree	Housewife	Moderate
P16	Woman	24	University degree	Housewife	Moderate
P17	Woman	25	High school degree	Housewife	Poor
P18	Woman	25	University degree	Housewife	Moderate
P19	Woman	26	University degree	Housewife	Moderate
P20	Woman	26	University degree	Housewife	Good
P21	Woman	26	University degree	Housewife	Moderate
P22	Woman	32027	University degree	Employee	Moderate
P23	Woman	30	High school degree	Housewife	Moderate
P24	Woman	27	University degree	Employee	Good
P25	Woman	28	University degree	Housewife	Moderate
P26	Woman	28	Primary school	Housewife	Moderate
P27	Woman	26	High school degree	Housewife	Poor
P28	Woman	29	University degree	Housewife	Moderate

RESULTS

The findings of this study were obtained through the analysis of data collected from interviews with women and midwives. Demographic characteristics of participants are shown in Table 1.

Based on data analysis, 310 codes, 28 sub-subcategories, 11 sub-categories, three categories, and one theme emerged (Table 2). The central theme of this study was “comprehensive, continuous, and up-to-date obstetrics care”. According to the participants, this model enhances maternal and neonatal health outcomes through woman-centered care practices. This central theme comprised three categories: “excellence-oriented midwifery care”, “Bridging the gap in midwifery care from pregnancy to postpartum”, and “Making pregnancy, childbirth, and postpartum a pleasant experience” (Table 2).

1. Excellence-Oriented Midwifery Care

Participants note that the integrated continuous team midwifery care model (ICTMC) delivers high standards of midwifery care. It strengthens trust, increases individualized care, and promotes education. ICTMC raises care standards and enhances equity and quality in healthcare systems. In this study, the category included five subcategories: “effective education during pregnancy, labor, childbirth, and postpartum”,

“continuous maternal support”, “preserving maternal dignity during pregnancy, childbirth, and postpartum”, “professional self-efficacy of midwives”, and “promoting maternal and infant health”.

1.a. Effective Education during Pregnancy, Labor, Birth, and Postpartum

The analysis showed that ICTMC fostered effective maternal education, enhancing knowledge through regular meetings, virtual discussions, and shared experiences. Effective education included three sub-subcategories: continuous learning during perinatal, virtual education, and improving mothers’ understanding.

The participants were satisfied with the education provided during the perinatal period, noting their prior knowledge had been limited. A woman said: *“It was my first pregnancy; I didn’t know much. Constantly posting information in the group was helpful. I knew everything about eating and exercising. When I attended the classes, I understood what to do if I had any problems. I tried my best to follow instructions.”* (P16)

Midwives also share the same viewpoint:

“We constantly repeated the training, and mothers were much more knowledgeable. They performed the exercises well, were aware of the stages of labor and childbirth, and had information about childbirth, breastfeeding and care.” (P4)

Table 2: Subcategories, categories, and themes emerged from the data

Sub-categories	Categories	Theme
Effective education during pregnancy, labor, childbirth, and postpartum	Excellence-oriented midwifery care	Comprehensive, continuous, and up-to-date obstetrics care
Continuous maternal support		
Preserving the mother’s dignity during pregnancy, birth, and postpartum		
Professional self-efficacy of midwives		
Improving maternal and infant health	Bridging the gaps in midwifery care from pregnancy to postpartum	Comprehensive, continuous, and up-to-date obstetrics care
Integrating midwifery care		
Reducing the financial burden of unnecessary services		
Reducing the frequency of midwifery visits		
Empowering mothers	Making pregnancy, childbirth, and postpartum a pleasant experience	
Facilitating physiological childbirth		
Facilitating the acceptance of the maternal role		

1.b. Continuous Maternal Support

The participants said ICTMC provided physical and emotional support throughout pregnancy and postpartum. Continuous maternal support had two sub-subcategories: ‘every day of the week, at every hour access to the midwifery team’ and ‘continuous support from the midwifery team from pregnancy to postpartum’.

The participants acknowledged that they had access to the midwifery team at any hour of the day or night and that the midwives provided comprehensive support. A woman told:

“It was my first experience. Pregnancy for first timers is stressful, especially when they have a problem. The midwifery team took the time for us and answered any questions about medication or problems immediately.” (P21)

Another participant said:

“The midwife who was at the hospital stayed with me from start to end. She helped me, held my hand, prayed with me, massaged my back, talked with me, and brought me a hot water bottle.” (P19)

1.c. Preserving Maternal Dignity during Pregnancy, Birth, and Postpartum

The participants noted that midwives in ICTMC emphasized informed consent, shared decision-making, and respectful communication. This environment preserved dignity, boosting self-esteem and psychological well-being. Preserving maternal dignity had two sub-subcategories: ‘professional behavior of midwives’ and ‘midwifery ethics’.

The participants mentioned that midwives treated them respectfully and protected their privacy. A woman implied:

“I was embarrassed about the examination, and my companion was with me. I was worried about it, but I saw that you were considerate. You closed the door and told my companion to go out. I didn’t want anyone else to see.” (P13)

1.d. Professional Self-Efficacy of Midwives

According to the participants’

experiences, shared responsibility and care encouraged the midwives to be more confident. Witnessing positive results from their joint efforts, they felt pride and satisfaction, boosting their motivation and commitment to the profession. Professional competence of midwives had three sub-subcategories: ‘increased job motivation of midwives’, ‘increased responsibility of midwives’, and ‘self-efficacy of midwives’. The midwifery team mentioned that ICTMC enhanced the midwives’ ability to provide care, boosted their self-confidence, skills and knowledge, and increased their willingness to learn and study more. A midwife mentioned:

“Continuous care made me study more. I realized that there was still a lot of room for improvement, especially in prenatal classes. Thus, I tried to read more about every question that a woman asked, so my information was improved.” (P2)

1.e. Improving Maternal and Infant Health

Data analysis showed that ICTMC led to better health outcome, i.e. reducing complications. Improving maternal and infant health had two sub-subcategories: ‘reducing maternal complications’ and ‘reducing neonatal complications’.

Many midwives reported that mothers receiving continuous care had fewer maternal complications, such as episiotomy and infections, shorter labor, and fewer neonatal complications. Two midwives said:

“These women were doing perineal exercises and other exercises, and they were cooperating during the pushing stage. We tried to avoid fundal pressure as much as possible, so there were fewer episiotomies. Even if we have an episiotomy, it was smaller and less tearing. Women were less likely to return due to episiotomy infections.” (P3)

“During continuous care, their labor stages progressed well, and they did the exercises and listened. These factors caused their newborns to have better Apgar scores.” (P7)

2. Bridging the Gap in Midwifery Care from Pregnancy to Postpartum

Based on the participants' statements, ICTMC significantly reduces the gaps in midwifery services from pregnancy to postpartum. The category of bridging the gap in midwifery care from pregnancy to postpartum included three subcategories: "integration of midwifery care", "reduction of the burden of unnecessary services", and "reduction of the burden of midwifery visits".

2.a. Integrating Midwifery Care

Our data analysis shows that continuous midwifery team care integrates midwives, obstetricians, and specialists to provide comprehensive care during the perinatal period. This approach delivers personalized care tailored to mothers' needs. The integration of midwifery care has four sub-subcategories: "maintaining continuity in midwifery care"; "fostering interdisciplinary teamwork in the healthcare"; "promoting inter-sectoral collaboration"; and "optimal maternal participation in pregnancy, childbirth, and postpartum care". The participants noted that their care continued through the perinatal period, with the continuous care team providing timely care and regular follow-up. A midwife shared:

"The mothers were informed, and they had received training. If they forgot something after childbirth, they would be followed up on, and they would have fewer problems. With the slightest symptoms, they would be treated quickly, which would prevent serious complications." (P6)

Midwives reported increased collaboration during continuous care, strengthening their links. The care team was informed about the mothers' conditions in the perinatal period. A midwife said:

"We coordinated with the hospital midwives in our group and held childbirth preparation classes together. We communicated well, you know, we would tell each other if our mothers had any problems." (P3)

The midwives stated that referrals of

mothers to different levels of care were timely and based on medical indications.

"Many pregnant women may not know where to go or what to do if they have a problem. But with continuous care, they are in contact with us, know when to go to the hospital, when to see a doctor, and where to go, and what arrangements need to be made to minimize the time and the problems." (P2)

2.b. Reducing the Financial Burden of Unnecessary Services

The participants reported that ICTMC reduced the financial burden from unnecessary services at both the individual and healthcare system levels. This model lowers costs from frequent visits, tests, and potential complications by increasing preventive care and early interventions, preventing the need for more expensive medical services. Reduction of the financial burden had three sub-subcategories: "reduction of paraclinical procedures without indication", "reduction of consumables and drugs in the hospital", and "reduction of costs paid by mothers".

The participants noted that fewer unnecessary visits and earlier hospitalizations resulted in decreased use of consumables and medications. A midwife said:

"Mothers in continuous care are informed; they know the difference between true and false labor. They do not come to the hospital with the slightest pain and are in contact with us. Early hospitalizations are less common; however, shorter labor, fewer examinations, and less use of equipment and medication occur." (P10)

The participants reported fewer unnecessary specialist visits during continuous care, leading to reduced costs, including visit fees. A woman emphasized:

"The continuous care group was good in saving time and energy, reducing the unnecessary and expensive doctor visits, and providing a faster answer." (P16)

2.c. Reduction of the Burden of Midwifery Visits

The participants stated that ICTMC reduced

unnecessary visits through an organized approach. Continuity of care gives midwives an understanding of mothers' conditions, reducing excessive referrals. Preventive care in this model addresses potential health issues early, minimizing emergency interventions or hospital visits. Reducing the burden of unnecessary midwifery visits included two sub-subcategories: "standardization of the duration and frequency of maternal hospitalizations" and "standardization of maternal visits to healthcare centers". The participants reported that continuous learning and exercise led to faster labor progression and shorter hospital stays. A midwife said:

"Mothers who came here were admitted in the active phase, and because of that, they made good progress, listened to our advice, and gave birth quickly. They followed the instructions and had no problems, and they were discharged early." (P4)

They also noted a reduction in unnecessary hospital visits by mothers. Another midwife mentioned:

"Mothers who receive continuous care are extremely attentive, arrive on time, and don't visit the hospital frequently." (P3)

3. Making Pregnancy, Childbirth, and Postpartum a Pleasant Experience

The participants stated that ICTMC fostered open communication, allowing concerns to be addressed. Familiarity and trust with midwives encourage women to ask questions and discuss fears, leading to empowerment and self-efficacy. By building trust, offering support and informed choices, and facilitating continuous individualized care, this model creates a positive experience.

The category of making pregnancy, labor, childbirth, and postpartum a pleasant experience had three sub-categories: "empowering mothers", "facilitating physiological birth", and "facilitating acceptance of the maternal role".

3.a. Empowering Mothers

The participants stated that ICTMC created a supportive environment, prioritizing

mothers' preferences, feelings, and choices. This care model helps mothers control their bodies and decisions during the perinatal period. Empowering mothers had four sub-subcategories: "effective communication between the midwife and mother", "providing the mother with continuous access to reliable information", "making informed choices about natural childbirth", and "maternal self-efficacy in caring for herself and the baby". They stated that during ICTMC, the relationship between the mother and midwife was strong, and there was a sense of trust. A midwife shared:

"The good thing about this plan is that if a pregnant mother has a problem, she first comes to you and informs you, and she considers you her confidant. She doesn't panic, and she knows that she has a safe trustful place and can easily talk about her concerns." (P3)

As their knowledge grew, mothers increasingly chose natural childbirth. A woman stated:

"My friend tells me: 'Pregnancy and natural childbirth are very difficult, and you can't do it. I thought I would never have a natural birth and would have a C-section. However, midwives started talking about these exercises and gave me explanations on continuous care. They said: 'Your baby is small; you can have a natural birth, so I decided to have a natural birth.'" (P17)

3.b. Facilitating Physiological Birth

The participants noted that ICTMC significantly decreased the need for invasive procedures and surgical interventions. ICTMC provides constant encouragement, tailored pain management strategies, and comfort measures. This promotes natural birth and reduces unnecessary intervention risks for both mother and baby. Facilitating physiological birth had three sub-subcategories: "reducing unnecessary interventions during labor and birth", "the mother's feeling of control and reassurance during labor and birth", and "the use of physiological birth techniques."

They also reported that mothers experiencing continuous care had fewer unnecessary interventions and experienced more natural labor and birth. A midwife said:

“Well, these mothers had fewer interventions. We did fewer fundal massage because they pushed well and knew how to push. We used less oxytocin serum, and honestly, they had good progress.” (P7)

A woman said: *“The exercises and movements they taught us at different stages of labor had a very positive impact. Using those simple yet practical techniques, I had a very positive birth experience.” (P22)*

3.c. Facilitating Acceptance of the Maternal Role

Participants noted that positive maternal experiences, emotional support, and addressing postpartum challenges foster a sense of belonging. This allows mothers to share experiences, seek advice, and build confidence. Midwives also help develop parenting skills and ease the transition to motherhood. Facilitating the acceptance of the maternal role had three sub-subcategories: “positive maternal experience during pregnancy, childbirth, and postpartum”, “successful breastfeeding”, and “boosting maternal motivation”.

The participants explained that positive birth experiences and the ability to breastfeed had led to the acceptance of the maternal role by the mothers. Two women stated:

“When my baby was born, they put my baby on my abdomen, and I breastfed her; it was a very beautiful feeling. All my pain had gone away. From that moment, I breastfed her and decided to continue to the end.” (P25)

“At first, I didn’t want another child, but now I’ve changed my mind because if I feel bad or need something, there is someone to ask.” (P16)

DISCUSSION

In this qualitative research, we aimed to describe women’s and midwives’ perspectives

on the ICTMC in Iran. The core theme of women’s and midwives’ experiences was “comprehensive, continuous, and up-to-date obstetrics care”. Continuous midwifery care offers comprehensive and personalized support throughout the entire perinatal period. This approach emphasizes the clinical aspects of care and the emotional, psychological, and social well-being of the mother.¹³

One key finding of this study was the achievement of excellence-centered midwifery care through ICTMC. Effective education, continuous support, dignity-based care, midwives’ professional self-efficacy, and improvement of maternal and infant health were found to be the pillars of excellence-centered midwifery care.

Previous research has shown that education during the perinatal period is essential to continuous midwifery care and empowers both mothers and midwives.¹¹ This study found virtual education highly effective for educating mothers. These findings suggest the potential of integrating technology into continuous midwifery care. There is evidence that virtual education platforms could be valuable resources for midwives and mothers.²⁴ Midwives could benefit from online training sessions and group discussions that improve their clinical skills and promote teamwork. Meanwhile, virtual education for mothers could provide personalized, accessible health information about the perinatal care. However, digital tools can create barriers for people with limited digital literacy or unreliable internet access.²⁵ Bridging the digital gap is essential to ensuring equitable care for all populations, and it should be a priority.

Our study emphasized that continuous support and maintaining maternal dignity are vital for high-quality midwifery care. A meta-synthesis revealed that continuous support during childbirth helped women cope with pain and stress more effectively. As a result, the need for medical interventions decreased, and the quality of midwifery care improved.²⁶ Furthermore, a study from Iran showed that providing emotional and physical

support during childbirth could facilitate a more natural progression of labor.²⁷

Continuous team midwifery care supports the mother's preferences with a non-paternalistic approach. Preserving maternal dignity is often associated with fostering feelings of autonomy, respect, and agency in decision-making.²⁸ This dignity-centered care boosts maternal satisfaction and reduces postpartum depression and anxiety.²⁹ Therefore, by incorporating dignity-centered principles, ICTMC can be considered a strategy for promoting maternal mental health.

Midwives in this study reported increased self-efficacy in providing continuous care. According to them, continuous team midwifery care also contributed to their professional development.³⁰ Long-term relationships with mothers help midwives refine skills and enhance knowledge. It has been shown that competent midwives deliver high-quality, culturally appropriate, and individual care.³¹

The participants reported that ICTMC significantly enhanced maternal and infant health. Research indicated that women in these models experienced lower rates of unnecessary interventions and a less stressful process than women in other care models.¹¹ However, some studies reported conflicting results. Denmark's continuous care model had higher rates of labor augmentation, emergency cesarean sections, and lower newborn Apgar scores. There were no differences in elective cesarean sections, pregnancy and birth complications, or interventions.³² The differences may be due to the continuous care model being provided by students in that study, while midwives in healthcare centers provided it in the present study. Variations in the research setting could have also contributed.

Another significant finding of this study was the bridging of gaps in midwifery care from pregnancy to postpartum. This was achieved by ICTMC, reducing the financial burden of services and decreasing unnecessary

visits. The study found that ICTMC, fostering collaboration among different healthcare providers, offers comprehensive support during perinatal. Evidence shows that integrated communication, shared decision-making, collective responsibility, and active maternal participation can improve health outcomes.³³

Studies show that team midwifery care is safe and cost-effective for women at all pregnancy risk levels, often reducing healthcare costs.³⁴ Medical intervention costs often create barriers for families. Based on previous studies, simplifying the care process and reducing unnecessary visits through team-based midwifery care will lower overall costs.¹⁶ The financial benefits also extend to the healthcare system, reducing the burden of unnecessary procedures.³⁵

In midwife-led continuity of care, the average hospital stay after childbirth is shorter than in the routine care model.³⁶ Our study also revealed that in continuous care, ongoing access and communication between mothers and midwives reduced unnecessary specialist referrals. This better resource allocation occurred by addressing mothers' specific needs and alleviating anxiety through ICTMC.

The participants reported that the program improved their perinatal experiences by empowering them, facilitating natural birth, and fostering maternal acceptance. A study in Iran also found that continuous team-based midwifery care increased the maternal satisfaction.¹⁰ Another study showed that implementing team-based, continuous midwifery care made childbirth more desirable for Iranian women and decreased the desire for elective C-sections.²⁷

In this study, empowerment meant effective midwife-mother communication, reliable information access, informed childbirth choices, and maternal self-efficacy. If women are educated and develop inner strength, they can overcome pregnancy challenges and experience better physical and psychological health.³⁷

The participants emphasized that the key steps for a physiological birth were reducing unnecessary interventions, fostering maternal control and reassurance, and using physiological childbirth techniques. In ICTMC, interventions are only applied when clinically justified. This model identifies and manages complications, reducing the risks.⁷ Women's experiences with midwife-led maternity care showed that these mothers used physiological birth techniques during labor and childbirth.³⁷ There is also strong evidence that implementing a midwifery-led care model increases physiological births and reduces C-sections.³⁸

This study found that ICTMC helped mothers accept their maternal role, evidenced by positive experiences during pregnancy, childbirth, postpartum, successful breastfeeding, and increased motherhood motivation. Previous evidence supports our finding that consistent care promotes acceptance of the maternal role and mental health.³⁹ In line with our study, longer exclusive and overall breastfeeding durations are associated with continuous education, long-term support, and maternal psychological well-being.⁴⁰ Team-based continuous care highly values postpartum support, unlike traditional models.^{7, 8} Home visits, virtual peer groups, and regular midwife care boost the mothers' confidence and lead to positive postpartum experiences. The subjects who participated in this study reported no fear of future pregnancies and expressed a desire for more due to the high-quality care. It has been seen that high-quality continuous care and increased maternal confidence encourages subsequent pregnancies.²

In this study, both groups recognized the benefits of the ICTMC model. However, the differences in experiences between the mothers and midwives emphasized important considerations for future implementation. The mothers experienced the ICTMC model as a consistent and supportive care from pregnancy to postpartum. They reported that receiving care from the same team over time made the stressful period feel more pleasant. Midwives

often viewed the ICTMC model from a professional perspective. They recognized that ICTMC facilitated a higher standard of midwifery care. They preferred this model; however, they encountered barriers when trying to provide continuity of care in a health system that limits that capability.

The results of this study help policymakers recognize the long-term economic and clinical value of ICTMC. Investing in this model can reduce the need for costly interventions, improve maternal satisfaction, and optimize healthcare delivery. However, the ICTMC model faces several implementation challenges including communication breakdowns, lack of coordination, limited budgets, and need for training among healthcare professionals. To implement this model in Iran, policymakers should develop supportive policies, pilot these models in select regions, and establish evaluation systems to collect feedback on maternal outcomes, the quality of healthcare, and staff satisfaction.

This study has some limitations. The research was conducted within the specific cultural, social, and healthcare context of Iran. The local midwifery system, organizational policies, and societal norms may have shaped the findings.

CONCLUSION

This study demonstrates that ICTMC effectively addresses the gaps in traditional maternal care by prioritizing continuity practices. The ICTMC improves health outcomes and enhances satisfaction, particularly in underserved populations. These findings align with the goals of community-based midwifery by emphasizing accessible, personalized care tailored to local needs. The ICTMC is an effective model, but its outcomes may vary across settings due to differences in midwife training, institutional support, sociocultural context, and type of healthcare setting.

Future studies could investigate the impact of the team-based continuous midwifery care model on health indicators in underserved

populations, along with its implementation challenges across diverse healthcare systems

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Authors' Contribution

FN, AB, KH, MD and ZA were responsible for the conceptualization and design of this study. The data collection was conducted by FN. The data analysis and interpretation were carried out by FN, AB, KH, MD, and ZA. FN, AB, KH, MD, and ZA drafted the initial manuscript. All authors critically reviewed, revised the manuscript, and approved the final version for publication. All authors take responsibility for the integrity of the data and the accuracy of the data analysis. The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted.

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Conflict of Interest

None declared.

Declaration on the use of AI

The authors declare that no artificial intelligence

tools were used in the preparation of this manuscript.

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