Original Article

Designing, implementing and evaluating the education program 'tele- continuing postpartum care' in the family health internship of master's midwifery students

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Abstract

Background & Objective: Changing the type of care in the family health internship curriculum towards continuing care programs can lead to the development of the professional identity of learners. This study was conducted with the aim of designing, implementing and evaluating a tele-continuous care program after delivery for midwifery students.

Materials & Methods: In this educational process, each student under the direction of the support team was responsible for the continuing care of his client for 6 weeks after delivery. The program was designed based on Taylor's curriculum development model and the evaluation of learners was done by qualitative interviews and completion of portfolios during the course at two levels of reaction and learning Kirkpatrick's model.

Results: Data in the three main categories was categorized as "learning", "continuous care" and "health provider" with sub-categories include new concept of postpartum period, knowing more about the profession of midwifery, improving communication skills with the client, strengthening the student's self-confidence, eagerness to learn, new experience of taking history, not being judged by others, daring to ask questions, synergy of knowledge, walking in mother's shoes, increasing intimacy, anticipating upcoming issues, availability, ability of follow-up, sense of pleasantness, sense of support, earlier familiarization of the client with the conditions ahead, trust of the client and more motivation to provide service.

Conclusion: It appears that placing midwifery students in a continuing care model will provide them the opportunity to experience a rich holistic learning.

Keywords: Continuity of Patient Care, Curriculum, Postpartum Period, Midwifery

Introduction

Continuum of care was first used in the 1970s with the aim of caring for the elderly, but in the following decades, its use in all chronic conditions requiring care has been widely expanded (1). Continuity of care emphasizes the individual needs of the patient. The concept of continuity for the patient and their family is that the caregivers may already know what has happened and agree on a managed care plan. The same caregiver who is familiar with them will take care of them in the future and provide them with sufficient knowledge and information (2).

Continuous care training programs lead students from performing only one procedure and one-way care to the comprehensive interactive care of the patient (3). By practicing continuous care, students experience meaningful learning and collaborative skills (4). In the continuous care training, students gain a unique experience of understanding the physical, psychological and emotional needs of the client. Other benefits of this training are as follows: reducing stress and increasing self-efficacy, changing their career approach towards health promotion, experiencing holistic care, increasing interpersonal skills, increasing professional performance, increasing self-confidence in service delivery, deeper learning, more responsibility in professional learning, professional identity formation,

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receiving feedback from clients and learning from different situations (5-7).

The follow-up process is considered as one of the most important learning techniques for learners (7). In the current clinical education, when the patient is discharged, observing the treatment process and the possibility of his follow-up is assigned to the student (5-7). One of the main obstacles is the difficulty of coordinating follow-ups and home care visiting programs for students (7). Patient follow-up at home and outside the clinical environment provides the possibility of comprehensive care (4).

Given the provision of services to women during critical periods of their lives, such as puberty, pre-pregnancy, pregnancy and childbirth, therefore, midwives are confronted with long-term care. Therefore, there is a need to design educational programs based on continuous care during the education period (4, 8-9). During the continuing care program, maintaining a long-term relationship with the mother and her family makes it possible for the student to directly face the change in the lifestyle of the mother and her family. In addition, the student can observe the efficacy of education, counseling and therapeutic interventions. In other words, with the continuous care due to engage the student in the client's life habits and family relationships, her understanding of the social aspects of midwifery increases (10-12). By experiencing continuous care, the student does not consider the patient as a tool in education and has a sense of belonging in the care team (13).

Currently, most of the educational programs, medical science is based on non-continuous care of patients and clients, and also it enables the learners to take care of patients in acute conditions, but it does not fully prepare the learners for the management of chronic conditions, and continuous improvement through teamwork (14-15). The conventional curriculum is based on a physician-centered learning environment and relies on the acquisition of academic knowledge in the classroom or clinic. Changing the current curriculum towards continuing care programs leads to the development of the professional identity of learners (14-16). In the current training program, students are missing the continuous process of counseling a client. In each training session, they face clients who were not aware of their problem in the process of the previous sessions, and they only experience guiding one counseling session with that client (12).

Taylor's curriculum model is a response to growing concerns about learner accountability in education and has dominated curriculum planning since its publication. Through its clear and precise objectives, this model provides a clear direction for the entire curriculum development process. By providing a sequential step-by-step approach, it reduces the complexity of the difficult task of curriculum planning and development. Taylor's model is good for tasks where there is a direct relationship between what teachers want learners to be able to do and the activities they need to engage in to achieve those outcomes. Taylor outlined the sources of his goals, specific learners and their needs, experiences, and abilities (17). Therefore, in this study, considering the development of Tyler's curriculum model, we attempted to design, implement and evaluate a tele-continuous care program for mothers who had given birth, starting from the post-partum ward and continuing for 6 weeks after delivery at home.

Materials & Methods

Design and setting(s)

This scholarly research was compiled, implemented, and evaluated in Alborz University of Medical Sciences.

Participants and sampling

All students who were in the second semester of a master's degree in midwifery participated in the training program for family health internship during 2021 and 2022.

Data collection methods

The present study was conducted in three stages:

1) design, 2) implementation, and finally, 3) evaluation of the program.

1) Program design

The continuous postpartum care program designed based on Tyler's model of educational program development (17). According to this framework, the identifying objectives, selecting learning activities for meeting the defined objectives, organizing learning experiences, and evaluating the learning experiences were addressed. To stating the objectives, we considered that the abilities expected of graduates include effective professional communication, critical thinking, problem solving skills, interpretation of findings, evidence-based decision-making, requesting and providing advice, rational prescription of authorized drugs, and follow-up. Now, the students are losing the whole process of counseling for a client and in every work shift, they face clients who were not aware of their problem in the process of the previous sessions and only experience guiding a

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counseling session with that client. Also, the training program for in-person home visits is not included in providing. Considering the current situation, goals were determined during three panel meetings with reproductive health experts. In the second step, the continuous care model, experience was selected among the experiences of clinical training and different care models (such as standard care, care home visiting, conservatories, etc.) (12). In the current curriculum, Family Health Internship is one of the main courses that students are expected to experience the sufficient ability to provide breastfeeding counseling, maternal nutrition, newborn care, sexual health and rehabilitation after completing this course. Considering the available educational facilities, the COVID-19 pandemic and the lack of sufficient infrastructure for remote counseling messaging app, WhatsApp was used for tele- care during 6 weeks after giving birth and also the first in-person visit in the postpartum ward was organized. Finally, the evaluation method of the program was determined by interviewing the students and checking the portfolio (Figure 1).

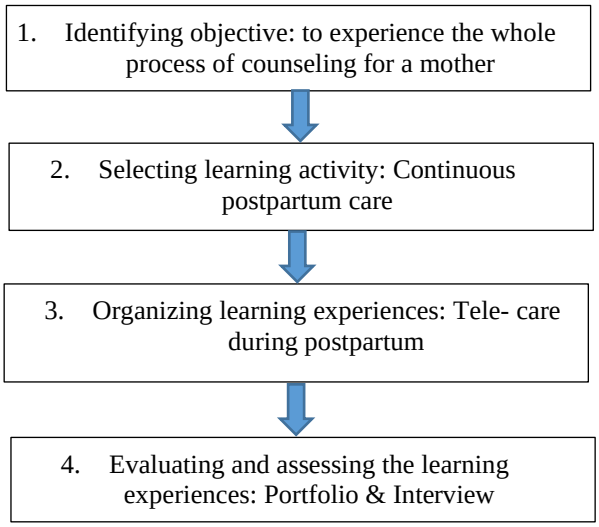


Figure 1. Design of the continuous postpartum care program based on Tyler's model

2) Program implementation

According to the lesson plan developed for this course (see Appendix), the students attended the post-partum ward of the Karaj hospital on the first day of training. After the first visit and breastfeeding counseling, they were given the responsibility for the comprehensive, continuous care based on the needs of each client at home during 6 weeks after giving birth under the supervision of the support team (including the researcher as the instructor of this internship along with one of the experienced personnel caring for the mother). Students undertake a remote and virtualhy visit such as video visit, viewing test results and tracking problems through WhatsApp messenger. In addition, mothers referring to health centers perform a common postpartum care program according to national guidelines. During the care period, the students presenting in a WhatsApp group where the support team was also a member, asked the questions and problems faced by their clients and were not able to resolve them. In this group, the students also shared their experiences.

The study inclusion criteria for clients were as follows: being Iranian, Persian-speaking, having a smartphone and the ability to work with one of the virtual platforms in the mobile phone and residence in the study city during the care. In order to start training, informed consent was obtained from all students and clients.

3) Program Evaluation

Kirkpatrick's model of two levels of reaction and learning were used for evaluation. Among the various methods to check the level of reaction (18), conducting qualitative interviews with learners to explain their views and opinions about the educational program and to evaluate the level of learning (19) completing the portfolio during the implementation period of the program was chosen.

In order to evaluate the program at the level of reaction, the learners' view was investigated with in-depth individual semi-structured interviews and open-ended questions. Participants were asked to describe their experiences of a tele-continuing care program for a family health internship. The following questions were

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used as interview guides: How did you experience postpartum learning during continuous care? How did you experience receiving feedback from mothers who were under your care? How would you describe the strengths and weaknesses of this program? How would you describe your experience of communicating with a client whom you had known for a few weeks? During this study, how would you describe your experience of the presence of the support team by your side during the period of care?.

Data analysis

The process of data analysis was carried out using the conventional qualitative content analysis method in three phases of preparation, organization and reporting (20). In the preparation phase, immediately after the completion of each interview, the recorded interviews were transcript word for word. Then, in the organizing stage, each interview was read several times and after repeated re-reading, semantic units related to the research question were selected and initial open codes were written for them, and 284 open codes were extracted. In this way, the data coded and similar codes were grouped into categories and sub-categories.

In order to ensure the accuracy and robustness of the data, the acceptability, trustworthiness, verifiability and transferability of the data were evaluated using the four criteria of Lincoln and Goba. Allocating enough time for each stage of data collection, data analysis and interpretation was considered in the present study. In addition, the full texts of the coded interviews were given to the participants in order to evaluate the conformity of the concepts (21).

In order to evaluate the program at the level of learning, the instructor reviewed the completed portfolio and feedback was given to the learners. In the designed portfolio, in addition to recording the patient's history, the learners were required to record all the activities and feedback of the action taken during the 6 weeks of continuous care.

Results

All 18 students who participated in the designed continuous care program were interviewed. The participants' characteristics are listed in Table 1. In relation to the evaluation of learners on the response level of Kirkpatrick's model, the experiences of learners after the implementation of long-term care after delivery in the family health internship were explained. In general, in this study, the results were placed in 3 categories and 19 sub-categories. Table 2 lists the categories, sub-categories, and selected codes.

Table 1. Participants characteristics (N=18)

Participant	Age	Marital Status	Birth history	Type of delivery
1	26	Married	No	**-**
2	40	Married	No	**-**
3	25	Single	No	**-**
4	49	Single	No	**-**
5	23	Single	No	**-**
6	37	Married	Yes	**Cesarean**
7	45	Married	Yes	**Vaginal**
8	27	Single	No	**-**
9	41	Married	Yes	**Vaginal**
10	30	Married	Yes	**Vaginal**
11	28	Single	No	-
12	32	Married	No	-
13	26	Single	No	-
14	27	Married	Yes	**Cesarean**
15	25	Single	No	-
16	25	Single	No	-
17	34	Single	No	-
18	28	Married	Yes	**Cesarean**

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Table 2. The results of the content analysis of student reactions to tele-continuous care

Main Category	Sub-category	Selected basic concepts (codes)
Learning	A new concept of postpartum period	1. A concept beyond class 2. Spending with more problems 3. Formation of parental role
	Knowing more about the profession of midwifery	1. Beyond the delivery room 2. To be accepted 3. Full of ability
	Improving communication skills with the client	1.Ease of Communication 2.Effective communication
	Strengthening the student's self-confidence	1. A sense of usefulness 2. Get motivated 3. Reduce embarrassment
	Eagerness to learn	1. Feeling of inadequacy of knowledge 2. Go to study resources 3. A real need to study
	New experience of taking history	1. The role of history in diagnosis 2. Understanding the history
	Not being judged by others	1. The absence of judgment 2. No comparison
	Daring to ask questions	1. Encourage questioning 2. Shedding fear
	Synergy of knowledge	1. Getting to know many new cases 2. High exchange of information 3. Up-to-date resources
Contiuious Care	walking in mother's shoes	
	increasing intimacy	
	anticipating upcoming issues	
	availibilty	
	ability of follow-up	
Health care provider	sense of pleasantness	
	sense of support	
	earlier familiarization of the client with the conditions ahead	
	trust of the client	
	more motivation	

1. Learning

In the category of learning, the students mentioned 9 sub-categories: new concept of the postpartum period, knowing more about the profession of midwifery, improving communication skills with the client, strengthening the student's self-confidence, eagerness to learn, new experience of taking a history, not being judged by others, daring to ask questions and synergy of knowledge. Shows examples of quotations in this regard are shown in Table 3.

Table 3. Examples of quotations, coding and abstraction of category and subcategorise

Category	Sub-category	Primary codes	qutations
Learning	A new concept of postpartum period	A concept beyond class	"In the classroom, when this subject was taught, I did not think that it would challenge me so much in practice" Participant No. 9.
		Spending with more problems	"Unlike other ailments, every day that passed during the postpartum period, the mother faced new issues" Participant No. 3.

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		Formation of parental role	"I realized that this counseling also includes psychological support, such as the role of a parent" Participant No. 8.
	Knowing more about the profession of midwifery	Beyond the delivery room	"Now I understand how many fields a midwife can work in and be effective" Participant No. 9.
		To be accepted	"Until now, I did not think that women trust a midwife so much in their private affairs" Participant No. 6.
		Full of ability	"I just realized the many capabilities of midwifery. I became very interested in my profession" Participant No. 1.
	Improving communication skills with the client	Ease of Communication	"Personally, I could not easily communicate with others. At the beginning of this course, I constantly asked the team, but now I do not avoid communicating with clients" Participant No. 11.
		Effective communication	"Now I can convey my meaning well to my client and I also understand her words correctly" Participant No. 2.
	Strengthening the student's self-confidence	A sense of usefulness	"When the client said how good your advice was, I felt good. My client enthusiastically told me that yes, I really want you to be by my side during this time" Participant No. 4.
		Get motivated	"Every day that I saw the effectiveness of the consultation, I did the care more willingly" Participant No. 13.
		Reduce embarrassment	"I learned not to be shy and to communicate with the client" Participant No. 6.
	Eagerness to learn	Feeling of inadequacy of knowledge	"It gave me the feeling that I should study more and be ready for more questions from the client at any moment" Participant No. 7.
		Go to study resources	"I read and reviewed many topics in my books that I had not opened for a long time" Participant No. 3.
		A real need to study	"It was the first time during my studies that I pursued learning with personal desire and passion" Participant No. 15.
	New experience of taking history	The role of history in diagnosis	"During the course, you told us about the differential diagnosis and taking a complete history, which made me have a deeper insight into the problems of my clients" Participant No. 6.
		Understanding the history	"The history you told us and we asked. Until now, I had not paid attention to the history so closely" Participant No. 14.
	Not being judged by others	The absence of judgment	"It was a good group. I got to know the problems of other clients, which were new to me, and my learning increased. How well the professors explained. Without judgment, they explained the material completely. I even learned without being judged and afraid that they would tell me this before... now I can ask the issues I face" Participant No. 10.
		No comparison	"Being in this course taught me that there is no comparison during training. The goal is to learn and everyone helps each other to provide better care" Participant No. 8.
	Daring to ask questions	Encourage questioning	"It was a great interaction. It was the best learning experience I had. I found the courage to ask questions

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		and I even boldly asked things that I had doubts about" Participant No. 2.
	Shedding fear	"Asking questions face to face was always full of apprehension. But in this course, being in a virtual group gave me the opportunity to ask my questions easily. I saw my other classmates raise their questions very easily in the group. I also learned to ask questions" Participant No. 10.
Synergy of knowledge	Getting to know many new cases	"In this group, I witnessed a high level of interaction between the group members. I had not seen some of the cases that were discussed in the group" Participant No. 11.
	High exchange of information	"In the group, my classmates were raising their mothers' problems, such as bereavement of a baby, deformity of a baby, which I had no experience with. This WhatsApp group made me gain a lot of experience in a short period of time" Participant No. 3.
	Up-to-date resources	"We easily learned new things from new questions that were asked in the group by our friends or professors" Participant No. 12.

2. Continuous care

Five sub-categories such as walking in the mother's shoes, increasing intimacy, anticipating upcoming issues, availability, ability of follow-up was included in the category of continuous care.

2.1 Walking in the mother's shoes

After completing this training program, students interpreted continuous care as walking in mother's shoes.

"… I feel that I was a step by step with the mothers all this time, and it was very satisfying for me" Participant No. 8.

"…Because we taught her step by step about her needs and even the mother is less prone to depression. Well, the people around the mother are not very helpful either" Participant No. 2.

2.2 Increase intimacy

Students considered one of the benefits of being in the care team to be increased interaction with classmates and a sense of intimacy.

"… Interacting with classmates and professors was a very good idea that everyone could discuss a topic even with cases that we had not faced before. Friends' cases gave us a lot of information" Participant No. 1.

"… I used to ask my friends about a lot of things and topics that happen to the mother. We used each other's experience a lot" Participant No. 5.

"… For me, increasing intimacy with professors and classmates was a pleasant experience of implementing this care" Participant No. 10.

2.3 Anticipating upcoming issues

The study participants reported that the difference between this care and the usual care was that they were ahead of the client before a problem happened to the client; they had the opportunity to explain the problem to the clients.

"… In conventional care, when a problem occurred to the mother, she referred. But in this care, before a problem occurred, such as postpartum depression, we explained to her and screened her" Participant No. 10.

2.4 Availability

The participants reported that one of the advantages of this care is being available to the client:

"… It was not necessary for the mother to be visited in person with every problem she encountered. This type of care reduced worries, saved time and money, and brought easier access" Participant No. 6.

2.5 Ability to follow up

The participants reported that one of the main differences between this care and the usual care is the possibility of follow up the client:

"… In the office, a visit was made and the client might be missed. But in this care, we were able to follow up the feedback and see the results of care and solutions" Participant No. 7.

3. Health provider

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Five sub-categories, such as sense of pleasantness, a sense of support, earlier familiarization of the client with the conditions ahead, trust of the client and more motivation to provide the health service were included in the category of the healthcare provider.

3.1 Sense of pleasantness

The study participants reported providing postpartum care service to mothers created a pleasant feeling in them:

"… The period after giving birth is important. An inappropriate experience or a bad memory after delivery leads to long-term negative results, like not wanting to have the next pregnancy. By being present in this care, I was able to create pleasant moments for the mother" Participant No. 13.

"… Continuous care program provided good learning even for her subsequent deliveries" Participant No. 5.

"…Most mothers who have a bad experience of childbirth are especially from the postpartum period. The people around them and their husbands do not pay attention to the postpartum period" Participant No. 8.

3.2 Sense of support

The participants believed that this care made the client bear less stress due to the support provided for the mothers:

"… The first days after giving birth are difficult days for mothers, and they just realize what problems they have to deal with. The problems are related to themselves and their newborn. When there is a companion by their side, who can gain their satisfaction and give them the right guidance, they feel less stressed" Participant No. 7.

"… Mothers are often abandoned during the postpartum period and are not evaluated much, especially for first-time mothers, mothers were very eager to have someone knowledgeable by their side" Participant No. 12.

"… In addition to the post-partum counseling that I gave, I felt that the mother would realize that there is someone she can trust when she is worried and that I would provide good psychological support for the mother" Participant No. 9.

3.3 Familiarize the client with the upcoming conditions

Mothers were less stressed because their caregivers informed them about the things they may face in the coming days:

"… I tried to inform the mothers step by step even before the problem happened. For example, in the case of a mother who said that her daughter's diaper was bloody, I told my client not to worry. I explained the reasons for this incident to her" Participant No. 10.

3.4 Client's trust

The participants felt satisfied that they were able to gain the client's trust in this care.

"… Both establishing a relationship with first-time mom and gaining her trust were difficult. In the post-partum department, it is difficult to communicate with the mother, especially when she has gone through a tension, such as the pain of childbirth, for the mother to trust you. At first, it was difficult for me as a student to start. I want to have the discussion and consultation, especially since in our country we receive many such consultations and it was not a normal routine after childbirth" Participant No. 2.

"… Because we are with the clients for a longer time, a very good trust is established between the consultant and them" Participant No. 10.

"… I didn't think they would trust and ask their questions so soon, even though they only saw me once in the hospital" Participant No. 3.

"… They trusted me, followed my advice, gave me feedback, the help was appreciated" Participant No. 13.

3.5 More motivation to provide service

The treatment of the clients gave the participants a high motivation to continue the service:

"… I made the mother's worries decrease. Even hearing this sentence from the mother that thank you for following up made me happy and motivated me" Participant No. 6.

"A mother has many problems after giving birth, and it is a very good thing for someone to be able to explain her problems and give her peace all the time. Many of their problems do not need to be visited in person. I became very interested in follow-up care" Participant No. 8.

In relation to the evaluation at the learning level of the Kirkpatrick model, the examination of the completed portfilio during the 6 weeks of the program showed that all the learners completed the counseling and follow-up measures completely.

Discussion

This study was conducted with the aim of explaining the experiences of midwifery students after participating in a designed course of continuous postpartum care. The experiences of the learners after this educational program showed the meaningful experience of trust-based communication with clients. They felt more responsible for the gained self-confidence in providing services to

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clients. Receiving constructive feedback during this care has made the relationship between them and mothers closer. The learners in this study expressed their satisfaction with communicating with clients. Participants experienced continuous care based on client-centeredness in a safe and supportive clinical environment.

In line with the results of this study, in the case care model designed by Sidebotham & Fenwick in 2019, the learners expressed a suitable and satisfactory learning experience and expressed the basic duty of a midwife to provide focused care for pregnant women. They considered the experience of establishing effective relationships with women as a unique type of learning. This study showed that there should be no hesitation in adopting a continuous clinical learning model to empower midwifery students to develop related skills and competencies (22). Gray et al. (2016) also examined the experiences of continuous care in the education of midwifery students and explained the continuity of care partnership between a midwife and a patient as having a professional friend. Learners believe that continuity in care over time has created a deeper learning process for them. Learners became more familiar with their knowledge limitations and understood their professional limitations. In this care, the personal development of learners increased visibly. In continuous care, students learning happens in the real environment of the community and in the real client. Clinical learning in continuous care also strengthens his psychomotor and emotional learning by strengthening comprehensive cognitive patterns (23). In the study of Evans et al. (2020), the results showed that during this care, the student starts a dynamic activity along with learning based on the needs of each client. This care has enabled the integration of science and experience during education and has minimized unnecessary referrals (24). In this study, students saw the role of midwifery more prominently than before and paid more attention to their own role as service providers. Arundell et al. (2018) in their review study, which was conducted with the aim of examining the clinical experiences of midwifery students and work culture, introduced continuous care to match the behavior patterns of learners with their role as midwives. Their results showed that due to the flexibility of the continuous care training program, the learning potential is maximized. The practical experience of continuous care of midwifery students during their studies has created enough self-confidence for them after graduation (25). The learners in the study of Flibby et al. (2016) stated that after completing continuous care during their training course, the learners felt more committed to the midwifery profession (26). Also, Yani and Yanti (2019) investigated the effect of continuous care on the improvement of the cognitive, emotional and psychomotor areas of learners and reported that the comprehensive metacognitive ability grows during this care because it is exposed to more responsibility and is in a position to make decisions and plan care. . In addition, learners are able to observe the working realities of the midwifery profession. They are able to clearly see how midwives can work flexibly and manage their workload around family and other obligations they have (27).

In the present study, learners placed in the care team position considered it a positive experience because they were able to share their experiences and thoughts with each other. In addition, participants in the continuous care model had their learning enhanced because they gained valuable mutual learning experience by being able to observe each other in a supervised group learning situation. The results of Billett's study (2016) also showed that the workplace provides a valuable learning environment for learners. During care, the trainee has a close working relationship with his trainer and experiences social learning. During this care, the learner practices the skills autonomously and assumes the role of cooperation with other health professionals. After experiencing this care, the learners described it as a great experience because during this care they trust their clinical skills and confirm their professional identity (28).

Tierney et al. (2017) in describing continuous care in midwifery education programs, pointed to the flexibility, attractiveness and dynamism of the program and the variety of services for the learner. They found that continuous care due to continuity in the practice environment creates a high potential for building confidence in learners after graduation (29). The practical experience of the learners in this care makes them familiar with the culture of the working environment and gives them a long life in midwifery programs and ultimately the midwifery profession (30). Evan et al. (2020) investigated the results of midwifery students' experience in two types of continuous and standard care and reported that interest, enjoyment of being a midwife, and pride related to it were high among students who experienced continuous care. They expressed that they had more power during continuous care. Continuous care enabled them to provide women

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with "the care that I want to give them." The participants stated that compared to standard care, they experienced more job satisfaction and even the experience of this continuous care made them determined to pursue midwifery in their future careers. In this study, the participants expressed the continuous care model as the gold standard in pregnancy and childbirth care (31). In general and based on the results of this study, the designed educational program was able to improve the learning of postpartum counseling of midwifery students.

Although one of the strengths of this study was the provision of a holistic learning experience for learners, one of the important limitations of the study was the short duration of continuous care in this curriculum. Considering the role that learners will have in their future career, explaining the experiences of learners in the long term can provide information that is more useful for curriculum planners. Another limitation of the study was the small number of specialists in the continuing care team compared to the need created for learners to receive guidance during continuous care.

Conclusion

Continuous care is a key concept in midwifery students' learning process and their understanding of midwifery. The use of this educational program in educational policies will lead to the training of midwifery specialists. Placement of midwifery students in a continuous care model allows them to experience mutual trust and partnership with the women under their care.

Since this study is the first design of a continuous care model in the form of the common curriculum of students in our country, it is suggested that researchers design such continuous care models for other internship courses and internships in medical sciences. Considering more experienced and interested professionals in each care team are the next suggestion. Also, for midwifery, it is suggested to design and implement such continuous care courses in the final year of study and during the internship period of the students.

Ethical considerations

This study was conducted based on the principles of the Declaration of Helsinki. Before the study, the approval of the Research Ethics Committee of Virtual University of Medical Sciences (IR.VUMS.REC.1400.020) was obtained. Complete confidentiality of research data was guaranteed. All the participants of this study were informed about its purpose and importance and entered the study after providing written and oral consent. Participants were informed that their participation was voluntary and that they could withdraw from the study at any time.

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Conflict of interests

The authors declare that they have no conflict of interest.

Author contributions

All the authors participated in the process of the initial writing of the manuscript, its revision, presentation of the idea and initial design and analysis of data. Moreover, all authors accept the responsibility for the accuracy and correctness of the contents of the present manuscript and approve the final version of the manuscript.

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