

Concepts and Dimensions in Continuous Midwifery Care Models Based on the Experiences and Expectations of Stakeholders: A Meta-Synthesis

Azam Bagheri,^{1,2} Masoumeh Simbar,^{3,*} Mansoureh Samimi,⁴ Fatemeh Nahidi,⁵ Hamid Alavi Majd,⁶

Narges Eskandari,⁷ and Fateme Abbaszadeh²

¹Nursing and Midwifery School, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Trauma Nursing research Center, Kashan University of Medical Sciences, Kashan, Iran

³Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

⁴Department of Gynecology and Obstetrics, Kashan University of Medical Sciences, Kashan, Iran

⁵Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran

⁶Department of Biostatistics, Faculty of Paramedical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

⁷School of Nursing and Midwifery, Qom University of Medical Sciences, Qom, Iran

*Corresponding author: Masoumeh Simbar, Department of Reproductive Health and Midwifery, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Tel/Fax:+98-21 88202512, E-mail: msimbar@sbmu.ac.ir

Received 2015 November 09; Revised 2016 October 15; Accepted 2016 October 24.

Abstract

Context: Pregnant women's have access to different models of care especially to those who provide continuous care and this is one of the recommendations of the world health organization (WHO) for promoting maternal health. Moreover, to provide adequate services in care models, the experiences and perceptions of mothers, providers of prenatal care, and other stakeholders should be taken into consideration.

Objectives: A systematic meta-synthesis was carried out to inquire into the findings of some qualitative studies aimed to explore the concept and dimensions of continuous midwifery care including experiences, perspectives and perceptions of engaged people.

Data Sources: This study was the first step of an action research designed to develop a midwifery model of care. Qualitative research articles published between 2005 and 2015 on experiences, attitudes, expectations and opinions of stakeholders in models of midwifery care were collected from Google scholar, Elsevier, and PubMed databases.

Study Selection: Following the various stages of the scrutiny of the abstracts and contents of the collected articles, five faculty members finally selected 21 qualitative research articles as eligible for inclusion in the meta-synthesis.

Results: The findings of meta-synthesis showed that continuous midwifery care for pregnant women as a highly important process revolves around at least five basic themes: continuity of care, compliance with needs satisfaction levels, regulation of care environment, and the philosophy of providing continuous care.

Conclusions: Given the importance of access to healthcare as a right for pregnant women and given the key role of continuous midwifery care in health promotion and maternal satisfaction, it is suggested based on the results of the study that rigorous local and national research in this area to be carried out so that adequate models of continuous midwifery care can be designed and implemented based on the findings.

Keywords: Midwife-Led Care, Continuity of Care, Midwifery, Continuum of Care

1. Context

In today's world, midwifery care is provided following two general approaches, namely, the biomedical approach and the midwife-oriented approach (1). In the former approach, the philosophy of care is that pregnancy and delivery are medical conditions and that expert care reduces possible risks in these conditions. In the midwife-oriented approach, however, the midwife is considered to be the leader of a team that plans, organizes, and administers all the necessary care from the beginning of pregnancy un-

til the postpartum period (1, 2). Only when necessary, and under risky conditions, does the midwife organize the visits to a doctor in the latter approach. In this model of care, women are actively engaged in the care giving process and pregnant women accountably participate in assessing needs, in planning the necessary care, and in referral when deemed necessary (1, 3).

Today, in many parts of the world including Iran, midwives are the main providers of primary care during pregnancy and childbirth (2). During the last decade, midwives in Iran have assumed a central role in continuous mid-

wifery care (CMC) because of the implementation the family physician program and development of primary health care in the country. Because of this, maternity care has been merged with primary health care and midwives are now mainly responsible for presenting services to pregnant women. Although continuous care is one of the most important goals of this program, it has not so far been described adequately (4). The benefits of midwifery care models have been clarified from many aspects in the related literature. Research has shown that the experience of the midwifery care model increases women's confidence and strengthens their belief in natural childbirth (5). Another study has introduced; conditions of the delivery room, perceived stress, and low-quality care as the main factors in choosing caesarean section (6). Decreases in the use of episiotomy, anesthesia, analgesia, instrumental delivery, and induction, as well as increases in the probability of spontaneous physiological delivery are but some of the benefits of midwife-oriented care (2). Despite the long history of midwifery practices in Iran, the experience of continuity in maternity care is relatively new. Sehati as a sample study has shown some advantages of continuity such as lower induction and more satisfaction (7).

Continuation is one of the fundamental principles in health care systems (8). Research has vividly shown that lack of continuity in providing care can lead to pregnant women's dissatisfaction and to an increase in unnecessary interventions (2, 9). In continuous care models, women are at the heart of the process and feel to be able to exercise control over what happens during pregnancy and childbirth. They are in constant contact with their care providers. This type of care fosters honesty, ongoing communication and accountability (10).

The provision of comprehensive continuous care during pregnancy is essential. World health organization (WHO) recommends that in areas where there is a greater coverage of healthcare services, a more leading role has to be given to midwives (11). Although continuous care is one of the most important goals of primary health care (PHC) programs, it has not received adequate attention and there is no specific description for continuous care in Iran that can be used for designing a continuity package (4, 12). Scholars present different definitions of continuity. In one study researchers claimed that the most important defining aspect was the communication between pregnant women and their caregivers aimed at building trust (13-15). Continuity has also been shown to be three types: informational, relational and management (10). Some studies on continuous care during pregnancy have highlighted different aspects of care such as continuation of care over time, continuation of care in shifting conditions, continuous access, consistency with the needs of in-

dividual woman, and psychological support (9, 15-18). To some extent pregnancy is a natural phenomenon needing no intervention (19). Because of the prevalent controversies in the descriptions of continuous care in maternal services midwife-led care with continuous care in Iran, we designed an action research study to develop a CMC model. In the first step of the study, we performed a systematic meta-synthetic study, the results of which are presented in this article.

2. Objectives

This study was carried out to answer the following questions:

1. What does the concept of continuous care in pregnancy mean?
2. What are the conceptual dimensions of continuous care in pregnancy?

3. Data Sources

This study was a meta-synthetic research that was carried out to combine the results of qualitative studies on continuous midwifery care to provide a greater knowledge of the subject (20). However, due to the lack of studies on the theme of continuous care in Iran, we had to do a meta-synthesis of studies done in other countries. In the present meta-synthesis, qualitative research articles published between 2005 and 2015 on the experiences, attitudes, expectations, and perceptions of managers, midwives, instructors, students, mothers and their partners were retrieved from databases including Google scholar, Elsevier, and Pubmed. In order to facilitate the search, the MESH system was used and related keywords and phrases were selected.

4. Study Selection

Some international databases were searched using a search strategy for finding the articles with keywords including (Continuity) OR (continuous care) OR (Midwife-led care model) AND (pregnancy, postpartum, labor, prenatal) AND qualitative method or approach. The search in other databases using a strategy for finding articles with the main keywords in combination with others. In the next stage, papers were selected if they met the following inclusion criteria:

1. They studied low-risk pregnancies and participants did not suffer from any disease;
2. It was possible to download the full-text of the article through the electronic library of medical universities;

3. They were published in English;
4. They used a qualitative approach in the study; and
5. They clearly reported results on the participants' perceptions

5. Data Extraction

Sandelowski, Docherty and Emden believed that the qualification of studies must not be as a factor in the selection of the study for meta-synthesis. However, if the researcher is interested in assessing the quality of studies it is possible to use some criteria agreed on, in advance (20). We used a tool made by a researcher that included 21 items. The items were grouped in 5 main domains: (1) research team and reflexivity, (2) study design (3) data analysis and reporting (4) usefulness to synthesis (5) importance of the findings for the purposes of this study.

The studies were first independently assessed by the first author and then a part of the studies were rated by a second author, until a consensus was reached on the content of the meta-synthesis. Finally, the selected articles summarized as the name of authors, publishing year, aims, methodology and main findings that it shows in Table 1. No studies were excluded due to the quality of the critique.

In order to verify the eligibility of the selected articles for inclusion in the meta-synthesis, five faculty members with specialization in midwifery willingly cooperated and discussed the criteria.

5.1. The Combination of Data and Statistical Analysis

The selected articles were carefully read. Core concepts, categories and subcategories reported for CMC were listed. So far, no standard methods for doing meta-synthesis have been reported and everything depends on the aim and design of the study. Therefore, in this study descriptive analysis and re-analysis with minimum intervention was used to synthesize metaphors in the original studies (20). After the listing of categories, sub-categories, and themes, statements made by the participants were carefully read and categorized. Finally, the researchers analyzed the results comparatively and developed a final classification of emerging themes.

The study was supported financially by Shahid Beheshti University of Medical Sciences (number of proposal: 6606). Confirmed by ethical committees of Kashan and Shahid Beheshti universities of Medical Sciences (number of ethical committee letter: 4919, 28/10/1393).

6. Results

In the first review, of 1053 articles obtained in the initial search, 257 were removed because they were duplicate

reports retrieved from different databases. In the second review of the remaining 796 articles, 741 were found which were not directly related to our research questions or did not offer clear and sufficient data required by our tool and were therefore removed. In the third step, studies targeting specific groups such as mothers with AIDS, diabetes, etc. were withdrawn and ultimately, with the elimination of studies not meeting other inclusion criteria, 21 papers were selected (see Figure 1).

The qualitative studies used in this meta-synthesis were carried out in Australia, the United Kingdom, Norway, Pakistan, Belgium, Sweden, Netherlands, some states in America, and China. They used varying methods including ethnography, exploratory, content analysis, and phenomenology.

Considering the results of this study, CMC was considered as a highly important and multi-dimensional concept. Generally, CMC points to a very powerful, comprehensive, sensitive and responsive relationship between mothers and their known care provider that is shaped through a long period, starts before pregnancy, continues during several fertilizations, changes with women's needs and does not stop with changes in the environment of the treatment. The main findings of the studies that are related to the concept of CMC are summarized in Table 1.

The analysis of the findings of the selected studies and the coding of the concepts revealed five themes: continuity of the care, conformity with needs, satisfaction, the quality of care, and the philosophy of providing care. Table 2 summarizes these themes with their sub-categories.

6.1. Continuity of the Care

Continuity of care refers to continuous accessibility of qualified staff that tends to be in contact with women all the time. Maternal care must start before pregnancy and continue. If the place of care is changed consistency must be preserved for example, a care provider must be present in the hospital and stay there until mothers feel safe.

6.1.1. Continuous Availability of Care Staff

Results showed that the concepts of continuity of staff and continuity of care are similar. It is ideal to provide Consistent approaches in the same place and with the same health care providers (9, 17, 23). A multiparous woman said the following after delivery:

"I like just to have one on one contact with the one person that knows everything, such as what's going on with me, and so we don't get mixed information with other people(9).

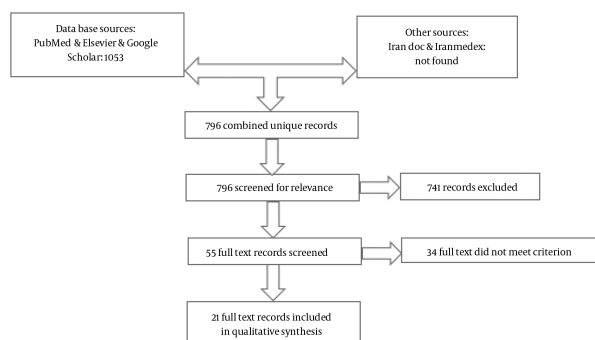


Figure 1. Flow Diagram of the Study

Table 2. The Analysis of Themes in Studies on Continuous Midwifery Care

Main Themes	Themes Extracted From Selected Studies	Subcategories
Continuity of the care		
	Continuous availability of care staff	Consistency (9), familiarity (17), non-judgmental attitudes (9), professional competencies (15, 18), not considering care as duty (9), non-stop availability of the midwife (14, 17)
	Continuity in relationships	Tendency to relate (21), relationship with trust (13), accountability (22), open relationships (23), satisfaction (16)
	Continuity of the information	The continuous provision of information by an expert midwife (9, 15, 23)
	Temporal continuity	Linking pervious care services to present ones (22), continuing care (9), planning and preparation for delivery and for pain reduction (24), full-time accessibility of the midwife (22)
	Continuity in changing locations	Continuing care when locations change (8, 9)
Conformity with needs		
	Individuality of care	The focus of care on each woman's needs (17), participation in decision-making (23), informed decision-making, bilateral cooperation (25), friendliness and sense of having a voice (8)
	Community, family-oriented care	Family access to midwives (26), the possibility for family members of visiting, visits in home and family settings, tendency to support the family after delivery, family's knowledge of the midwife (8, 23-25)
Satisfaction		
	Satisfaction with relationships	Kind, patient, cooperative, informing, friendly, encouraging, entrusting, soothing skillful, polite relationships between pregnant women and all other medical staff (16, 17, 23, 27)
	Satisfaction with care quality	High-quality, comprehensive, beneficial, constructive, evolutionary, and cost-effective care, experience, fostering self-confidence, sensitivity, foresee ability, coordination (8, 9, 13, 23)
Regulatory of the care environment		
	Internal qualification	The importance of resources and facilities, overcoming workplace problems and work overload, shortage in staffs, quality of food, waiting time, enough time in each visit, sufficiency of laboratory tests, advance preparations (9, 16, 18, 25)
	External qualification	Suitability to cultural norms, understanding religious needs such as Halal food, the role of cultural beliefs, social acceptability of care, risk avoidance, cultural changes (19, 25-30)
The philosophy of providing care		
	Accepting natural delivery	Pregnancy is not a condition; it is the natural responsibility of a woman; she requires nothing but pain reduction; she needs non-medical attention; pregnancy is not a medical problem and each woman is just like all other normal pregnant women (18, 19, 30)

6.1.2. Continuity in Relationships

The theme of continuous trusted and warm relation between providers and women was confirmed in several

studies (13, 14, 17). When there is such relation, women can fulfill their individual needs. They can trust their caregiver

thoroughly and this feeling of relaxation transfers not only to mothers but also to their family. One of the targeted women pointed:

“Yes, I knew her. That was reassuring. She was there for me. She was there like a pillar of support all the time and I am glad that I knew her. That there was a familiar face, at least. You are scared; after all, you have no idea what you are going in to (13).

6.1.3. Continuity of the Information

Women are hesitant about repeating their history. This means that when care providers don't know them, they may be missing information or mistake. A healthcare provider must have access to health information. Consistency of information made available during pregnancy is also important for women (13, 15, 17, 22). It means that care providers should know what happened the last time to manage correctly. A multiparous woman said:

“Having the same person throughout the pregnancy definitely was important one that knows the health record of myself and the babies so you don't have to get switched around all the time and then have someone make a mistake (17).

6.1.4. Temporal Continuity

As results of this study, continuity across different pregnancies, along different time periods in one pregnancy from prenatal to postpartum and even from one visit to another visit is important (9, 14, 18). A woman in a study said:

“My first delivery was an emergency caesarean after 14 hours of labor. And I wanted to have a vaginal birth for the second. So I believed I would get the best chance at a trial of labor if I visit the same doctor that I visit the first time, which I did. And we had a non-eventful drug-free, no problem second labor, yeah” (9).

6.1.5. Continuity in Changing Locations

Women have a desire for continuity of care providers across multiple geographical settings to enable a healthcare provider to ‘follow’ a woman across different locations. They said the care interrupts when women are transferred between hospitals, or leave their communities to give birth in a referral center. They want health providers to keep some connection with their ‘home environment’ (6, 16, 22). One of the participants said:

“I feel that the presence of the same midwife during pregnancy, labor room, and in the ward will give more satisfaction and happiness” (16).

6.2. Conformity With Needs

Needs change along pregnancy and are affected by family, community, women's and their babies' conditions. Continuity of care must address all needs. In this respect, two subcategories are discussed:

6.2.1. Individuality of Care

Regarding women as the main focus of the care plan is very important. Having one person all to oneself, having someone there just for me was uttered as the need. Apparently, it makes sense to keep the focus on women's individual needs. As most studies stress continuous midwifery led-care must be woman-centered to empower them and to help them to participate in decision making (16, 17, 25, 28). A Student midwife said:

“I think for me, continuity has brought home woman-centered care, it's obviously what women want, and it's really nice to be able to provide that, you understand that, because you've got the relationship with this woman, and you want to build this relationship, for me it was about that” (28).

6.2.2. Community-Oriented Care

We found that continuous care is community and family-centered with some connection to women's ‘home environment’. Women view this connection as very important because of making ties with families and community. Continuous care from pregnancy to postpartum suit different needs that arise during time and may be different in various health policies, communities, cultures and populations (17, 19, 29, 30). Continuous care was also very important for the men. One pointed out:

“She's famous, yes she's famous because my sister-in-law told me she had a baby with her yes, so all the family know her!” (17).

6.3. Satisfaction

One of the most important aspects of continuous care is the satisfaction of caregivers. It includes two subcategories:

6.3.1. Satisfaction With Relationships

This theme pointed to factors that finally made a type of holistic satisfaction from care providers with characteristics such as kindness, patience, cooperativeness, informing, friendliness, encouragement, trust, soothing skillfulness, and polite relationships with pregnant women and all other medical staff. The theme came out of comments by participant in several studies: she was for me, she was my midwife, and it was fantastic! And it isn't important how system is (15, 16, 31).

6.3.2. Satisfaction With Care Quality

Care quality deals with developing confidence, trust and a feeling of safety because of receiving high quality of care. Continuous care must be comprehensive, responsiveness and sensitive enough to be cost-effective and beneficial (17, 28, 29). One of the women not having continuous care described how she felt in labor.

“This is different ones and that’s horrible. You get used to one face and then another face comes in and it’s like ‘Oh please no It is not good seeing different faces and different hands touching you all the time you feel a piece of meat” (17).

6.4. Regulatory of Care Environment

This means that the organization of the internal and external environment should demonstrate very high consistency. The original key in this section is qualification of care. We categorized this into two subcategories:

6.4.1. Internal Qualification

Various aspects of the organization and environment of care can lead to both positive and negative experiences. Limited resources and facilities lead to untrusted behaviors and interruption in care with long waiting for antenatal visits, busy staff and shared rooms in hospitals, short visiting hours and quality of hospital food (18, 23, 25). Women expressed desires to have a home-like environment and had said:

“I don’t like hospitals. The delivery ward should therefore be nice looking and as homelike as possible” (18).

6.4.2. External Qualification

Attention to cultural, social and educational circumstances of care is a main concept in providing continuous care. Issues of language, migration, religion, adaptation and cultural believes are very important (16, 19, 25). One of the participants had said:

“People usually do not have awareness about the sister care, whereas it is important that they should be aware about this facility. So if anybody who cannot afford to go to a doctor, she can come here for the sister care” (16).

6.5. The Philosophy of Providing Care

This is one of the most basic themes in CMC. We must consider pregnancy and birth as a valuable physiologic and natural condition. It isn’t a disease and there is no need to have medical over-attention unless there is high risk criteria (15, 18, 19, 30). In one study, it was pointed out:

“Always intervening and everything, well, bending things to their will, and well, if it is pathology, you have to do that, but please do not let your normal birth develop

into pathology. They have a huge responsibility, but they should actually be focusing on pathology which they are trained for” (30).

7. Discussion

Considering the results of this study, CMC was reconsidered as a highly important, multi-dimensional and very specialized model of care which might affect the outcome of pregnancy and birth. We found five original themes including continuity of the care, conformity with needs, satisfaction, the quality of care, and the philosophy of care providing. Although a number of studies highlighted the importance of relational, management and informational continuity (9, 10), we found that continuity is only one of the midwifery care themes among the other variables such as relational and informational continuity. Depending on the specialty of maternity care, the continuity of staff and continuous care across the time and location are very important as Mary noted (9). In some of the studies, continuity of relationship-especially across pregnancies was defined as the same as a desire to know and be known by the care providers (21, 26) that would result in a feeling of safety (8) and continuous quality relationships between client and care providers (14).

In the present study, the conformity with needs was emerged as a basic theme. Of course continuous care models must be community, family and individual oriented, every change in the caring system might affect the needs and therefore, all the care plans should be flexible. Some of the studies considered the individualization of care as a main factor in the process of CMC, so that care providers can meet the people’s or the families’ specific needs (9, 17, 19, 26).

Data Analysis in this study highlighted satisfaction as the third theme in CMC. Patient satisfaction is a crucial issue in all of the healthcare systems. Factors affecting satisfaction varies among people. A woman was satisfied when the meat used in the hospital food was Halal while some others made a connection with the quality of care and characteristics of caregivers. Mothers surveyed in the targeted studies expected that care providers be patient, empathetic, supportive, encouraging, friendly, skilled, respectful, non-judgmental, and professionally up-to-date (9, 15, 18, 25). The women expected to receive comprehensive, affordable, unique, flexible, convenient, and predictable services (14, 17, 28, 32).

We considered the quality of care as an important theme. Several studies connoted to the quality care measures such as allotting sufficient time to patient care, scheduling regular visits, shortening the waiting time, and availability of sufficient resources and facilities (9, 18, 25).

Furthermore, all care providers must be sensitized to the patients' cultural norms and beliefs such as religious tendencies of the clients (i.e. pregnant women). Therefore, midwifery care models should adequately be marketed so that the risk to mothers be decreased or eliminated (16, 19, 25). However, such a combination have not been observed in previous studies, at least of studies selected in this review.

The present study showed that continuous care is a multi-dimensional concept and pregnant women are satisfied with continuous care models and considered them as highly important. In order to establish a system of CMC, the public should accept the pregnancy and childbirth as physiologic rather than medical phenomena. Then authorities should try to plan for continuous care aiming at satisfying community, families and women's needs. Further studies on the features of continuous care in pregnancy, needed and available resources, and country's policies should be carried out. Then, findings of international studies can be implemented to improve the national healthcare systems in the developing countries such as Iran. Then not only the potentials of the midwifery care, but also the potentials of the national healthcare system would be improved.

7.1. Limitations

This review is limited due to the lack of implementation of midwifery care model in Iran during recent decades and also lack of scientific recorded study in the area of midwife-led care in our country, specifically in the context of continuous care during pregnancy.

Acknowledgments

None declared.

Footnotes

Authors' Contribution: Azam Bagheri: searching, selecting of articles and manuscript drafting; Masoumeh Simbar: supervision, critical revision and corresponding author; Mansoureh Samimi, Fatemeh Nahidi, Hamid Alavi Majd, Narges Eskandari, Fateme Abbaszadeh: participating in evaluation of articles, selecting codes and analyzing.

Financial Disclosure: This article was supported by a grant no 6606 Shahid Beheshti University of Medical Sciences research council.

Funding/Support: This study was part of a PhD thesis of reproductive health which granted by the research deputy of Shahid Beheshti University of Medical Sciences (No. 301/3153, 2014/6/22).

References

1. Rooks JP. The midwifery model of care. *J Nurse Midwifery*. 1999;**44**(4):370-4. [PubMed: 10466283].
2. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database Syst Rev*. 2013;**8**:004667. doi: 10.1002/14651858.CD004667.pub3. [PubMed: 23963739].
3. Anne Moore RNR. Pioneering a new model of midwifery care: a phenomenological study of a midwifery 2009. Available from: <http://dlibrary.acu.edu.au/digitaltheses/public/adt-acuvp288.11032011/02whole.pdf>.
4. Department of Health . Health reform plans and performance Ministry of Health and Medical Education; 2015. Available from: <http://health.behdasht.gov.ir/page/politicsandprograms>.
5. Fenwick J, Hammond A, Raymond J, Smith R, Gray J, Foureur M, et al. Surviving, not thriving: a qualitative study of newly qualified midwives' experience of their transition to practice. *J Clin Nurs*. 2012;**21**(13-14):2054-63. doi: 10.1111/j.1365-2702.2012.04090.x. [PubMed: 22672463].
6. Bagheri A, Masoudi Alavi N, Abbaszadeh F. Iranian obstetricians' views about the factors that influence pregnant women's choice of delivery method: a qualitative study. *Women Birth*. 2013;**26**(1):45-9. doi: 10.1016/j.wombi.2012.09.004. [PubMed: 23083642].
7. Sehati F, Najarzade M, Rasooli ES, Zade VZ. The effect of continuity of midwifery care during the length of labor and delivery. *Iran J Nur Midwife Res*. 2009;**4**(15):13-8.
8. de Jonge A, Stuijt R, Eijke I, Westerman MJ. Continuity of care: what matters to women when they are referred from primary to secondary care during labour? a qualitative interview study in the Netherlands. *BMC Pregnancy Childbirth*. 2014;**14**:103. doi: 10.1186/1471-2393-14-103. [PubMed: 24636135].
9. Jenkins MG, Ford JB, Todd AL, Forsyth R, Morris JM, Roberts CL. Women's views about maternity care: how do women conceptualise the process of continuity?. *Midwifery*. 2015;**31**(1):25-30. doi: 10.1016/j.midw.2014.05.007. [PubMed: 24861672].
10. Haggerty JL, Reid RJ, Freeman GK, Starfield BH, Adair CE, McKeendry R. Continuity of care: a multidisciplinary review. *BMJ*. 2003;**327**(7425):1219-21. doi: 10.1136/bmj.327.7425.1219. [PubMed: 14630762].
11. World Health Organization . Strategic directions for strengthening nursing and midwifery services 2011-2015 World Health Organization,; 2010. Available from: http://www.who.int/hrh/nursing_midwifery/en.
12. Department of Health . Ministry of Health and Medical Education; 2016. Available from: <http://www.behdasht.gov.ir>.
13. Aune I, Dahlberg Msc U, Ingebrigtsen O. Parents' experiences of midwifery students providing continuity of care. *Midwifery*. 2012;**28**(4):372-8. doi: 10.1016/j.midw.2011.06.006. [PubMed: 21764190].
14. Dahlberg U, Aune I. The woman's birth experience—the effect of interpersonal relationships and continuity of care. *Midwifery*. 2013;**29**(4):407-15. doi: 10.1016/j.midw.2012.09.006. [PubMed: 23399319].
15. Fereday J, Collins C, Turnbull D, Pincombe J, Oster C. An evaluation of Midwifery Group Practice. Part II: women's satisfaction. *Women Birth*. 2009;**22**(1):11-6. doi: 10.1016/j.wombi.2008.08.001. [PubMed: 18926788].
16. Anwar S, Jan R, Qureshi RN, Rattani S. Perinatal women's perceptions about midwifery led model of care in secondary care hospitals in Karachi, Pakistan. *Midwifery*. 2014;**30**(3):79-90. doi: 10.1016/j.midw.2013.10.020. [PubMed: 24290946].

17. Beake S, Acosta L, Cooke P, McCourt C. Caseload midwifery in a multi-ethnic community: the women's experiences. *Midwifery*. 2013;**29**(8):996-1002. doi: [10.1016/j.midw.2013.01.003](https://doi.org/10.1016/j.midw.2013.01.003). [PubMed: [23415359](https://pubmed.ncbi.nlm.nih.gov/23415359/)].
18. Hildingsson I, Thomas JE. Women's perspectives on maternity services in Sweden: processes, problems, and solutions. *J Midwifery Womens Health*. 2007;**52**(2):126-33. doi: [10.1016/j.jmwh.2006.10.023](https://doi.org/10.1016/j.jmwh.2006.10.023). [PubMed: [17336818](https://pubmed.ncbi.nlm.nih.gov/17336818/)].
19. Carolan M, Cassar L. Antenatal care perceptions of pregnant African women attending maternity services in Melbourne, Australia. *Midwifery*. 2010;**26**(2):189-201. doi: [10.1016/j.midw.2008.03.005](https://doi.org/10.1016/j.midw.2008.03.005). [PubMed: [18653262](https://pubmed.ncbi.nlm.nih.gov/18653262/)].
20. Refaie Shirpak K, Guruge S, Chinichian M. Meta-Synthesis of Qualitative research in Health Sciences. *Iran J Epidemiol*. 2010;**6**(1):51-7.
21. Dove S, Muir-Cochrane E. Being safe practitioners and safe mothers: a critical ethnography of continuity of care midwifery in Australia. *Midwifery*. 2014;**30**(10):1063-72. doi: [10.1016/j.midw.2013.12.016](https://doi.org/10.1016/j.midw.2013.12.016). [PubMed: [24462189](https://pubmed.ncbi.nlm.nih.gov/24462189/)].
22. Barimani M, Vikstrom A. Successful early postpartum support linked to management, informational, and relational continuity. *Midwifery*. 2015;**31**(8):811-7. doi: [10.1016/j.midw.2015.04.009](https://doi.org/10.1016/j.midw.2015.04.009). [PubMed: [25982847](https://pubmed.ncbi.nlm.nih.gov/25982847/)].
23. Kennedy HP, Farrell T, Paden R, Hill S, Jolivet R, Willetts J, et al. "I wasn't alone"-a study of group prenatal care in the military. *J Midwifery Womens Health*. 2009;**54**(3):176-83. doi: [10.1016/j.jmwh.2008.11.004](https://doi.org/10.1016/j.jmwh.2008.11.004). [PubMed: [19410209](https://pubmed.ncbi.nlm.nih.gov/19410209/)].
24. Cheung NF, Mander R, Wang X, Fu W, Zhou H, Zhang L. Views of Chinese women and health professionals about midwife-led care in China. *Midwifery*. 2011;**27**(6):842-7. doi: [10.1016/j.midw.2010.09.001](https://doi.org/10.1016/j.midw.2010.09.001). [PubMed: [20933311](https://pubmed.ncbi.nlm.nih.gov/20933311/)].
25. Shafiei T, Small R, McLachlan H. Women's views and experiences of maternity care: a study of immigrant Afghan women in Melbourne, Australia. *Midwifery*. 2012;**28**(2):198-203. doi: [10.1016/j.midw.2011.02.008](https://doi.org/10.1016/j.midw.2011.02.008). [PubMed: [21458892](https://pubmed.ncbi.nlm.nih.gov/21458892/)].
26. Homer CS, Foureur MJ, Allende T, Pekin F, Caplice S, Catling-Paull C. 'It's more than just having a baby' women's experiences of a maternity service for Australian Aboriginal and Torres Strait Islander families. *Midwifery*. 2012;**28**(4):449-55. doi: [10.1016/j.midw.2011.06.004](https://doi.org/10.1016/j.midw.2011.06.004). [PubMed: [21820775](https://pubmed.ncbi.nlm.nih.gov/21820775/)].
27. Sweet LP, Glover P. An exploration of the midwifery continuity of care program at one Australian University as a symbiotic clinical education model. *Nurse Educ Today*. 2013;**33**(3):262-7. doi: [10.1016/j.nedt.2011.11.020](https://doi.org/10.1016/j.nedt.2011.11.020). [PubMed: [22196076](https://pubmed.ncbi.nlm.nih.gov/22196076/)].
28. Browne J, Haora PJ, Taylor J, Davis DL. "Continuity of care" experiences in midwifery education: perspectives from diverse stakeholders. *Nurse Educ Pract*. 2014;**14**(5):573-8. doi: [10.1016/j.nepr.2014.01.014](https://doi.org/10.1016/j.nepr.2014.01.014). [PubMed: [24766824](https://pubmed.ncbi.nlm.nih.gov/24766824/)].
29. Browne J, Taylor J. 'It's a good thing...': Women's views on their continuity experiences with midwifery students from one Australian region. *Midwifery*. 2014;**30**(3):108-14. doi: [10.1016/j.midw.2013.11.006](https://doi.org/10.1016/j.midw.2013.11.006). [PubMed: [24360768](https://pubmed.ncbi.nlm.nih.gov/24360768/)].
30. Van Kelst L, Spitz B, Sermeus W, Thomson AM. A hermeneutic phenomenological study of Belgian midwives' views on ideal and actual maternity care. *Midwifery*. 2013;**29**(1):9-17. doi: [10.1016/j.midw.2011.10.002](https://doi.org/10.1016/j.midw.2011.10.002). [PubMed: [22079626](https://pubmed.ncbi.nlm.nih.gov/22079626/)].
31. Rolls C, McGuinness B. Women's experiences of a Follow Through Journey Program with Bachelor of Midwifery students. *Women Birth*. 2007;**20**(4):149-52. doi: [10.1016/j.wombi.2007.09.001](https://doi.org/10.1016/j.wombi.2007.09.001). [PubMed: [17951124](https://pubmed.ncbi.nlm.nih.gov/17951124/)].
32. Rawnsdon S. A qualitative study exploring student midwives' experiences of carrying a caseload as part of their midwifery education in England. *Midwifery*. 2011;**27**(6):786-92. doi: [10.1016/j.midw.2010.07.004](https://doi.org/10.1016/j.midw.2010.07.004). [PubMed: [20870321](https://pubmed.ncbi.nlm.nih.gov/20870321/)].

Table 1. Concepts Related to Continuous Midwifery Care Based on Studies Reported Between 2005 and 2015

Author(s), Date, Country	Participants	The Type of Study and Goals	Main Findings
Jenkins, et al. 2015, Australia	53 women aged 18 - 44	A qualitative study to gain an understanding of how women conceptualize continuity of maternity care	Continuous care during pregnancy and childbirth for women is very important. It does not mean the continuous care of a person for each pregnant woman. Providing management, information and relation with a woman during pregnancy should be carried out continuously across pregnancies and across location (9).
Beake, et al. 2013, UK	12 women of different ages between 3 to 6 months after delivery	A qualitative study to evaluate caseload midwifery in a relatively deprived inner-city area	Person-centered care is the central concept which enables care providers to progress from a concept of 'cultural competence' towards cultural safety. Relational continuity and ability to practice help midwives to get to know the women and to respond to their needs in a way that is difficult in busy wards (17).
Shona Dove et al. 2014, Australia	8 midwives, one specialist and 17 pregnant women	A critical ethnography to examine how midwives and women with in a continuity of care midwifery program conceptualized child birth risk	Continuous relationship between midwives and pregnant women is the key to a midwife's success as risk negotiator within the context of continuity of midwifery care (21).
Barimani, and Vikström, 2015, Sweden	18 women and 16 men	A qualitative study to understand how parenting support is related to management, informational, and relational continuity	Management continuity has the greatest impact. Other important concepts include providing continuity especially after discharge, confidence in care and immediate access to care when needed and the availability of someone to answer questions at any time (22).
De Jonge, et al. 2014, Netherland	27 women transferred from primary to secondary care (labor) phases	A qualitative study to explore the experiences of women who were referred during labor from primary to secondary care with regard to continuity of care	Continuity of care contributed to the feeling of safety. Pregnant women expected the original care provider to stay with them until they felt safe. This sometimes lasted until the end of labor (8).
Kennedy, et al. 2009, USA	234 women during the postpartum period	A qualitative study to explore women's experiences with the centering pregnancy model of group	Ongoing relationships with providers, increased knowledge, enhanced self-esteem of women and helped them adapt to physical changes. Higher interaction with health workers and spending more time and higher privacy needed (23).
Dahlberg, and Aune, 2013, Norway	23 women after a continuity of care model	A retrospective qualitative study to gain a deeper understanding of how relational continuity in the childbearing process may influence the woman's birth experience.	Continuous relation and relationship quality are two key elements in creating a positive experience in obstetric care model. The positive experience of labor is affected by clinical outcome as well. The positive effects of continuous relation are hidden and difficult to measure (14).
Anwar, et al. 2014, Pakistan	10 women who have availed of midwifery led model of care	A qualitative exploratory approach to explore the perceptions and experiences of perinatal women who have availed of midwifery led model of care	Midwife-led model of care is person-centered and meets the needs of women, thus leading to increased satisfaction. Even though the feeling of satisfaction is achieved in the shadow of high interest midwives in women's health, continuing care, and cost-effectiveness positive birth outcomes (16).
Browne, et al. 2014, Australia	354 completed surveys about continuity experiences	A qualitative study to understand women's experiences of their continuity relationships with midwifery students	Described that it will recommend to other friends. Such a program of CMC leads to increased professional credibility and acceptance in society (29).
Hildingsson, and Thomas, 2007, Sweden	responses of 827 pregnant women to an open question	A qualitative survey to obtain women's opinions about what is important to them during pregnancy and birth	Pregnancy is not a disease but like other recipients of primary healthcare and prevention, a midwife is an alert and active participant, so care should be a person-centered approach to development (18).
Shafiei, et al. 2012, Australia	Forty women four months after birth	A mixed methods design to explore immigrant Afghan women's views and experiences of maternity care in Melbourne, Australia	Person-centered care plan is worthwhile and a high quality interaction between the pregnant woman and her care provider is the most important issue. She must attend in all visit sessions (25).
Fereday, et al., 2009, Australia	120 women who received midwifery group practice	A qualitative content analysis to explore the effectiveness of MGP, and reports on women's satisfaction with the model of care	The most significant aspect of care model that had a positive impact on satisfaction was the ability to communicate meaningfully in continuous care provided by a midwife obstetric who understands needs, regularly provides information and recommendations in order to satisfy the needs (15).

Rolls, and McGuinness, 2007, Australia	Seven women who had a midwifery model care	An exploratory descriptive design to explore the experiences of women involved with bachelor of midwifery, students enrolled at Australian Catholic University	Showed support and constant relation between students and pregnant women to enable them to plan for their delivery. Building trust and respect for women's empowerment increases the sense of control (31).
Ngai Fen Cheung, et al. 2010, China	30 women, five midwives and five medical staff who involved with the midwife-led service	A qualitative study to explore Chinese women's and health professionals' views of the first midwife-led normal birth unit in China to facilitate normal birth and enhance midwifery practice	The concept of two to one, meaning two caregivers to a pregnant woman was extracted from the continuous care model (one supporter and one primary caregiver). This model can lead to increased empowerment of women in the physiological and normal birth (24).
Carolan, and Cassar, 2010, Australia	18 pregnant African-born women	A qualitative study explore the experiences and concerns of an African-born sample of pregnant women receiving antenatal care	Pregnancy and childbirth from the perspective of women covered by the study does not require special care. Women's experiences differ with cultural background, residential status, educational level and prior experiences (19).
Aune, and Olufsen, 2012, Norway	eight women and five men	A qualitative study to gain knowledge and a deeper understanding of the value attached by parents to relational continuity	The most important themes in the process of pregnancy and childbirth were the trust created as a result of continuous relationship with the passage of time and lead to empowerment. It was valued when continued after delivery (13).
Browne, et al. 2014, Australia	15 student midwives, 14 midwives and six managers	A qualitative study for better understanding and optimizing experiences of continuity experiences incorporating diverse stakeholder perspectives	Midwifery student involvement in the continuous care of mothers is a unique experience to learn the practical skills of midwifery. The most prominent theme was the model's woman-centered quality (28).
Sweet, and Glover, 2013, Australia	20 graduated students that completed the Bachelor of Midwifery	A qualitative study to identify strengths and weakness of a midwifery continuity of care program	Continuous care model results in the development of values and professional skills of midwifery students. With a strong focus on the relationship between students and pregnant women practical possibility of early exposure to learning is created (27).
Van kelst, et al. 2013, Belgium	12 midwives, of non-university hospitals and conducting home births	A qualitative hermeneutic phenomenological study to explore midwives' views on ideal and actual maternity care	Approach an ideal maternal care during pregnancy and childbirth duo to the acceptance of normalcy of pregnancy and women- centeredness. Medical intervention is the end of the process. Intervention is based on basic cultural developments in modern societies (30).
Homer, et al. 2012, Australia	Seven mothers and babies from Aboriginal and Torres Strait Islander	A descriptive study using quantitative and qualitative approaches to evaluate the perspective of the women who accessed the maternal service	Continuing care facilitates women's access to care, care providers, trust and relationships (26).