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Review Article

# The Concept of Maternal Care Quality for Women with Low-risk Pregnancy in the Maternity Ward: An Integrative Review

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ABSTRACT

**Background:** Improving the quality of maternal care is considered a key strategy for improving maternal and neonatal outcomes. However, available definitions do not clearly define this concept. **Objective:** The aim of this study was to clarify the concept of maternal care quality (MCQ) for women with low-risk pregnancy in the maternity ward and to determine its attributes. **Methods:** This integrative review was conducted using Whitmore and Knafl's method. An online literature search was done in Medline, Embase, Web of Sciences, Scopus, SID, Magiran, and IranMedex databases as well as the websites of health-care and midwifery organizations and associations. Data were analyzed in the four steps of data reduction, data display, data comparison, and conclusion drawing and verification. **Results:** The two main attributes of MCQ are effective communication and interaction and professional care. Effective communication and interaction between the care provider and pregnant women in the maternity ward is the most important attribute of MCQ. The first category included three subcategories, namely informational interaction, human interaction, and participatory interaction. The two subcategories of the second category were adherence to standards during care delivery and delivering accessible care. **Conclusion:** MCQ in maternity ward is defined as "the process of delivering safe, fair, accessible, and standard professional care to women during childbirth through human, informational, and participatory interactions."

**Keywords:** *Care quality, Integrative review, Low-risk pregnancy, Maternal care, Maternity*

## Introduction

Maternal and neonatal disability and death are among the major health-care challenges. Despite the wide accessibility to competent health-care providers in many health-care settings, many women and neonates still experience lifelong disability or death.[1] The World Health Organization (WHO) estimates that each year, 303000 women and 2.7 million neonates die at the time of childbirth.[2] These deaths are mostly due to preventable problems such as bleeding, hypertension, premature delivery, asphyxia, and infection.[3] MCQ has a significant role in reducing preventable maternal and neonatal complications and death,[4] reducing unnecessary interventions, and improving psychosocial outcomes and public health.[5]

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A key step to MCQ improvement is to provide a clear definition for the concept of MCQ. Some previous studies provided definitions for the concept of MCQ in the maternity ward. For instance, a study noted that care quality is far beyond supplying medications and supervising women during the process of labor and defined MCQ as the emotional presence of midwives for women to reassure them through providing guidance,

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support, and counseling.[6] In another study, researchers considered that the concept of respectful maternity care is broader than a reduction of disrespectful care or mistreatment of women during childbirth. They explained the 12 dimensions of respectful maternity care during childbirth in health centers.[7] Although these studies provided data about some aspects of the concept of MCQ, there is still no clear and comprehensive definition for the concept, particularly about MCQ in the maternity ward. Therefore, comprehensive studies are still needed to further clarify the concept and its dimensions.

### Objectives

The present study aimed at clarifying the concept of MCQ for women with low-risk pregnancy in the maternity ward and at determining its attributes.

## Methods

This integrative review was conducted using Whitmore and Knafl's method. The integrative review is "the broadest type of research review"[8] that provides a framework for the comprehensive assessment of complex concepts or theories[9] and allows the inclusion of studies with different methodologies in the review.[10] After problem identification, this method includes a literature search, data evaluation, data analysis, and presentation.

### Literature search

In this stage, an online search was done in the following databases: Medline, Embase, Web of Sciences, Scopus, SID, Magiran, and IranMedex as well as the websites of midwifery and health-care organizations and associations, including the WHO and the International Confederation of Midwives. Moreover, the reference lists of the retrieved documents were assessed for relevant documents. The search protocol was developed through consulting an experienced librarian and was limited to date between 2000 and 2020. A literature search was done through both a keyword-based search and a subject-based search using headings extracted from the Medical Subject Headings. Search keywords included "midwife," "nurse midwifery," "maternal-child nursing," "maternity," "obstetric," "maternity nursing," "neonatal nursing," "prenatal nursing," "antenatal," "maternity care," "healthcare quality," "care quality," "midwifery care," "quality of midwifery care," and "antenatal care" [Appendix S1-4]. Retrieved documents were assessed for eligibility.

### Inclusion criteria

Inclusion criteria were publications in Persian or English, inclusion of the search keywords in title, abstract, or keywords, relevance to MCQ for women with low-risk pregnancy in the maternity ward, and the use of a descriptive, observational, and interventional meta-analysis, survey, systematic review, qualitative, or mixed-methods design.

The primary search produced 15506 records. Duplicate records were identified and excluded using the EndNote software ($n$ = 7846) and then, the titles and the abstracts of the remaining 7660 documents were assessed. Accordingly, 351 documents with keywords in title, abstract, or keywords section were identified. Eight more studies were retrieved from relevant websites and the reference list of these 359 documents. After that, 321 documents were excluded due to irrelevance to MCQ ($n$ = 281), inaccessible full-text ($n$ = 2), publication in languages other than English or Persian ($n$ = 7), or being commentaries, editorials, or conference abstracts ($n$ = 31). Finally, 38 documents were included in the study [Figure 1]. Eligibility assessment was independently performed by two of the study authors. Disagreements between them were resolved by the third author.

### Data evaluation

The 38 documents included in the present study were 22 qualitative studies, 12 review studies, one mixed-methods study, one cross-sectional study, and two guidelines [Table 1]. None of these documents was excluded during data evaluation. We used the Mixed-Methods Appraisal Tool to evaluate qualitative, mixed methods, and cross-sectional studies. This tool is appropriate for both quantitative and qualitative studies[11] and has been used in former systematic and[12,13] integrative reviews. The two guidelines included in the study were evaluated using the Appraisal of Guidelines for Research and Evaluation (AGREE), which is a standard tool for critiquing clinical guidelines.[14] The quality of review studies included in the present study was assessed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement.[15] In order to ensure the reliability of the findings, the data evaluation forms completed by two of the authors were checked and confirmed by two more authors.

### Data analysis

For data analysis, primary codes were extracted from the included studies and then, the codes were compared and categorized. Generated categories were also compared

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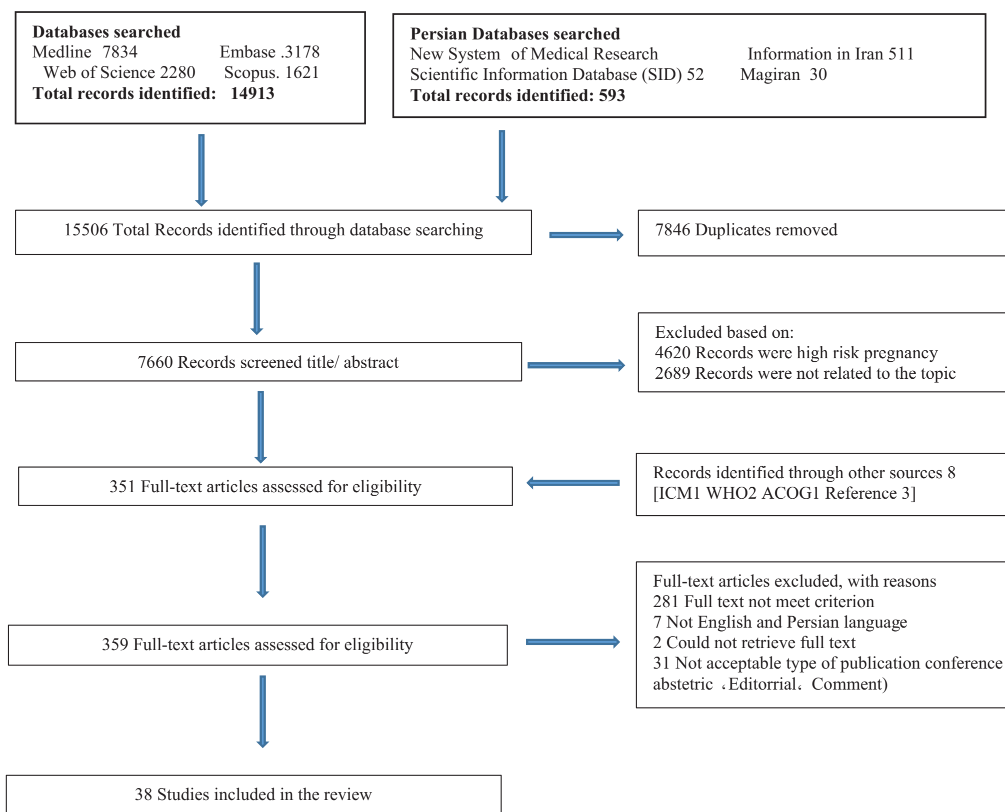


**Figure 1:** Flow diagram of the review selection process

and categorized into larger categories.[51] We used original excerpts from the documents included in data analysis. For ensuring the validity of data analysis, two of the authors independently analyzed the data and then, compared their findings and generated final findings. They resolved their disagreements through consulting the third author.

The Ethics Committee of Tehran University of Medical Sciences, Tehran, Iran, approved this study (code: IR.TUMS.FNM.1398.053).

## Results

The attributes of MCQ included the two main categories of effective communication and interaction and professional care, which are shown in Table 2 and explained in what follows.

### Effective communication and interaction

Effective communication and interaction between midwife and pregnant women in the maternity ward is the most important attribute of MCQ and is considered as the core and the essence of humanistic care.[37] This main category included three subcategories, namely informational interaction, human interaction, and participatory interaction.

### Informational interaction

Women in labor need to receive information that care providers should pay attention to and provide. Informational interaction is considered as one of the key components of MCQ.[19,21,23,32] It has a significant role in empowering pregnant women, facilitating their acceptance of health-care providers' recommendations, and enhancing their satisfaction with care.[21] Moreover, it improves their self-confidence in the process of childbirth.[20] This category had two subcategories:, unexpressed information needs and expressed information needs.

### Unexpressed information needs

Pregnant women need information about labor progression, the process of childbirth,[6,21] breathing techniques,[19,26,32] pain-relief techniques, relaxation techniques, family planning, vaccination, episiotomy care,[19,32] and child care.[30] Although pregnant women may not express this need, providing them with accurate information can improve their relationships with midwives during labor, make women calm, and create a positive birth experience for them.[29] Before each therapeutic or diagnostic intervention in the

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**Table1: Characteristics of studies that were included**

| Author(s), date | Country | Design | Main outcome(s) |
|---|---|---|---|
| Bohren *et al*.[6] | Nigerian and Ugandan | Qualitative | Five domains were identified, including: effective communication, respect and dignity, emotional support, competent and motivated human resources, and essential physical resources. |
| Mgawadere *et al*.[16] | Malawi. | Qualitative | Three main sub-themes were identified, including: the importance of interpersonal relationships, the provision of maternity care, and the availability of an enabling environment. |
| Dolores *et al*.[17] | Uganda | Qualitative | Knowledge of clinical standards, timeliness, women's choice, resources, physical infrastructure, and collaboration were important aspects of MCQ. |
| Mohale *et al*.[18] | Sub-Saharan African | Qualitative | Four themes were identified: Access to services including health education, birth environment, support, pain management, and perceptions of care. |
| Ndirima *et al*.[19] | Rwanda | Qualitative | The women agreed on the need for respectful treatment and privacy but had distinct preferences for the gender of the birth attendant, and husband's presence during delivery. |
| Demirci *et al*.[20] | Turkey | Qualitative | Participants reported wanting vaginal birth without interventions, needed support and to be empowered and a health-promoting environment. |
| Jolly *et al*.[21] | Malawi | Qualitative | Important themes included: the importance of the patient–provider relationship, the need for education, and the need for confidentiality. |
| Shimoda *et al*.[22] | Tanzania | Qualitative | Five categories were identified, including: positive interactions between midwives and women, respect for privacy, provision of safe and timely care, active engagement in labor, and encouragement of the mother–baby relationship. |
| Raven *et al*.[23] | China | Qualitative | Expectations such as having skilled providers and privacy during childbirth were met. |
| Afulani *et al*.[24] | Kenya | Qualitative | Four factors influenced women's perceptions of quality of care: responsiveness, supportive care, dignified care, and effective communication. |
| Berg *et al*.[25] | Sweden and Iceland | Qualitative | The five main factors were: a reciprocal relationship, the birthing atmosphere, grounded knowledge, the cultural context, and the balancing act involved in facilitating woman-centered care. |
| Cornally *et al*.[26] | Dublin | Exploratory | Factors that contributed to a positive experience of women were trusting, and a supportive relationship between the woman and the caregivers. |
| Jenkins *et al*.[27] | Australia | Qualitative | Five important aspects of care are: woman-focused care, staff qualities, systems and facilities, family-focused care, and continuity of care/information. |
| Afaya *et al*.[28] | Ghana | Qualitative | Participants' experiences of nursing/midwifery care during birth were influenced by reception and respect, provision of information, technical skill, providers' behavior, pain management, and availability of nurses/midwives |
| Dahlberg *et al*.[29] | Norway | Qualitative | Two main themes emerged: "to be seen as an individual" and the "health-promoting perspective." |
| WHO[30] | – | Guideline | The WHO technical consultations led to 56 recommendations on intrapartum care. |
| ACOG[31] | – | Guideline | "Low risk" indicates a clinical scenario for which there is no clear demonstrable benefit for a medical intervention. |
| Baldisserotto *et al*.[32] | Brazil | Cross-sectional | The good practices are associated with positive assessment, partner's presence, privacy, place, time available to ask questions, clarity, and empathic support. |
| Homer *et al*.[33] | Australia | Multi-method | The key elements were: being woman centered, providing safe and supportive care, and collaborative services. |
| Cipolletta and Balasso[34] | Italian | Qualitative | Having control, needing support, and the importance of the birth environment were the main themes that emerged. |
| Goberna-Tricas *et al*.[35] | Spain | Qualitative | These core features were grouped into three categories: safety, the relationship between the carers and the service user, and the context in which health care is provided. |
| Kyaddondo *et al*.[36] | Uganda | Qualitative | Respect and dignity, timely communication, competent skilled staff, and availability of medical supplies were central to women's accounts of quality care. |
| Attarha *et al*.[37] | Iran | Qualitative | Relationship as the nature of midwifery care was a core theme that emerged from the data. Contextual factors, the midwife's professional characteristics, observing ethical principles, and respect were important. |
| Mohseni *et al*.[38] | Iran | Qualitative | Four concepts were extracted: effective interrelationship, professional care, education, and available facilities. |

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**Table 1: Contd...**

| Author(s), date | Country | Design | Main outcome(s) |
|---|---|---|---|
| Askari *et al*.[39] | Iran | Qualitative | Three main themes were extracted: environment, assuring the labor, and routine techniques. |
| Moridi *et al*.[40] | Iran | Qualitative | Three themes were derived from the midwives' perceptions of RMC during labor and birth, including showing empathy, women-centered care, and protecting rights. |
| Shakibazadeh *et al*.[7] | Review | – | Twelve domains of RMC were synthesized: being free from harm and mistreatment; maintaining privacy and confidentiality; preserving women's dignity; prospective provision of information and seeking of informed consent; ensuring continuous access to family and community support; enhancing quality of physical environment and resources; providing equitable maternity care; engaging with effective communication; respecting women's choices that strengthen their capabilities to give birth; availability of competent and motivated human resources; provision of efficient and effective care; and continuity of care. |
| Iravani *et al*.[41] | Review | – | Evidence does not support routine enemas, routine perineal shaving, continuous electronic fetal heart rate monitoring, routine early amniotomy, and restriction of fluids and food during labor; whereas it supports the continuity of midwifery care and supports the non-supine position and freedom in movement throughout labor. |
| Nove *et al*.[42] | Review | – | The essential components considered were effective practices, the organization of care, the philosophy and values of the care providers working in the health system, and the characteristics of care providers. |
| Srivastava *et al*.[43] | Review | – | Determinants of maternal satisfaction covered all dimensions of care across structure, process, and outcome. |
| Kennedy *et al*.[44] | Review | – | Four overarching themes were identified: the midwife as an "instrument" of care; the woman as a "partner" in care; an "alliance" between the woman and midwife; and the "environment" of care. |
| Renfrew *et al*.[4] | Review | – | We identified more than 50 short-term, medium-term, and long-term outcomes that could be improved by care within the scope of midwifery. |
| WHO[45] | Review | – | The WHO has prepared a framework for improving the quality of care that should be assessed, improved, and monitored within the health system. |
| ICM (2014)[46] | Review | – | This document provides a universal description of the philosophy and model of midwifery care, without compromising local or regional characteristics of midwifery care. |
| Corcoran *et al*.[47] | Review | – | The major themes were valuing continuity of care, managing structural issues, having negative experiences with mainstream services, and recognizing success. |
| Moghasemi *et al*.[48] | Review | – | Midwifery-led care models have various advantages for mothers and babies; they bring about a high level of satisfaction among pregnant women, a reduction of undesirable outcomes for mothers and babies, and the empowerment of women. |
| Page and McCandlish[49] | Review | – | "The humanization of birth" is defined as treating each mother as an individual and respecting her right to be involved in decisions about her care, and showing sensitivity to her desires and feelings, which is crucial to a safe and happy birth. |
| Behruzi *et al*.[50] | Review | – | Midwife-led care increased the chance of feeling in control during labor, having a spontaneous vaginal birth, and initiating breastfeeding. |

**Table 2: Attributes of the concept of MCQ**

| Subcategories | Categories | Main category |
|---|---|---|
| Need-based education | Informational interaction | Effective communication and interaction |
| Request-based information delivery | | |
| Emotional interaction | Humanistic interaction | |
| Respect for human dignity | | |
| Promoting women's participation | Participatory interaction | |
| Promoting companions' participation | | |
| Performing necessary interventions | Adherence to standards during care delivery | Professional care |
| Avoiding unnecessary interventions | | |
| Adhering to care-related models | | |
| Delivering fair care | Delivering accessible care | |
| Delivering safe care | | |

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maternity ward, pregnant women should be provided with clear explanations about the intervention. After the intervention, they should also be informed about its results and necessary recommendations.[22,28]

### Expressed information needs

These needs are mostly revealed when the clients ask health-care providers questions. All clients in health-care settings, including women in the maternity ward, have the right to ask their questions and express their concerns. Therefore, health-care providers should allocate adequate time to respond to their clients' questions and provide them with the requested information. In other words, responding to their questions and addressing their concerns are among the primary components of care delivery.[21,32] An important point to establish effective communication and interaction is the use of an understandable jargon-free language for communication.[6]

### Human interaction

Human interaction refers to a bilateral relationship for altruistic purposes. The two components of human interaction for MCQ are emotional interaction and respect for human dignity.

### Emotional interaction

Respectful and friendly relationships between midwives and pregnant women have significant effects on MCQ.[7,19,21,23,28] Mutual confidence and respect,[46] empathy,[16,19,52] and reassurance[20] are essential for protecting the health of women and their neonates.

### Respect for human dignity

The two components of respect for human dignity in order to ensure MCQ in the maternity ward are respect for women's privacy and respect for their culture, values, and beliefs. Respect for privacy is a basic need of pregnant women in the ward.[7,16,19,21,28,43] Health-care providers in the maternity ward also need to respect women's culture, values, and beliefs.[50] Most women, particularly Muslim women, prefer to receive care from female health-care providers in the maternity ward.[53]

### Participatory interaction

Participatory interaction means patient participation in the treatment decisions and nursing care procedures. Both midwives and pregnant women should actively participate in the process of childbirth. Midwives should respect women's preferences and choices and use their opinions throughout childbirth.[21] This category included two subcategories, namely promoting women's participation and promoting their companions' participation.

### Promoting women's participation

Women should actively participate in the process of decision making about labor position,[17,30] their companions' presence during labor, and labor pain relief methods.[30]

### Promoting companions' participation

A trained companion during labor can provide pregnant women with physical and emotional support and thereby, bring them calmness.[54] Family members' and friends' support during labor can reduce women's stress, promote positive thinking, and enhance their confidence.[20,23] Women often prefer to receive their husbands' support during labor and believe that sharing the process of childbirth with the husband is important for having a positive childbirth experience. Contrarily, some women do not prefer their husbands to be present during labor because they are concerned about their husbands' probable interference in the process of labor due to their lack of knowledge or misunderstanding about some labor-related techniques.[20,39]

### Professional care

Professional care supports the client in the processes of identifying, determining, and acting upon experiences relevant to health and healing. In this study, professional care is the second main category of the attributes of MCQ in the maternity ward. The two subcategories of this main category were adherence to standards during care delivery and delivering accessible care.

### Adherence to standards during care delivery

Care delivery based on standards consisted of three subcategories, namely performing essential interventions, avoiding unessential interventions, and adhering to care-related models.

### Performing essential interventions

Essential interventions are interventions that should be performed in the maternity ward for women with a low-risk pregnancy. These interventions include fetal monitoring, vaginal examination, administration of oral fluids during labor,[30,31] administration of food stuffs during labor,[30-32] encouraging women to have mobility during labor,[30-32,41] giving them the right to have a companion during labor, helping them to choose the best position, administrating epidural analgesia and opioids, nonpharmacological pain relief, administering relaxation techniques,[30,31] using techniques to reduce perineal trauma,[30] encouraging and supporting women to follow their own urge to push during delivery,[30,31] controlled cord traction (CCT),[30] administering oxytocin in the third stage of labor, delayed umbilical cord clamping,

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encouraging breastfeeding in the first postnatal hour, performing careful postnatal assessment for women and their neonates, encouraging skin-to-skin contact, warming neonates,[22,30] and administering vitamin K for neonates.[30]

### Avoiding unessential interventions

Unessential interventions include interventions that are recommended not to be used for women with a low-risk pregnancy. These interventions include cardiotocography at the time of admission, continuous cardiotocography during labor,[30,31] enema at the time of admission, perineal shaving before vaginal delivery, vaginal disinfection using chlorhexidine, pain relief in order to postpone delivery,[30] amniotomy just to prevent delay in childbirth, administering intravenous fluids to shorten labor, restricting the intake of fluid and foods during labor,[30,41] premature amniotomy and induction using oxytocin, administering oxytocin to prevent delay in childbirth in women with epidural analgesia, using antispasmodic agents to prevent delay in childbirth, routine use of episiotomy, fundal pressure in the second stage of labor, forcing women to assume the supine position, oral and nasal suctioning of neonates, postnatal continuous massage of the uterine fundus in women who have received prophylactic oxytocin, administration of prophylactic antibiotics, and mother–neonate separation.[30]

### Adhering to care-related strategies

Among the attributes of midwifery care is adherence to continuous care,[6,27,47,48] one-to-one care,[17,22,26] and woman-centered care.[30,55] These care-related models can promote and support normal vaginal delivery. Therefore, health-care policy makers and providers need to consider them during perinatal care.

### Delivering available care

Care provider should be available all the time in the maternity ward. Quality maternal care necessitates continuous attendance of midwives at the women's bedside during labor[37] and women's easy access to them. Care providers should be present in the maternity ward for delivering fair and safe care.

### Delivering fair care

Delivering fair care means ensuring that all people have equal opportunities, regardless of their abilities, background, and lifestyle. Therefore, all pregnant women should have access to fair care irrespective of their age, ethnicity, religion, or other characteristics.[49] Care services should be provided in a timely manner[32] and without any prejudice.[54] Moreover, health-care providers should not judge women in the maternity ward, particularly those with the human immunodeficiency virus.[21]

### Delivering safe care

Normal delivery should be performed with minimum possible interventions,[34,56] without any damage and misconduct,[7,21] and with regular monitoring of the process of labor.[22]

## Discussion

Maternal care is part of the health care provided to the mothers in maternity units. Although the concept of care exists in the philosophy, vision, and mission of most health-care organizations and institutes, it is still a complex concept in health-care systems with no clear and precise definition.[52] Study findings revealed that the two main attributes of the concept of MCQ are effective communication and interaction and professional care. These two attributes refer to the process component of Donabedian's model. He introduces a process as how to deliver care services or as interpersonal processes in care delivery.[57] The professional care attribute of MCQ refers to the performance of midwives and the process of their care delivery. Adherence to standards during care delivery and provision of accessible care are the two key aspects of professional care delivery. Our findings revealed that continuous care, one-to-one care, evidence-based care, and woman-centered care are among the strategies for improving care quality in the maternity ward, which should be taken into account by health-care policy makers and providers. A former study provided valuable data about respectful care, health-care providers' relationships with pregnant women, and physical structures in maternity wards[7]; however, that study provided no data about professional care and just reviewed qualitative studies. Contrarily, we addressed two main attributes of MCQ and reviewed qualitative, quantitative, and review studies as well as the newest guidelines on maternal care.

Effective communication and interaction, as a key attribute of MCQ, should be considered in defining the process of any type of quality care. Communication skills are key elements in quality midwifery care delivery.[18] Women expect midwives to act like a mother for them, warmly accept them, reassure them, encourage them to have a good delivery,[6] and empathize with them during care delivery.[29] A former study also showed that perinatal care mostly includes supportive and emotional care.[6]

To the best of our knowledge, this is the first integrative review of its kind into the concept of MCQ in the maternity ward. The findings of the study can be used

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for MCQ improvement in different settings and also for developing instruments to measure MCQ.

We defined MCQ in the maternity ward as "the process of delivering safe, fair, accessible, and standard professional care to women during childbirth through humanistic, informational, and participatory interactions." One of the strengths of the present study is the provision of a clear definition of the concept of MCQ in the maternity ward. The definition provided in this study is based on the comprehensive review of the existing literature and, hence, is comprehensive and provides a deep understanding of MCQ. Along with its strengths, this study had some limitations. For instance, it addressed MCQ in relation to women with a low-risk pregnancy. Future studies are recommended to analyze the concept of MCQ in relation to women with a high-risk pregnancy. Moreover, as this was the first study into the analysis of the concept of MCQ in the maternity ward, there was no definition and study for the purpose of comparison.

## Conclusion

Based on the findings of the present study, the concept of MCQ in the maternity ward is defined as "the process of delivering safe, fair, accessible, and standard professional care to women during childbirth through humanistic, informational, and participatory interactions."

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### Conflicts of interest

There are no conflicts of interest.

## References

1. The State of the World's Midwifery 2011: Delivering Health, Saving Lives. USA: United Nations Population Fund (UNFPA); 2011.
2. Lankarani NB, Azin A, Sadighi J, Jahangiri K, Aeenparast A, Omidvari S, *et al*. Chronic diseases in a population-based study: Iranian health perception survey (IHPS). Payesh 2011;10:391-5.
3. World Health Organization. Quality, Equity, Dignity: The Network to Improve Quality of Care for Maternal, Newborn and Child Health—Strategic Objectives. Geneva: World Health Organization; 2018
4. Renfrew MJ, McFadden A, Bastos MH, Campbell J, Channon AA, Cheung NF, *et al*. Midwifery and quality care: Findings from a new evidence-informed framework for maternal and newborn care. Lancet 2014;384:1129-45.
5. Oladapo OT, Iyaniwura CA, Sule-Odu AO. Quality of antenatal services at the primary care level in southwest Nigeria. Afr J Reprod Health 2008;12:71-92.
6. Bohren MA, Titiloye MA, Kyaddondo D, Hunter EC, Oladapo OT, Tunçalp Ö, *et al*. Defining quality of care during childbirth from the perspectives of Nigerian and Ugandan women: A qualitative study. Int J Gynaecol Obstet 2017;139:4-16.
7. Shakibazadeh E, Namadian M, Bohren MA, Vogel JP, Rashidian A, Nogueira Pileggi V, *et al*. Respectful care during childbirth in health facilities globally: A qualitative evidence synthesis. Bjog 2018;125:932-42.
8. Whittemore R, Knafl K. The integrative review: Updated methodology. J Adv Nurs 2005;52:546-53.
9. Broome ME, Lillis PP, Smith MC. Pain interventions with children: A meta-analysis of research. Nurs Res 1989;38:154-8.
10. Ganong LH. Integrative reviews of nursing research. Res Nurs Health 1987;10:1-11.
11. Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, Cargo M, *et al*. The mixed methods appraisal tool (MMAT) version 2018 for information professionals and researchers. Educ Inform 2018;34:285-91.
12. Oates J, Topping A, Arias T, Charles P, Hunter C, Watts K. The mental health and wellbeing of midwifery students: An integrative review. Midwifery 2019;72:80-9.
13. Pezaro S, Clyne W, Fulton EA. A systematic mixed-methods review of interventions, outcomes and experiences for midwives and student midwives in work-related psychological distress. Midwifery 2017;50:163-73.
14. Brouwers MC, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, *et al*.; AGREE Next Steps Consortium. AGREE II: Advancing guideline development, reporting and evaluation in health care. CMAJ 2010;182:E839-42.
15. Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JP, *et al*. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. Plos Med 2009;6:e1000100.
16. Mgawadere F, Smith H, Asfaw A, Lambert J, Broek NVD. "There is no time for knowing each other": Quality of care during childbirth in a low resource setting. Midwifery 2019;75:33-40.
17. Munabi-Babigumira S, Glenton C, Willcox M, Nabudere H. Ugandan health workers' and mothers' views and experiences of the quality of maternity care and the use of informal solutions: A qualitative study. PLoS One 2019;14:e0213511.
18. Mohale H, Sweet L, Graham K. Maternity health care: The experiences of sub-Saharan African women in sub-Saharan Africa and Australia. Women Birth 2017;30:298-307.
19. Ndirima Z, Neuhann F, Beiersmann C. Listening to their voices: Understanding rural women's perceptions of good delivery care at the Mibilizi district hospital in Rwanda. BMC Women Health 2018;18:38.
20. Deliktas Demirci A, Kabukcuglu K, Haugan G, Aune I. "I want a birth without interventions": Women's childbirth experiences from turkey. Women Birth 2019;32:e515-22.
21. Jolly Y, Aminu M, Mgawadere F, van den Broek N. "We are the ones who should make the decision": Knowledge and understanding of the rights-based approach to maternity care among women and healthcare providers. BMC Preg Childbirth 2019;19:42.

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22. Shimoda K, Horiuchi S, Leshabari S, Shimpuku Y. Midwives' respect and disrespect of women during facility-based childbirth in urban Tanzania: A qualitative study. Reprod Health 2018;15:8.
23. Raven J, van den Broek N, Tao F, Kun H, Tolhurst R. The quality of childbirth care in China: Women's voices: A qualitative study. BMC Preg Childbirth 2015;15:113.
24. Afulani PA, Kirumbi L, Lyndon A. What makes or mars the facility-based childbirth experience: Thematic analysis of women's childbirth experiences in western Kenya. Reprod Health 2017;14:180.
25. Berg M, Asta Ólafsdóttir O, Lundgren I. A midwifery model of woman-centred childbirth care–in Swedish and Icelandic settings. Sex Reprod Healthc 2012;3:79-87.
26. Paula C, Butler M, Martina M, Ann R. Exploring women's experiences of care in labour. Evid Based Midwifery 2014;12:89-94.
27. Jenkins MG, Ford JB, Morris JM, Roberts CL. Women's expectations and experiences of maternity care in NSW: What women highlight as most important. Women Birth 2014;27:214-9.
28. Afaya A, Yakong VN, Afaya RA, Salia SM, Adatara P, Kuug AK, *et al*. A qualitative study on women's experiences of intrapartum nursing care at tamale teaching hospital (TTH), Ghana. J Caring Sci 2017;6:303-14.
29. Dahlberg U, Persen J, Skogås AK, Selboe ST, Torvik HM, Aune I. How can midwives promote a normal birth and a positive birth experience? The experience of first-time Norwegian mothers. Sex Reprod Healthc 2016;7:2-7.
30. World Health Organization. Recommendations on Intrapartum Care for a Positive Childbirth Experience. Geneva: World Health Organization; 2018. Available from: http://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf;jsessionid=172A8E944D20DFD3B4D6FF3756189A86?sequence=1. [Last accessed on 2021 Aug 10].
31. ACOG. Committee Opinion No. 766: Approaches to limit intervention during labor and birth. Obstet Gynecol 2019;133:e164-e73.
32. Baldisserotto ML, Theme Filha MM, da Gama SG. Good practices according to WHO'S recommendation for normal labor and birth and women's assessment of the care received: The "birth in brazil" national research study, 2011/2012. Reprod Health 2016;13:124.
33. Homer CS, Passant L, Brodie PM, Kildea S, Leap N, Pincombe J, *et al*. The role of the midwife in Australia: Views of women and midwives. Midwifery 2009;25:673-81.
34. Cipolletta S, Balasso S. When everything seems right: The first birth experience of women in an Italian hospital. J Reprod Infant Psychol 2011;29:374-81.
35. Goberna-Tricas J, Banús-Giménez MR, Palacio-Tauste A, Linares-Sancho S. Satisfaction with pregnancy and birth services: The quality of maternity care services as experienced by women. Midwifery 2011;27:e231-7.
36. Kyaddondo D, Mugerwa K, Byamugisha J, Oladapo OT, Bohren MA. Expectations and needs of Ugandan women for improved quality of childbirth care in health facilities: A qualitative study. Int J Gynaecol Obstet 2017;139:38-46.
37. Attarha M, Keshavarz Z, Bakhtiari M, Jamilian M. The outcome of midwife-mother relationship in delivery room: A qualitative content analysis. Health 2016;8:336.
38. Mohseni M, Bahadoran P, Abedi H. The quality of postpartum care from mothers' viewpoint. Hakim Res J 2009;12:27-34.
39. Askari F, Atarodi A, Torabi S, Delshad Noghabi A, Sadegh Moghadam L, Rahmani R. Women's labor experience: A phenomenological study. Horizon Med Sci 2010;15:39-46.
40. Moridi M, Pazandeh F, Hajian S, Potrata B. Midwives' perspectives of respectful maternity care during childbirth: A qualitative study. PLoS One 2020;15:e0229941.
41. Iravani M, Janghorbani M, Zarean E, Bahrami M. An overview of systematic reviews of normal labor and delivery management. Iran J Nurs Midwifery Res 2015;20:293-303.
42. Nove A, Hoope-Bender PT, Moyo NT, Bokosi M. The midwifery services framework: What is it, and why is it needed? Midwifery 2018;57:54-8.
43. Srivastava A, Avan BI, Rajbangshi P, Bhattacharyya S. Determinants of women's satisfaction with maternal health care: A review of literature from developing countries. BMC Preg Childbirth 2015;15:97.
44. Kennedy HP, Rousseau AL, Low LK. An exploratory metasynthesis of midwifery practice in the United States. Midwifery 2003;19:203-14.
45. World Health Organization. Standards for Improving Quality of Maternal and Newborn Care in Health Facilities. Geneva; 2016 [internet]. Available from: http://apps.who.int/iris/bitstream/10665/249155/1/9789241511216eng.pdf. [Last accessed on 2017 Aug 10].
46. ICM. Core Document; Philosophy and Model of Midwifery Care; 2014. Available from: http://www.internationalmidwives.org/assets/uploads/documents/CoreDocuments/CD2005. [Last accessed on 2016 Jul 10].
47. Corcoran PM, Catling C, Homer CS. Models of midwifery care for indigenous women and babies: A meta-synthesis. Women Birth 2017;30:77-86.
48. Moghasemi S, Vedadhir A, Simbar M. Models for providing midwifery care and its challenges in the context of Iran. J Holist Nurs Midwifery 2018;28:64-74.
49. Jamas MT, Hoga LA, Tanaka AC. Mothers' birth care experiences in a Brazilian birth centre. Midwifery 2011;27:693-9.
50. Behruzi R, Hatem M, Goulet L, Fraser WD. Perception of humanization of birth in a highly specialized hospital: Let's think differently. Health Care Women Int 2014;35:127-48.
51. Cooper H. Synthesizing Research: A Guide for Literature Reviews. 3rd ed. Thousand Oaks, Calif: Sage Publications; 1998.
52. Bolderston A, Lewis D, Chai MJ. The concept of caring: Perceptions of radiation therapists. Radiography 2010;16:198-208.
53. Guittier MJ, Cedraschi C, Jamei N, Boulvain M, Guillemin F. Impact of mode of delivery on the birth experience in first-time mothers: A qualitative study. BMC Preg Childbirth 2014;14:254.
54. Sorkin DH, Ngo-Metzger Q, De Alba I. Racial/ethnic discrimination in health care: Impact on perceived quality of care. J Gen Intern Med 2010;25:390-6.
55. Page LA, McCandlish R. The New Midwifery E-book: Science and Sensitivity in Practice. 2nd ed. Elsevier Health Sciences: Netherlands; 2006.
56. Solnes Miltenburg A, Lambermon F, Hamelink C, Meguid T. Maternity care and human rights: What do women think? BMC Int Health Hum Rights 2016;16:17.
57. Contreras JAH, Hernández MDE, Ponce AMG. Quality assessment in the service area of expertise in an institution of public health sector. Open J Soc Sci 2015;3:50-3.

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**Appendix S1. PubMed search strategy**

| # | Searches (PubMed) |
|---|---|
| #1 | Midwives[Title/Abstract] OR Midwive[Title/Abstract] OR "nurse midwifery"[Title/Abstract] OR "nurse midwives"[Title/Abstract] OR Midwife[Title/Abstract] OR "maternal-child nursing"[Title/Abstract] OR maternity[Title/Abstract] OR Obstetrics[Title/Abstract] OR Obstetric[Title/Abstract] OR "Maternal Child"[Title/Abstract] OR "Maternity Nursing"[Title/Abstract] OR "Neonatal Nursing"[Title/Abstract] OR "Prenatal Nursing"[Title/Abstract] OR "Nurse-Midwife"[Title/Abstract] OR "Nurse Midwife"[Title/Abstract] OR antenatal[Title/Abstract])) OR Midwives[MeSH Terms]) OR "nurse midwives"[MeSH Terms]) OR "maternal-child nursing"[MeSH Terms]) OR "Neonatal Nursing"[MeSH Terms] |
| #2 | "maternity care"[Title/Abstract] OR "Health Care Quality"[Title/Abstract] OR "Quality of Healthcare"[Title/Abstract] OR "Healthcare Quality"[Title/Abstract] OR "Quality of Care"[Title/Abstract] OR "Care Quality"[Title/Abstract] OR "Quality of Health Care"[Title/Abstract] OR "quality of midwifery care"[Title/Abstract] OR "quality midwifery care"[Title/Abstract] OR "midwifery care"[Title/Abstract] OR "quality of maternity care"[Title/Abstract] OR "Antenatal Care"[Title/Abstract]) |
| #3 | "Obstetric Labor"[Title/Abstract] OR "Obstetric Deliveries"[Title/Abstract] OR "Obstetric Delivery"[Title/Abstract] OR "Delivery Rooms"[Title/Abstract] OR "Delivery Room"[Title/Abstract] OR "Hospital Birthing Centers"[Title/Abstract] OR "Hospital Birthing Center"[Title/Abstract] OR "Hospital Birth Center"[Title/Abstract] OR "Hospital Birth Centers"[Title/Abstract] OR "Hospital Birthing Center"[Title/Abstract] OR "delivery unit"[Title/Abstract] OR labour[Title/Abstract] OR labor[Title/Abstract] OR "delivery ward"[Title/Abstract] OR "delivery wards"[Title/Abstract])) OR Obstetric Labor[MeSH Terms]) OR Delivery, Obstetric[MeSH Terms]) OR "Delivery Rooms"[MeSH Terms]) OR Labor, Obstetric[MeSH Terms] |
| #4 | Search (#1 AND #2 AND #3) |

**Appendix S2. EMBASE search strategy**

| No. | Query |
|---|---|
| #1 | 'nurse midwifery'/exp |
| #2 | 'maternal child health care'/exp |
| #3 | 'prenatal care'/exp |
| #4 | #1 OR #2 OR #3 |
| #5 | 'maternal care'/exp |
| #6 | 'quality of nursing care'/exp |
| #7 | 'labor'/exp |
| #8 | 'delivery room'/exp |
| #9 | 'maternity ward'/exp |
| #10 | 'birth setting'/exp |
| #11 | #5 OR #6 |
| #12 | #7 OR #8 OR #9 OR #10 |
| #13 | #4 AND #11 AND #12 |

**Appendix S3. Scopus search strategy**

**(TITLE-ABS ("Obstetric Labor" OR "Obstetric Deliveries" OR "Obstetric Delivery" OR "Delivery Rooms" OR "Delivery Room" OR "Hospital Birthing Centers" OR "Hospital Birthing Center" OR "Hospital Birth Center" OR "Hospital Birth Centers" OR "Hospital Birthing Center" OR "delivery unit" OR labour OR labor OR "delivery ward" OR "delivery wards")) AND (TITLE-ABS ("maternity care" OR "Health Care Quality" OR "Quality of Healthcare" OR "Healthcare Quality" OR "Quality of Care" OR "Care Quality" OR "Quality of Health Care" OR "quality of midwifery care" OR "quality midwifery care" OR "midwifery care" OR "quality of maternity care" OR "Antenatal Care")) AND (TITLE-ABS (midwives OR "nurse midwifery" OR "nurse midwives" OR midwife OR "maternal-child nursing" OR maternity OR obstetrics OR obstetric OR "Maternal Child" OR nursing OR "Maternity Nursing" OR "Neonatal Nursing" OR "Prenatal Nursing" OR "Nurse-Midwife" OR "Nurse Midwife" OR antenatal).**

**Appendix S4. Search strategy Web of Science**

**TOPIC:** (Midwives OR Midwive OR "nurse midwifery" OR "nurse midwives" OR Midwife OR "maternal-child nursing" OR maternity OR Obstetrics OR Obstetric OR "Maternal Child" OR nursing OR "Maternity Nursing" OR "Neonatal Nursing" OR "Prenatal Nursing" OR "Nurse-Midwife" OR "Nurse Midwife" OR antenatal) *AND* **TOPIC:** ("maternity care" OR "Health Care Quality" OR "Quality of Healthcare" OR "Healthcare Quality" OR "Quality of Care" OR "Care Quality" OR "Quality of Health Care" OR "quality of midwifery care" OR "quality midwifery care" OR "midwifery care" OR "quality of maternity care" OR "Antenatal Care") *AND* **TOPIC:** ("Obstetric Labor" OR "Obstetric Deliveries" OR "Obstetric Delivery" OR "Delivery Rooms" OR "Delivery Room" OR "Hospital Birthing Centers" OR "Hospital Birthing Center" OR "Hospital Birth Center" OR "Hospital Birth Centers" OR "Hospital Birthing Center" OR "delivery unit" OR labour OR labor OR "delivery ward" OR "delivery wards")