

# ORIGINAL ARTICLE

## Exploration of Informational Needs Regarding Childbearing in Iranian Women: A Qualitative Study

Faeze Ghorbani<sup>1</sup>, PhD candidate; Talat Khadivzadeh<sup>2,3\*</sup>, PhD; Fatemehzahra Karimi<sup>3</sup>, PhD; Kolsoum Deldar<sup>4</sup>, PhD

<sup>1</sup>Student Research Committee, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran;

<sup>2</sup>Nursing and Midwifery Research Center, Mashhad University of Medical Sciences, Mashhad, Iran;

<sup>3</sup>Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran;

<sup>4</sup>Department of Information Technology, School of Allied Medical Sciences, Shahrood University of Medical Sciences, Sharoud, Iran

### Corresponding Author:

Talat Khadivzadeh, PhD; Department of Midwifery, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Postal code:91388-13944, Mashhad, Iran

**Tel:** +98 51 38591511; **Fax:** +98 51 38597313; **Email:** tkhadivzadeh@yahoo.com

**Received:** 06 July 2024    **Revised:** 08 February 2025    **Accepted:** 15 February 2025

### ABSTRACT

**Background:** Family is the foundation of social institutions, and having children is considered the basic pillar of the family. In this regard, women need information about childbearing to help them in this process. This study aimed to explain the informational needs of women regarding childbearing.

**Methods:** This conventional content analysis study was performed on 24 participants including 18 women and 6 experts, who were purposively selected from urban health centers in Mashhad, Kerman, Tehran, Sari, and Ahvaz cities from February to August 2023. Face-to-face, semi-structured, and in-depth interviews were conducted for data collection until data saturation was attained. The collected data were analyzed based on Graneheim and Lundman's approach. Moreover, MAXQDA software version 20 was used for the organization of data.

**Results:** Data analysis demonstrated three main categories and six subcategories. The main categories were 1) need for specialized reproductive health information and parenting skills, 2) need for supportive information to strengthen maternal identity, and 3) need for social and cultural information related to childbearing and population dynamics.

**Conclusion:** Women need various information in different fields for childbearing. Therefore, the provision of relevant information in line with the needs of women can facilitate childbearing.

**Keywords:** Childbearing, Informational, Iranian women, Needs, Qualitative content analysis

**Please cite this article as:** Ghorbani F, Khadivzadeh T, Karimi FZ, Deldar K. Exploration of Informational Needs Regarding Childbearing in Iranian Women: A Qualitative Study. IJCBNM. doi: 10.30476/ijcbnm.2025.102474.2488.

## INTRODUCTION

Family has always been the first and most fundamental social institution in all societies, and reproduction and childbearing are considered the basic pillars of the family.<sup>1</sup> Childbearing is among the important topics in the field of social and cultural issues.<sup>2</sup> Iran is one of the countries that have undergone population transition in a short period. The fertility rate has declined more than expected in Iran in the last few decades. Many reasons, including a lack of knowledge and awareness of childbearing, have reduced childbearing. Knowledge about fertility and childbearing helps men and women become aware of their potential for reproduction.<sup>3</sup> Accurate knowledge and understanding of the facts related to fertility and childbearing by women are essential for deciding when and how to conceive.<sup>4</sup> Lack of knowledge leads to postponement of parenthood and may increase the number of couples experiencing infertility and prolonged time to pregnancy.<sup>5</sup> It should be mentioned that inadequate knowledge about fertility may negatively affect the decisions of women for childbearing in the future.<sup>4</sup>

The average score of fertility and childbirth in a study in Iran on 400 women referred to health centers indicates a low-level knowledge of fertility and childbearing.<sup>4</sup> It should be noted that limited research has been performed on the level of knowledge of fertility and the childbearing field. One of the studies was conducted on 280 men and women (140 women) who were referred to comprehensive health centers affiliated with Iran University of Medical Sciences in Iran. The aforementioned study investigated the level of knowledge of women about fertility and childbearing. Based on the findings of the aforementioned study, the levels of knowledge of women and men regarding fertility and childbearing were 53.3% and 49.7%, respectively, which were not significantly different.

Provision of information and training in the field of fertility and childbearing is among the ways to improve reproductive behavior in women. According to a study, women

need correct information about the decision to have children which can significantly help them in terms of childbearing and increase their interest in it. The essential prerequisite for education and promotion of reproductive behavior is identifying the information needs of women regarding childbearing.<sup>5</sup> Some of these informational needs are related to menstrual cycles, ovulation time, and the proper time to have sexual intercourse to get pregnant, as well as information on sexual health and sexually transmitted diseases.<sup>6</sup>

Several studies have been conducted on the childbearing information needs of women with chronic disease.<sup>7-9</sup> In a related study, researchers examined the information needs of women with rheumatoid arthritis and found that many lacked sufficient knowledges about their fertility and childbearing options. This lack of information often led them to delay childbirth.<sup>7</sup> Evidence suggests that women with chronic illnesses require up-to-date information about their condition and its implications for fertility and childbearing.<sup>8</sup> Another study highlighted that women with cystic fibrosis often face uncertainties about whether to have children, challenges related to achieving or maintaining a pregnancy, giving birth, managing treatment and adherence during pregnancy, breastfeeding, and motherhood, as well as concerns about the impact of pregnancy and childbirth on their future health. These women expressed a need for detailed information in these areas.<sup>9</sup> A review study emphasized that delaying childbearing based on misconceptions about female fertility could lead to involuntary childlessness. The study suggested that health education about fertility should be integrated into broader health promotion programs to increase awareness of the impact of age on fertility.<sup>8</sup>

Most studies have quantitatively assessed women's knowledge of fertility and childbirth. However, there is limited information on the childbearing-related information needs of women in the general, non-patient population. In light of these gaps, the present research aimed to explore the information needs of

women regarding childbearing.

## MATERIALS AND METHODS

The present qualitative study with conventional content analysis was conducted between

February to August 2023. The study participants were 24 people including 18 married women (participant number 1 to 18) and 6 experts (participant number 19 to 24) living in Tehran, Mashhad, Ahvaz, Tabriz, Sari, and Kerman cities in Iran (Table 1). The participants

**Table 1:** Demographic characteristics of the participants

Participant Number	Age (year)	Sex	Education	Occupation	Length of marriage (year)	Number of children	History of abortion
1	37	Female	Master of Industry	Housewife	16	4	0
2	38	Female	Bachelor of Seminary	Student	12	4	1
3	41	Female	High school diploma	Housewife	18	4	1
4	33	Female	PhD <sup>a</sup> of Reproductive Health	Housewife	5	1	0
5	32	Female	High school diploma	Student	8	2	0
6	37	Female	Master of Midwifery	Housewife	9	2	0
7	33	Female	Master of Midwifery	Faculty member	7	1	0
8	39	Female	Bachelor of Theology	Private office owner	11	2	0
9	35	Female	Master of Medical Physics	Housewife	7	1	0
10	35	Female	Master of Philosophy	Hospital employee	10	2	0
11	40	Female	Master of Management	Housewife	18	3	0
12	42	Female	Associate in Electrical Engineering	Government employee	19	5	2
13	30	Female	Master of Industry	Notary office assistant	9	3	1
14	35	Female	High school diploma	Housewife	15	5	1
15	37	Female	Bachelor of Chemistry	Housewife	16	4	0
16	28	Female	High school diploma	Housewife	3	1	0
17	22	Female	High school diploma	Student	4	1	0
18	45	Female	Bachelor of Food Industry	Housewife	16	1	0
19	46	Female	PhD in Sociology	Member of Parliament and Population Working Group	15	3	0
20	45	Female	PhD in Reproductive health	Working in the clinic and media activist	19	3	0
21	56	Male	PhD in Medical informatics	Faculty member	30	2	-
22	60	Male	PhD in Sociology	Faculty member	22	3	-
23	42	Female	PhD in reproductive health	Faculty member and researcher in the field of childbearing	9	1	0
24	65	Male	MD <sup>b</sup> and surgical Oncology Fellowship	Faculty member and policymaker	35	3	-

<sup>a</sup>PhD: Doctor of Philosophy; <sup>b</sup>MD: Medical Doctor

consisted of women of reproductive age who met the inclusion criteria, as well as experts and policymakers in the field of fertility and childbearing. The inclusion criteria for women were being an Iranian in reproductive age (18-45), not having contraindications for pregnancy according to the history of diseases such as severe heart failure, cancers and autoimmune diseases, not suffering infertility which is mentioned by the person's own statements, and being willing to take part in the study. The exclusion criterion was a lack of willingness to continue cooperation at any stage of the interview.

Purposeful sampling for women was performed with maximum variation in terms of age, education level, economic status which was mentioned by the person's statements, number of children, and city of residence. Eligible women were selected from healthcare centers and counseling centers. Sampling for experts and policymakers in the field of childbearing was performed with maximum variation in terms of their type of expertise in demographics, reproductive health, sociology, and health; they were selected from the Iranian Ministry of Health and Medical Education, Health, and Medicine Deputies of the Universities.

All of the interviews were conducted by the main investigator who is a Ph.D. candidate in Reproductive Health. She participated in related courses about qualitative research and had active interaction with her supervisors who were experts in qualitative research.

Data were collected based on semi-structured individual interviews which began with an open-ended question for experts; first, questions such as "Please talk about the information needs for women regarding childbearing" and for women "What information do you need to decide to have a child?" were asked; then, probing questions were employed according to the responses of the participants to extract more details and clarify their explanations and examples. Note-taking during the interview was used to direct the interview and data analysis. Interviews

continued until data saturation was reached and subcategories and categories emerged.

The interviews in Mashhad and Kerman cities were conducted in person and in a private place at a selected health center, while the interviews in the cities of Tehran, Sari, Ahvaz, and Tabriz were conducted over the phone due to the distance. All the participants were interviewed once, except for two cases who participated in a supplementary interview. Every interview lasted about 45 min (30-70 min) and was held in Persian.

The data analysis process was performed continuously and concurrently with data collection and based on Graneheim and Lundman's approach.<sup>10</sup> At first, interviews were transcribed verbatim, and each interview text was reviewed several times to achieve a general understanding of its content. Afterward, the context was divided into meaning units, which were condensed while preserving the main concept; the condensed units were labeled by codes. After that, subcategories and categories emerged. The authors reflected on the findings continually and discussed disagreements until reaching a consensus. The organization of data was performed in MAXQDA software version 20.

Lincoln and Guba's trustworthiness criteria were considered in all of the steps of the study.<sup>11</sup> Credibility was increased by prolonged engagement with the data and member checking. In terms of dependability, the research report was presented in a manner that allowed other inquiries to easily trail the decisions made by the researchers. The provision of some quotations related to every subtheme confirmed the findings. Confirmability was ensured by documenting all activities from the initial text search through coding and data extraction, which were then shared with external reviewers for validation. During data collection, interview data were accurately recorded in real time without adding personal bias. The researchers maintained a neutral attitude during data analysis to accurately reflect the subjects' real experiences. We detailed the participants'

characteristics, data collection methods, and analysis processes to provide readers with essential information relevant to the research, ensuring transferability.

The current study was approved by the Research Council and Ethics Committee affiliated with Mashhad University of Medical Sciences, Mashhad, Iran with the code of IR.MUMS.NURSE.REC.1400.091. Written informed consent was obtained from all participants, and all interviews were recorded with the consent of participants. The right to withdraw from the study and the anonymity of participants were preserved.

## RESULTS

According to interview with 24 participants, 821 codes were obtained in the field of informational needs of women related to childbearing. The codes were placed in six subcategories and three main categories (Table 2).

### *1. Need for Specialized Reproductive Health Information and Parenting Skills*

One of the information needs of women in the field of childbearing was the need for educational content on fertility and infertility. Moreover, they required education and information on how to optimize parenting skills, including the needs related to having children. In other words, obtaining this scientific information will help them a lot in becoming parents and in their decision-making process regarding having children. Many women may refuse to have more children due to a lack of comprehensive scientific information. The subcategories

included medical information on pregnancy, childbirth, and infertility as well as strategies for optimization of parenting skills.

#### *1.1. Medical Information on Pregnancy, Childbirth, and Infertility*

According to the majority of participants in the study as well as experts, having comprehensive scientific and medical information about antenatal, natal, and post-natal issues, as well as comprehensive information about the types of childbirth and infertility and its causes, treatment, and infertility centers can guide women in the path of childbearing and facilitate their decision-making regarding this matter. A participant said:

*“To be able to have a baby again, I would like to have easy access to complete scientific information during pregnancy after childbirth and its problems; because I was always stressed, even in those years I could not have children. I really wanted to know about the cause of my infertility because it was difficult for me to go to the doctor for a question.” (P11)*

#### *1.2. Strategies for Optimizing Parenting Skills*

Many participants stated that women should be properly trained in the optimization of parenting skills at the right time, i.e. before marriage. Knowledge of parenting skills helps to stabilize the family and have more children. These skills include positive parent-child interaction, increased family resilience, and improved intimacy in mother-child relationships. In this regard, a participant said:

*“It is not only having children that is*

**Table 2:** Subcategories and categories emerged from data analysis

Subcategories	Main categories
Medical information on pregnancy, childbirth, and infertility Strategies for optimization of parenting skills	Need for specialized reproductive health information and parenting skills
Rethinking the role of mother through role modeling Strengthening maternal self-efficacy through empowerment	Need for supportive information to strengthen maternal identity
Religious and cultural teachings related to having children Knowledge of the social consequences of population aging	Need for social and cultural information related to childbearing and population dynamics



*important, parenting is also important. We must have information on how to raise our children. How should our relationship with teenage children be? In general, I think parenting is more important.” (P10)*

## *2. Need for Supportive Information to Strengthen Maternal Identity*

Supportive information plays a vital role in restoring the role of motherhood. Mothers need supportive information to overcome the hardships of childbearing and decide to have children again. Reception of supportive information makes them feel relaxed and this relief gives them self-efficacy which helps them make better decisions. The subcategories included rethinking the role of the mother through role modeling and strengthening maternal self-efficacy through empowerment.

### *2.1. Rethinking the Role of Mother through Role Modeling*

According to the majority of the participants, (women and experts), one of the women’s information needs is that women who tend to have few children need supportive information from other mothers to regain the role of mother. Women tend to forget their maternal role and need this information to regain this role for childbearing. The information shared by other mothers increases their self-confidence which can lead to having more children. In this regard, two participants said:

*“Look, if we want to be modern, we should have fewer children because they will make us happy, but when I see a mother who has 4 or 5 children, but she has good self-confidence and is also socially active, then I am encouraged to have more children. We must find the principle of motherhood.” (P10)*

*“I think it is important for women to take role models from others of their kind in the matter of having children.” (P 20)*

### *2.2. Strengthening Maternal Self-efficacy through Empowerment*

It seems that the modern conflicts of

life reduce the sense of empowerment in women and weaken their ability to deal with childbearing issues. One of the information needs of women is maternal self-efficacy through empowerment. Some women are afraid and worried about how to adapt to motherhood since their self-efficacy is weak; therefore, they decide to delay having children. Empowerment of women can happen in the form of empowering them to simultaneously manage household affairs and their roles as wives and mothers, as well as empowering them to educate and raise children. In this regard, two participants stated:

*“If a mother knows how to manage her household chores effectively despite having more children, ensuring peace in the family for both her existing children and her husband, we will follow her example. In this way, I can also empower myself, and it will make me feel better.” (P1)*

*“We should be able to provide comprehensive information to mothers so that they can become self-efficacious in the field of childbearing and feel empowered, and this is possible for other mothers.” (P 22)*

## *3. Need for Social and Cultural Information Related to Childbearing and Population Dynamics*

From the point of view of most experts and participants in this study, the informational needs of having children include achievement of cultural, religious, and social information. Parents need to know their cultural and religious identity to decide to have children. Culturalization of childbearing should be visible in education and media information. In fact, childbearing should be considered natural, and people should know their authentic Iranian Islamic culture. Furthermore, knowledge of the consequences of population aging by women encourages them to have more children. The subcategories included religious and cultural teachings related to having children and awareness of the social consequences of population aging.

### 3.1. Religious and Cultural Teachings Related to Having Children

Some women stated that with appropriate and timely knowledge and training, cultural values would gradually change from having fewer children to having more children. The information that women receive from different media daily is important in this context. In this regard, a participant said:

*"We should create an authentic Iranian and Islamic culture regarding the number of children. This is very effective in my opinion."* (P15)

Some participants stated that women who want to have children need to know the religious view (Quran verses and traditions) on having children to support their steady progress on this path. Opinions of religious experts and their education through different media can be very effective. In this regard, a participant said:

*"The information provided for people must be true information. True information comes from God, the Messenger of God, and the innocents (PBUH). That is established, law-abiding, unchangeable information. This information about having children exists in our religious basis and should be conveyed to the people."* (P21)

### 3.2. Knowledge of the Social Consequences of Population Aging

Women must understand the implications of a declining young population and its adverse effects on various social aspects. It is important to use different media for educational and advertising purposes in this subcategory. In this regard, a participant said:

*"Our public should know the consequences of population aging. These damages will affect the people themselves in the future economically, socially, and politically. People should know this well."* (P23)

## DISCUSSION

The findings clarified the information needs of women regarding childbearing. These include

the need for specialized reproductive health information and parenting skills, supportive information to strengthen maternal identity, and cultural and social information related to childbearing and population dynamics.

The need for information on fertility and infertility is one of the information needs of women that should be fulfilled for them to have children. Acquisition of scientific information in these fields will reduce stress and worry and increase peace between spouses.<sup>10</sup> For example, not knowing the advantages and disadvantages of different delivery methods and the preference of women to have a cesarean section can disrupt the process of childbearing. In line with this information need, a previous study stated that cesarean section in the first birth was an important predictor of low fertility, which seems to have played an important role in the reduction of fertility in recent years in Iran. Women who have experienced cesarean section are less likely to give birth to more than three children, compared to those who have had a vaginal delivery.<sup>12</sup>

In this regard, a study indicated that the information needs of pregnant mothers included their nutrition, the process of pregnancy and childbirth, family planning, and child care. Moreover, health and medical service providers should try to provide services according to the information needs of people.<sup>13</sup> In another study, pregnant mothers were aware of this information need and considered it essential.<sup>14</sup> All the mentioned studies have shown the importance of this information for women who plan to have children.

The provision of information about strategies for the optimization of parenting skills was an important information need, which was emphasized by many women in this study. According to the findings of a similar study, parenting education and positive parent-child interaction increase family resilience, improve intimacy in mother-child relationships, and reduce stress in mothers.<sup>15</sup> Informing is very important

in raising individuals who will be useful in the future.<sup>16</sup> A previous study has stated that parents who are worried about their lack of parenting skills are less likely to think about having a second child; instead, parents who have received parenting skills training and have had sufficient support from their families and spouses are more likely to have a second child.<sup>17</sup> Another study confirmed the importance of this information by considering parenting education for parents necessary and stating that this education and awareness improves the relationship between parents and children.<sup>18</sup>

Another main category extracted from the qualitative data analysis in this study was the need for supportive information to strengthen maternal identity. The purpose of this type of information is strengthening the mother's identity, returning her to the original role of mother, and increasing her self-efficacy through her empowerment. Today, mothers are distanced from their original motherly identity due to their busy schedules; for regaining this role, they need to follow the model of other mothers. The purpose is to share experiences and everyday life routines and empower mothers by providing a role model from capable mothers, who simultaneously play the roles of mother, wife, and household affairs manager, as well as a role in education and employment. Based on Rindfuss and Browster's theory, playing multiple maternal roles explains the difference in the degree of work and childbearing conflict among working mothers and the differences in the fertility levels in different societies. If the roles of mother and employee become incompatible and women perceive their roles as mothers and wives interfering with their other roles, their decisions to have children will change. Therefore, these women will prefer to reduce the number of children they want or even avoid playing the childbearing role due to the high time and energy demands of fertility.<sup>19</sup> Explanation of the favorable information about mothers in the present era can motivate the young

generation of women to maintain the role of motherhood.<sup>20</sup> In general, it can be said that attitudes toward women and motherhood are related to women's childbearing behavior.<sup>21</sup>

The need for social and cultural information related to childbearing and population dynamics was one of the main extracted categories in this study. The great impact of cultural and social information governing society on fertility is undeniable.<sup>22</sup> Some believe that reproductive behavior is strongly affected by the culture, beliefs, and values of the society; therefore, knowledge of the social effects of population aging can have a positive influence on childbearing.<sup>23</sup> In a study conducted in the United States, it was shown that culture and religion were very important in the daily lives of women. Moreover, the actual fertility rate and desire to have children in women who believed that culture and religion were very important in their daily lives were higher than those in women who believed that culture and religion were not important or less important. Besides, in their research, it was observed that those who were more religious had more traditional attitudes about gender roles and family, which increased their fertility.<sup>24</sup> Therefore, one of the essential needs of women is to obtain the kind of information that results in building a childbearing culture over time. Moreover, they need cultural and religious information related to childbearing which can consolidate the family and promote reproductive behavior. This information can be important and effective in the path of having more children. Policy and program interventions to address unintended childbearing should consider the religious diversity of the country as well as regional sociocultural influences on reproductive preferences and behavior.<sup>25</sup>

Results of the present study showed that knowing the social effects of population aging can affect the decision of women to have children since the effects of population aging will return to them in the future. The findings of this research were in line with those of other studies mentioned in this field.<sup>17, 23</sup>



This issue shows the importance of these information needs in having children.

One of the strengths of this study was the assessment of the information needs of women in terms of childbearing in a qualitative manner through in-depth individual interviews. Among other strengths of this research, interviews were conducted in different cities in Iran due to the diversity of childbearing culture in various cities.

One of the limitations of the study was the impossibility of face-to-face interviews in the cities of Tabriz, Sari, and Tehran due to the long distance. For this reason, we tried to conduct additional interviews to improve the quality of the interview.

## CONCLUSION

Women need various information in different fields for childbearing. Therefore, the provision of relevant information in line with the needs of women can facilitate childbearing. Given the decrease in the fertility rate in Iran and the dangers of this decreasing trend, it is very important to pay attention to the informational needs of women to have children and consider the production of educational content on fertility and infertility, the need to access the lived experience of mothers in peer groups, and also the need to provide scientific/authentic information based on the social and cultural conditions of the society. The provision of scientific and accurate information about these needs should be on the agenda of population policymakers. In addition, the necessary grounds for the provision of this information and education should be provided, the joy of motherhood and having more children should be displayed through advertising and promoting the experiences of successful people in this regard, and also the focus on family orientation at the community level should be strengthened.

## Acknowledgment

This article was extracted from a thesis submitted as the partial fulfillment of the requirement

for a doctorate in Reproductive Health to the Mashhad University of Medical Sciences, Mashhad, Iran (Grant number: 4000218). The authors would like to express their gratitude and appreciation to the esteemed research assistant of the university and all the participants in the research for their participation in this study.

## Authors' Contribution

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

## Funding

This study was funded by Mashhad University of Medical Sciences, which provided essential financial support for the research (Grant number: 4000218)

**Conflict of Interest:** None declared.

## Declaration on the use of AI

The authors of this manuscript declare that no artificial intelligence (AI) was used during the writing process.

## REFERENCES

- 1 Moosavi F, Ghafelebashi M. Examining the position and attitude towards the child In the young families of Qazvin. *Women and Family Studies*. 2014;1:11-34. [In Persian]
- 2 Turkian Valshani S, Zamani Alvigeh F, Heidari Z, et al. Fertility desire: Facilitators and inhibitors. *Payesh*. 2020;18:241-9.

- [In Persian]
- 3 Mahmoudiani S, Dehghani M. Studying the Relationship between Fertility Knowledge and Childbearing among Women Attending the Health Centers in Zarrin Shahr City, Iran. *Journal of Health System Research*. 2024;20:106-13. [In Persian]
  - 4 Mahmoudiani S, Dehghani M. Fertility Knowledge and its Related Factors among Women Attending the Health Centers of Zarrin Shahr City in 2022. *Hakim Journal*. 2022;25:91-9. [In Persian]
  - 5 Almeida-Santos T, Melo C, Macedo A, et al. Are women and men well informed about fertility? Childbearing intentions, fertility knowledge and information-gathering sources in Portugal. *Reproductive Health*. 2017;14:91.
  - 6 Hammarberg K, Zosel R, Comoy C, et al. Fertility-related knowledge and information-seeking behaviour among people of reproductive age: a qualitative study. *Human Fertility*. 2017;20:88-95.
  - 7 Ackerman IN, Jordan JE, Doornum SV, et al. Understanding the information needs of women with rheumatoid arthritis concerning pregnancy, post-natal care and early parenting: A mixed-methods study. *BMC Musculoskeletal Disorders* 2015;16:194.
  - 8 Holton S, Kirkman M, Rowe H, et al. The childbearing concerns and related information needs and preferences of women of reproductive age with a chronic, noncommunicable health condition: a systematic review. *Womens Health Issues* 2012;22:541-52.
  - 9 Holton S, Fisher J, Button B, et al. Childbearing concerns, information needs and preferences of women with cystic fibrosis: An online discussion group. An online discussion group. *Sex Reprod Healthc*. 2019;19:31-5.
  - 10 Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Educ Today* 2004;24:105-12.
  - 11 Elo S, Kääriäinen M, Kanste O, et al. Qualitative content analysis: A focus on trustworthiness. *Sage Open*. 2014;4:1-10.
  - 12 Irani M, Khadivzadeh T. The relationship between childbearing motivations with fertility preferences and actual child number in reproductive-age women in Mashhad, Iran. *Journal of Education and Health Promotion*. 2018;7:175-83.
  - 13 Mohammed M, Gwarzo SM. Information needs and seeking strategies of antenatal patients for enhancing healthcare service delivery in rural areas of Northeastern Nigeria. *Library and Information Perspectives and Research*. 2024;6:193-206.
  - 14 Alibabaei M, Torkashvand Moradabadi M, Kalateh Sadat A. Mothers' experiences of pregnancy care: A qualitative study study. *Payesh*. 2024;23:245-57. [In Persian]
  - 15 Jahan F, Ansari M. Comparison of the effect of parenting training and positive parent-child interaction through play on family resilience, mother-child relationship intimacy, and mothers' stress. *Studies in Psychology and Educational Sciences*. 2022;8:182-97. [In Persian]
  - 16 Engasi S, Arefian M, Tashk A. Parents' parenting style and child's social development. *Journal of Contemporary Psychology*. 2015;10(suppl):171-3. [In Persian]
  - 17 Moilanen S, Räikkönen E, Lammi-Taskula J, et al. Do parenthood worries impede the birth of a second child? Differences according to the parent's gender and spousal support in Finland. *Journal of Family Research*. 2024;36:103-25.
  - 18 Sohrabi F, Khanjani Z, Zeinali Sh. Efficacy of adolescent parent management training in conduct disorder symptoms and Improve parents' parenting styles. *Scientific Journal of Gorgan University of Medical Sciences*. 2015;17:24-30. [In Persian]
  - 19 Rindfuss R, Brewster K. Childrearing and Fertility. *Population and Development*

- Review. 1996;22:258–89.
- 20 Meaney S, Lutomski JE, Connor LO, et al. Women's experience of maternal morbidity: a qualitative analysis. *BMC Pregnancy and Childbirth*. 2016;16:184.
- 21 Holton S, Fisher J, Rowe H. Attitudes Toward Women and Motherhood: Their Role in Australian Women's Childbearing Behaviour. *Sex roles Journal*. 2009;61:677-87.
- 22 Kagitcibasi C. The changing value of children in Turkey. Hawai'i: East West Population Institute; 1982.
- 23 Kaveh Firouz Z, AbbasiShavazi MJ, Serajzadeh H, et al. The Relationship between Religiosity and Family Values with Fertility Desires and Intention among Married Women in Tehran. *Quarterly of Social Studies Research in Iran*. 2021;10:587-623. [In Persian]
- 24 Heyford SR, Morgan SP. Religiosity and Fertility in the United States: The Role of Fertility Intentions. *Sociology Forces*. 2008;86:1163-88.
- 25 Oyediran KA, Ishola G, Bankole A. Relationship between Religion and Unintended Childbearing in Nigeria: A Cross-Regional Perspective. *Genus*. 2020;76:15.