Explaining the Educational Needs of Iranian First-Time Parents for Adaptation to Parental Role: A Qualitative Study

Abstract

Background: The transition to parenthood is one of the most challenging experiences in a couple's life, which can be stressful and difficult. A positive transition period affects the quality of parents' behavior and the baby's health. This qualitative study aimed to explain the educational needs of adaptation to parental role among first-time parents in Iran. Materials and Methods: In this qualitative study, 25 participants from a variety of ethnic backgrounds were recruited in Ahvaz, Iran, using purposive sampling. In-depth interviews were used to collect the data which were analyzed by qualitative content analysis. Results: Three main categories emerged from the data analysis: "The need for knowledge improvement training," "The need for psychological adaptation training," and "The need for sociocultural adaptation training." Conclusions: To adapt to the parental role, first-time parents should be equipped with the knowledge to turn the challenges of this period into an opportunity for growth. Moreover, they need to be supported by their family members, the healthcare team, and the government.

Keywords: Acclimatization, education, Iran, parents, qualitative research

Introduction

The transition to parenthood is one of the most challenging milestones in a first-time parent's life, which can be stressful and difficult.[1] About 25% of first-time mothers experience periods of low maternal self-confidence and high parenting stress.[2] However, by gaining awareness, a woman can conceive of the postpartum period as one of the best periods of her life, and the challenges that arise can be opportunities for better self-knowledge and formation of her identity.[3,4] The stress of becoming a father may be associated with depression and social isolation, might be accompanied which impaired communication with the wife or children.^[5] Effective measures to facilitate paternal adjustment include improving the fathers' knowledge and skills, creating educational opportunities, providing support resources, preparing the ground for the fathers' participation in the family, and providing paternal role models.^[6]

Sandler et al. (2011) indicated the necessity of a theoretical foundation for many parenting programs as an important point

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in current practices.^[7] Chang et al. (2018) found that first-time Taiwanese mothers who received education on infants' abilities and how to play with infants effectively experienced improved quality of interaction with their infants.[8] Similar results were also obtained in a randomized clinical trial by Kordi et al. (2018) in Iran.^[9] However, Trillingsgaard (2021) reported that their intervention did not affect parental competence, even though parents attended and liked the group sessions. Their results highlight the need to modify the intervention approach.[10] Also, Jamshidbeiki et al. (2017) concluded that the mother's identity did not improve with short-term training, and it is necessary to implement broad interventions.[11]

However, the influence of the cultural context on parenting has rarely been the focus of scholarly attention. Despite the large number of extensive surveys on the experience of parenthood in different countries, it is still a little-understood subject. Thus, this qualitative study aimed to explore first-time parents' educational needs during pregnancy and early parenthood in Iran.

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Forough Talebi¹, Nahid Javadifar², Masoumeh Simbar³, Maryam Dastoorpoor⁴, Nahid Shahbazian⁵, Zahra Abbaspoor²

¹PhD Candidate of Midwifery, Student Research Committee, Nursing and Midwifery School, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ²Midwifery Department, Reproductive Health Promotion Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ³Midwifery and Reproductive Health Research Center, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran, ⁴Department of Epidemiology and Biostatistics, Menopause Andropause Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran, ⁵Reproductive Health Promotion Research Center, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Address for correspondence:

Dr. Zahra Abbaspoor,
Midwifery Department,
Reproductive Health Promotion
Research Center, Ahvaz
Jundishapur University of
Medical Sciences, Ahvaz, Iran.
E-mail: Abbaspoor_z762@
yahoo.com

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Materials and Methods

This qualitative study is part of a mixed-methods study conducted in partial fulfillment of a Ph.D. degree in midwifery. It was aimed to design an intervention for improving adaptation to parental role among first-time parents. In fact, this qualitative study used content analysis to explain the educational needs of adaptation to parental role among first-time parents in Iran. Data collection was conducted from May 2022 to November 2022. The data collection site was a comprehensive health service center in Ahvaz, Iran.

The participants included 17 first-time parents between the 20th week of pregnancy and 2 months after delivery and eight healthcare workers (two midwives, two obstetricians, two psychiatrists, and two psychologists) in Ahvaz, Iran. They were selected by purposive sampling method. The first-time parents were eligible to participate if they were willing to participate in the study, were between 18 to 45 years of age, had Iranian citizenship, were in the period between the 20th week of pregnancy and two months after birth, had a term and healthy baby, and did not have a history of mental or physical illness. The inclusion criterion for healthcare providers was to have at least five years of work experience as a healthcare provider. The participants were selected with maximum diversity in terms of age, education, occupation, socio-economic status, ethnicity, and childbirth method. Participants were recruited either through face-to-face meetings or by telephone.[12] After enrollment, none of the participants withdrew from the study.

interviews,[13] in-depth individual Semi-structured diaries, and field notes were used to collect the data. The questions and cues were prepared after reviewing the documents and consulting several reproductive health experts, and this was piloted in four pilot interviews. The objectives and research method were explained to the participants, and they gave consent before the interview. The semi-structured questionnaire guide used in this study consisted of open-ended questions: 1. What do you think about parenthood? 2. As someone who experiences becoming a parent for the first time, what problems do you think you are facing? and 3. Would you please explain your experiences of parenthood? Interviews with healthcare providers began with these general questions: 1. What type of information do first-time parents need? 2. What problems do first-time parents encounter during pregnancy and postpartum? Please explain." Then, the interview process was guided by their open and interpretive answers. The time and place of the interviews were arranged at the participants' convenience. The interviewer recorded all discussion steps with a voice recorder and took notes. The length of each interview varied from 45 to 60 minutes. Interviews continued until data saturation.

The criteria proposed by Lincoln and Guba were used to evaluate qualitative data.^[14] Different methods were

used for data validation, including in-depth interviews at different places and combining several data collection methods such as in-depth interviews, field notes, and diaries (by the first author). Participants were selected with maximum diversity. In a meeting, the transcripts and coded interviews were shared with four participating first-time parents, and their final comments were obtained and summarized to be checked against the data (member checking). An exchange of opinions was made with three experts to match and ensure the consistency of the data with the statements of the participants (peer checking). To increase transferability, the study findings were presented to three first-time parents, who were not among the study participants but were similar to the participants, to judge the similarity of the study results with their experiences. The first author (F.T.) transcribed the interviews verbatim. The transcription was analyzed using the content analysis method.[15] Content analysis is the process of identifying, coding, and classifying patterns in data. Data collection was run throughout the study. Data analysis involved returning to the research objective and guiding questions. Each interview was re-read several times to gain a full understanding of the concepts. Then, meaning units were highlighted based on study objectives. The coded sections were grouped into main and subcategories that reflected the main message of the interviews. The themes were discussed between the first and second authors until a consensus was reached.

Ethical considerations

This research has been approved by the Ahvaz Jundishapur University of Medical Sciences ethics committee (Ethical code: IR.AJUMS.REC.1400.472). A written informed consent was obtained from all subjects after one of the researchers explained the study. Permission was also obtained to record the interviews with an audio recorder. Ethical principles related to the confidentiality of the participants' information and participants' right to withdraw from the study at any time were also considered without any consequences.

Results

The demographic characteristics of the participants are shown in Tables 1 and 2. Data analysis yielded 17 codes, 7 subcategories, and 3 main categories. The main categories included: "The need for knowledge improvement training," "The need for psychological adaptation training," and "The need for sociocultural adaptation training" [Table 3].

Category 1 The need for knowledge improvement training

The participants believed that during pregnancy and after childbirth, first-time parents need training to promote their self-care knowledge and parenting knowledge and adapt to sexual relationship issues in pregnancy and after childbirth. They pointed out that the acquisition of knowledge is essential for adapting to changes associated with the

	Table 1: Demographic characteristics of first-time parents									
No	Method of birth	Mother's age (years)	Mother's ethnicity	Mother's education	Mother's job	Father's age (years)	Father's ethnicity	Father's education	Economic status	
1	Cesarean	25	Persian	Diploma	Housewife	31	Persian	Diploma	Average	
2	Vaginal	33	Persian	BSc	Employed	36	Persian	PhD	Good	
3	Vaginal	33	Persian	BSc	Housewife	45	Persian	BSc	Average	
4	Vaginal	23	Bakhtiari	BSc	Employed	28	Bakhtiari	BSc	Weak	
5	Cesarean	25	Persian	Diploma	Employed	30	Persian	BSc	Weak	
6	Cesarean	25	Azerbaijani	BS	Employed	27	Persian	Diploma	Average	
7	Cesarean	39	Azerbaijani	PhD	Employed	44	Azerbaijani	PhD	Good	
8	Cesarean	35	Azerbaijani	Diploma	Housewife	36	Bakhtiari	Diploma	Average	
9	Cesarean	20	Arab	Primary school	Housewife	24	Arab	Middle school	Average	
10	Vaginal	31	Persian	MDc	Employed	33	Persian	MDc	Good	
11	Vaginal	25	Azerbaijani	Diploma	Housewife	28	Azerbaijani	Primary school	Weak	
12	Vaginal	25	Persian	Middle school	Housewife	30	Persian	Middle school	Weak	
13	Vaginal	32	Kord	Diploma	Housewife	36	Kord	Diploma	Average	
14	Vaginal	19	Arab	Illiterate	Housewife	21	Arab	Primary school	Average	
15	Vaginal	33	Persian	MDc	Employed	39	Persian	PhD	Good	
16	Vaginal	25	Azerbaijani	Primary school	Housewife	28	Azerbaijani	Illiterate	Average	
17	Vaginal	26	Persian	Primary school	Housewife	32	Persian	Diploma	Average	

Table 2: Demographic characteristics of other participants

Participant	Work experience	Job	Age
	(years)		(years)
18	12	Midwife	35
19	7	Midwife	30
20	21	Obstetricians	55
21	15	Obstetricians	53
22	16	Psychologist	40
23	11	Psychologist	35
24	10	Psychiatrist	44
25	5	Psychiatrist	37

parenting process. This main category included three subcategories.

1-1-Improving self-care knowledge

Most participants stated that first-time parents have many questions about the physical changes in the mother, proper nutrition, use of medication, danger signs, exercise during pregnancy and after delivery, and how to return to health after delivery. One of the fathers said: "Because of our ignorance, any change in my wife used to worry us. It is better to give first-time parents information so that they can distinguish normal from abnormal changes during pregnancy and after delivery" (Father 3).

According to one of the obstetricians: "Many first-time mothers do not know about the danger signs of pregnancy and after childbirth, and it is necessary that they be informed in this regard" (p20).

Since fathers are usually expected to play the role of protectors of their families, they should be informed about maintaining and improving their physical health. One of the fathers said: "It is better to take care of myself while doing everyday activities. For example, while riding a motorcycle or when I'm at work, I have to be careful and constantly ask myself this question: If something happens to me, what will happen to my child?" (Father 4).

1-2-Improving parenting knowledge

According to the participants' statements, neonatal health is one of the most important concerns of first-time parents. However, raising their awareness in this regard can reduce their worries and promote their self-confidence. A mother said: "My child's health is my most important worry. I'm always concerned about whether her growth and development are normal or not. I ask other mothers and her doctor about this. I even read books so that I can make sure that she is OK!" (Mother 10).

The participants also stated that first-time parents should acquire knowledge about upbringing of their children and the correct communication with them. One of the mothers put it as follows: "I often think I must know how to communicate effectively with my child. I am constantly worried that I'm doing mistakes in my relationship with him, and this causes mental harm in him" (Mother 11).

One of the fathers also said: "At any age, the child's needs must be met. We need to know what his needs are. What game is suitable for infants? What is the right game for a one-year-old child? It is necessary to inform parents about this" (Father 12).

Table 3: Findings of the data analysis					
Categories	Sub-category	Primary codes			
The need for knowledge	Improving self-care knowledge	Lifestyle modification			
improvement training	Improving parenting knowledge	Management of common problems in pregnancy, childbirth, and postpartum			
The need for psychological	relationship issues in pregnancy	Learning skills related to childcare psycho-social			
adaptation training		Sexual relations and pregnancy safety			
The need for socio-cultural adaptation training	after childbirth	Change in libido due to hormonal changes			
adaptation training	Help to adapt to role challenges Stress management Comprehensive support Correcting beliefs and attitudes	Worry about unplanned pregnancy			
		Adapt to new conditions			
		Playing various roles			
		Identify sources of stress			
		Strategies to control stress			
		Husband			
		Family			
		Healthcare providers			
		Government			
		Correcting false beliefs and teachings			
		Modifying social and gender norms			

1-3- Coping with sexual relationship issues in pregnancy and after childbirth

Some parents were interested in acquiring knowledge about sexual issues and the changes occurring during pregnancy and after delivery. One of the fathers said: "We are worried about having sex. Can we do it or not? When is it prohibited? It does not harm the mother and the fetus. Parents need to be aware of this" (Father 16).

An expectant mother said: "At the beginning of pregnancy, I was not willing to have sex. Later, I realized that this had been due to the hormonal changes of pregnancy. I gradually got better. Sometimes it bothers my husband" (Mother 6).

After giving birth, most postpartum women were worried about an immediate and unintended pregnancy, so they were not willing to have sex. They stated that they need to be informed about contraception methods during the postpartum period. A postpartum mother said: "I'm worried about an unplanned pregnancy. I can't imagine it at all, and because of this, I'm not willing to have sex at all" (Mother 13).

Category 2: The need for psychological adaptation training

According to the participants of this study, the psychological preparation of first-time parents is necessary for the transition to parenthood. The changing conditions and the stress associated with these conditions are the challenges they experience during this transition. This main category included two subcategories.

2-1 – Help for coping with role adaptation challenges

The interviewed participants believed that raising the awareness of first-time parents may help them obtain a

proper mental image of themselves as a parent. A mother said: "Deep inside, I am always worried. I'm worried about not being a good mother. Do I know everything? Am I acting like a good mother?" (Mother 4).

The participants' narratives suggested that first-time parents need to know how to communicate correctly with each other during pregnancy and after childbirth period and understand their new needs. The mothers admitted that they had to spend so much time caring for their babies that they could not interact with their husbands as they used to. In some cases, these cause conflicts between couples. A father said: "Our lives have changed. We have no time for each other, no social time, and no sex life. Everything has changed completely. Sometimes I get angry and upset because of this" (Father 1).

According to one of the psychiatrists interviewed in this study: "Many couples are not sufficiently aware of their needs and how to communicate appropriately with their spouse after the birth of the child, and the health team can help them" (P 22).

2-2-Stress management

The participants stated that to manage stress while becoming a parent, first-time parents must be aware of the sources of stress and how to control them. A major concern of the first-time parents was how childbirth occurs. They believed that acquiring knowledge about the process of childbirth leads to a reduction in their stress. One mother said: "I didn't know anything about labor symptoms. I was worried about the delivery process and what was going to happen during delivery. I was afraid that I could not bear the pain of childbirth. If I had been informed about it, I would've been feeling less stress" (Mother 4).

The healthcare providers participating in this study believed that lack of support during pregnancy and after delivery escalates the feelings of loneliness and stress in parents, especially the mothers. One of the psychologists said: "Taking care of a child in the first years of her life is a full-time task. When they receive no support, parents and especially mothers feel alone in facing these responsibilities, and this feeling can be very stressful" (P 24).

Category 3 The need for sociocultural adaptation training

The interviewed participants believed that couples need support during pregnancy and after childbirth to adapt to the new conditions, and this support should be provided at various dimensions. Factors such as social and educational support and modification of beliefs and attitudes play an important role. This main category consisted of two subcategories.

3-1 – Comprehensive support

According to the majority of the participants, in their transition to new conditions, first-time parents need support and help (from family members, friends, health care providers, and the government). More particularly, the husband's empathy and cooperation in supporting the mother during the postpartum period are necessary to help the mother recover and return to her previous physical strength. A mother said: "A man should be told that his help is important for the mother. The companionship of her husband makes the woman feel good about being a mother. If the mother is alone, she will get tired and may become discouraged, which may lead to misbehavior with her husband and child" (Mother 6).

Some of the mothers stated that the support of the medical personnel is important because they deal with mothers in the early hours after giving birth. One postpartum mother said: "In hospital, the nurses cared very well. It was encouraging. For example, they used to visit me regularly. They also told me tips on breastfeeding; for example, how to hold the baby and many other things" (Mother 9).

However, most participants highlighted the need for increased government support as a key factor for promoting parental support. This includes extending the parental leave, reducing working hours, and allowing first-time parents to work remotely from home. These measures also allow the husband to spend more time supporting his wife and cooperating with her during the postpartum period. Although there are some laws to protect mothers in Iran, they are neither sufficient nor efficient. A postpartum woman said: "Maternity and breastfeeding leave is not enough for working mothers. I think these laws should be corrected so that the mother can spend more time with her child" (Mother 3).

A father said: "I wish there were some laws that would give men paid time off after childbirth or reduce their work hours so that fathers could stay home and help their wives without financial worries" (Father 7).

However, some mothers believed that motherhood and their new conditions pushed them away from their ideals. Job loss and limited social activities were among their main concerns. A mother said: "What will happen to my job when my child grows up? I am getting deprived of my interests, job, fun, and sports. I like to be in the community, but I have no time. These make me sad!" (Mother 5).

3-2-Correcting beliefs and attitudes

Some mothers complained about the existence of "patriarchal" beliefs and stereotyped gender roles in some ethnic groups, which prevent men from supporting their wives during pregnancy and after childbirth. In these communities, housekeeping and baby care are solely the duty of women. They stated that these beliefs harm the couple's relationship, and it is necessary to raise awareness to change these false beliefs. One mother said: "Since I gave birth, my husband does not care about me like before. According to him, baby care is the duty of the mother, and that's why he doesn't help me at all! I am sad and feel lonely" (Mother 7).

Discussion

The aim of this qualitative study was to explain the Iranian first-time parents' educational needs for adaptation to parental roles. Data analysis led to the emergence of 3 main categories:

"The need for knowledge improvement training", "The need for psychological adaptation training," and "The need for sociocultural adaptation training."

The participants in the present study believed that first-time parents need training to improve their knowledge to adapt to the parental role. According to Entsieh and Hallström (2016), awareness is one of the basic needs for the transition to motherhood.[16] Golyan Tehrani et al. (2017) reported that postpartum care education based on the educational needs of mothers increased puerperal care knowledge compared to routine education.[17] A qualitative study by Asadi et al. (2022) showed that women who want to adapt to postpartum changes need training in topics related to the health of the mother and baby.[13] Lu et al. (2012) maintained that learning skills related to childcare foster a positive attitude toward parenting in parents.^[18] Due to their physical problems and various maternal and social responsibilities, women become physically and psychologically vulnerable during pregnancy and postpartum.^[19] Therefore, they should be made aware of the dangerous complications of pregnancy and childbirth so that they can seek immediate medical assistance.[19] However, men must also improve their health, given their fatherly responsibilities for supporting their families. In Simbar et al. (2012), Iranian men believed that being careful about their health and behavior and understanding the existing conditions are the main duties of fathers.^[21] In America, fathers considered it their duty to correct past behaviors and avoid repeating them to improve their health.[22] The findings of the present study showed that obtaining information about sexual relationship issues is another topic of interest to first-time parents. Razavinia et al. (2019) believe that the process of pregnancy and delivery affects women's sexual relationships.^[23] Ghiasi et al. (2018) found that sexual dysfunction is a common health problem among Iranian women of reproductive.[24] In this regard, Zamani (2019)[25] stated that postpartum care is an important opportunity for sexual health counseling. Sexual dysfunction reduces the quality of life of couples, which damages their physical, mental, and emotional health.[26] However, Anzaku and Mikah (2014), showed that worry about unwanted pregnancy is an independent risk factor for postpartum sexual dysfunction.^[27]

The participants in the present study believed that gaining knowledge about psychological adaptation is the most significant educational need of first-time parents. Parental psychological preparation means the parents are prepared for changes and responsibilities after childbirth.^[5] Entsieh and Hallström (2016) argued that positive psychological readiness by enhancing self-efficacy can reduce depression.^[28] Therefore, meeting parents' educational needs plays an important role in their adaptation to the changes associated with parental roles. After giving birth, women are usually susceptible to depression due to physical problems and performing various tasks.[19] The novelty of parents' experiences and the lack of knowledge and skills in this regard cause worry and fear.[22] According to May and Fletcher (2013), parenthood is accompanied by problems such as psychological stress, social isolation, and impaired interaction with each other and with the child.^[5] Lu et al. (2012) stated that men need to organize themselves psychologically during pregnancy. They must balance the parenting role, new emotional and relational demands, economic pressures, and social expectations.^[18]

The participants in the present study believed that informing first-time parents about sociocultural adaptation would help them transition to parenthood. In this regard, their needs include comprehensive support and modification of beliefs and attitudes. Ospina *et al.* (2012) defined the postpartum period as when mothers need comprehensive support. Lau and Hutchinson (2020) found that the knowledge and awareness of the husband, family members, and healthcare workers play a critical role in this respect. Men have been reported to be able to learn involvement through training. Receiving support from the husband is possible if he is physically present at home; thus, parental leave for the husband should become a national law. If the mother is concerned about her social and professional role after childbirth, reliable centers such as kindergartens

can help alleviate some of these concerns.[21] Mothers who do not find the right resources will suffer from stress and various problems.^[4] Also, for many fathers, fatherhood is associated with psychological loneliness, lack of support, and worthlessness.[18,30] Therefore, to facilitate paternal adaptation, it is necessary to increase fathers' parenting knowledge and skills, create educational opportunities for them, provide support resources, set the stage for their presence and participation in the family, and introduce paternal models at the level of society^[6] Also, evidence shows that current parent training classes do not meet the needs of the expectant and new fathers in parenting skills. It is therefore necessary to tailor the current training classes to the needs of men.[29] However, women were unsatisfied with the cultural gender stereotypes that considered housework and childcare "feminine" duties. In these societies, men believe that their most important contribution to family is to provide the necessities of life, [19] and their participation in household affairs and taking care of children is insignificant.^[20] As a result, the woman loses her most important source of support. Awareness raising and changing social beliefs in this respect may lead to increased participation of men in household affairs and raising children. [20,22] Fathers must be provided with the necessary information and training to take this path consciously. In this regard, mass media can play a colorful role in forming correct beliefs and promoting responsible behaviors.^[21]

Based on the results of the present study, the experiences of Iranian first-time parents in facing the challenges of parental role adaptation are sometimes consistent with similar studies in other countries. Preparing parents and families for this transition phase by providing accurate information helps them better cope with these challenges. This shows the important role of midwives, the healthcare system, and policymakers in incorporating these concepts into educational programs and health protocols, presenting them at the right time, and using the right content.

Participants in the present study were selected purposefully. They were chosen from different age and sociocultural groups and were from other geographical regions of Iran. One of the most critical strengths of the study was the participation of healthcare providers and husbands, which helped to clarify the research topic from different perspectives. The choice of parents up to 2 months after the birth of their baby and having a term and healthy baby, and not including adolescent pregnancies, may be regarded as limitations of the present study. By presenting a vivid picture of parents' needs to adapt to changes associated with parenthood, the findings of this study can help design interventions aimed at improving the adaptation of first-time parents. The results of this research could open up new avenues for future research in parenting.

Conclusion

The transition to parenthood has been defined as one of the

most challenging experiences in a couple's life, and it is associated with significant changes occurring in the lives of expectant parents.^[30] It is therefore necessary to design educational programs tailored to the needs of first-time parents to facilitate their adaptation to parental roles. Moreover, they must be supported by their family members, the healthcare team, and the government at different levels.

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Conflicts of interest

Nothing to declare.

References

- Redshaw M, Martin C. The Couple Relationship before and During Transition to Parenthood. Taylor and Francis; 2014. p. 109-11.
- Kristensen IH, Simonsen M, Trillingsgaard T, Pontoppidan M, Kronborg H. First-time mothers' confidence mood and stress in the first months postpartum. A cohort study. Sex Reprod Healthc 2018;17:43-9.
- Ospina Romero AM, Muñoz de Rodríguez L, Ruiz de Cárdenas CH. Coping and adaptation process during puerperium. Colomb Méd 2012;43:167-74.
- Pinto TM, Samorinha C, Tendais I, Figueiredo B. Depression and paternal adjustment and attitudes during the transition to parenthood. J Reprod Infant Psychol 2020;38:281-96.
- May C, Fletcher R. Preparing fathers for the transition to parenthood: Recommendations for the content of antenatal education. Midwifery 2013;29:474-8.
- Eskandari N, Simbar M, Vadadhir A, Bageri A. Paternal adaptation and affecting factors in men: A meta-synthesis. Iran J Health Sci 2018;6:53-62.
- Sandler IN, Schoenfelder EN, Wolchik SA, MacKinnon DP. Long-term impact of prevention programs to promote effective parenting: Lasting effects but uncertain processes. Annu Rev Psychol 2011;62:299-329.
- Chung F-F, Wan G-H, Kuo S-C, Lin K-C, Liu H-E. Motherinfant interaction quality and sense of parenting competence at six months postpartum for first-time mothers in Taiwan: A multiple time series design. BMC Pregnancy Childbirth 2018;18:1-13.
- Kordi M, Bakhshi M, Masoudi S, Esmaily H. Effect of prenatal psychological trainings on satisfaction with childbirth and maternal role competence in primiparous women. J Maz Univ Med Sci 2018;28:98-108.
- Trillingsgaard TL, Maimburg RD, Simonsen M. Group-based parent support during the transition to parenthood: Primary outcomes from a randomised controlled trial. Soc Sci Med 2021;287:114340.
- Jamshidbeiki S, Khakbazan Z, Geranmayeh M, Tahmasebi S, Mehran A. The impact of training given to nulliparous pregnant

- women for attaining identity and being satisfied with the maternal role. J Holist Nurs Midwifery 2017;27:17-25.
- 12. Creswell JW, Poth CN. Qualitative Inquiry and Research Design: Choosing among Five Approaches. Sage Publications; 2016.
- Asadi M, Noroozi M, Alavi M. Identifying women's needs to adjust to postpartum changes: A qualitative study in Iran. BMC Pregnancy Childbirth 2022;22:115.
- 14. Guba EG, Lincoln YS. Competing paradigms in qualitative research. Handbook of qualitative research. 1994;2:105.
- 15. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. Qual Health Res 2005;15:1277-88.
- Entsieh AA, Hallström IK. First-time parents' prenatal needs for early parenthood preparation-A systematic review and meta-synthesis of qualitative literature. Midwifery 2016;39:1-11.
- 17. Tehrani G. Evaluation of effect of postpartum care education based on maternal educational needs on knowledge of postpartum care. Nursing And Midwifery Journal 2017;15:76-85.
- Lu H, Zhu X, Hou R, Wang D-h, Zhang Hj, While A. Chinese family adaptation during the postpartum period and its influencing factors: A questionnaire survey. Midwifery 2012;28:222-7.
- Simbar M, Nahidi F, Ramezankhani A. Fathers educational needs about perinatal care: A qualitative approach. Hakim Journal. 2009;12:19-31.
- Mortazavi F, Keramat A. The study of male involvement in prenatal care in Shahroud and Sabzevar, Iran. Qom Univ Med Sci J 2012;6.
- Simbar M, Nahidi F, Tehrani FR, Ramezankhani A, Zadeh ARA. Educational needs assessment for fathers' participation in perinatal care. Payesh (Health Monitor) 2012;11:39-49.
- Carneiro LMR, Silva KLd, Pinto ACS, Silva AdA, Pinheiro PNdC, Vieira NFC. Fatherhood: discourses of men who experience a closer and participative relationship in the children care. 2012.
- Razavinia F, Tehranian N, Tatari FT, Bidhendi Yarandi R, Ramezani Tehrani F. The postpartum marital satisfaction, maternal serum concentration of orexinA and mode of delivery. J Sex Marital Ther 2019;45:488-96.
- Ghiasi A, Keramat A. Prevalence of sexual dysfunction among reproductive-age women in Iran: a systematic review and metaanalysis. Journal of midwifery & reproductive health. 2018;6.
- Zamani M, Roudsari RL, Moradi M, Esmaily H. The effect of sexual health counseling on women's sexual satisfaction in postpartum period: A randomized clinical trial. International Journal of Reproductive BioMedicine 2019;17:41.
- Banaei M, Tork Zahrani S, PormehrYabandeh A, Ozgoli G, Azad M. Investigating the impact of counseling based on PLISSIT model on sexual intimacy and satisfaction of breastfeeding women. IJPRAS 2016;5:489-99.
- Anzaku A, Mikah S. Postpartum resumption of sexual activity, sexual morbidity and use of modern contraceptives among Nigerian women in Jos. Ann Med Health Sci Res 2014;4:206-10.
- 28. Entsieh AA, Hallström IK. First-time parents' prenatal needs for early parenthood preparation-a systematic review and meta-synthesis of qualitative literature. Midwifery 2016;39:1–11.
- Lau R, Hutchinson A. A narrative review of parental education in preparing expectant and new fathers for early parental skills. Midwifery 2020;84:102644.
- Banaei M, Tork Zahrani S, PormehrYabandeh A, Ozgoli G, Azad M. Investigating the impact of counseling based on PLISSIT model on sexual intimacy and satisfaction of breastfeeding women. IJPRAS 2016;5:489-99.