

## Childbearing Barriers among Iranian Women: A Qualitative Study

Katayoun Jalali-Aria (MSc)<sup>1</sup>, Najmeh Tehranian (PhD)<sup>2\*</sup>, Eesa Mohammadi (PhD)<sup>3</sup>, Anoshirvan Kazemnejad (PhD)<sup>4</sup>, Ali Montazeri (PhD)<sup>5</sup>

<sup>1</sup> PhD Student of Reproductive Health, Department of Reproductive Health and Midwifery, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

<sup>2</sup> Associate Professor, Department of Reproductive Health and Midwifery, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

<sup>3</sup> Professor, Department of Nursing, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

<sup>4</sup> Professor, Department of Biostatistics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

<sup>5</sup> Professor, Population Health Research Group, Health Metrics Research Center, Iranian Institute for Health Sciences Research, Tehran, Iran

### ARTICLE INFO

*Article type:*  
Original article

*Article History:*  
Received: 18-Aug-2022  
Accepted: 27-Oct-2022

*Key words:*  
Childbearing  
Childlessness  
Women

### ABSTRACT

**Background & aim:** The Fertility rate is decreasing in most countries and the total fertility rate (TFR) has reached its lower replacement level, and negative population growth is observed in some countries, including Iran. This study aimed to explore the childbearing barriers among women living in northern Iran.

**Methods:** This qualitative study was performed with a conventional content analysis approach in Gorgan, Iran, from November 2018 to October 2019. A total of 23 women participated in this study. Of these, ten women had delayed childbearing at least four years after marriage, nine experienced induced abortion (without medical reasons), and four were voluntarily childless. Three childbearing politicians were also interviewed. Data were collected via face-to-face interviews and analyzed following recommendations by Hsieh & Shannon. The four criteria of credibility, dependability, conformability, and transferability were used to achieve trustworthiness.

**Results:** Seven themes emerged as childbearing barriers: undesirable society, economic hardship, work-family conflict, changed value of motherhood and childbearing, self-interest and convenience, feeling of inadequacy about parental role, being worried about child suffering and loneliness.

**Conclusion:** It seems that societal and personal concerns are the most important childbearing barriers among Iranian women. Perhaps some barriers such as economic and social problems could be resolved by advancing women's status in society, equality policies and paid parental leave. However, personal concerns might be reconciled by implementing appropriate educational interventions ensuring that assist couples in making informed decisions about childbearing.

► Please cite this paper as:

Jalali-Aria K, Tehranian N, Mohammadi E, Kazemnejad A, Montazeri A. Childbearing Barriers among Iranian Women: A Qualitative Study. *Journal of Midwifery and Reproductive Health*. 2023; 11(2): 3682-3693. DOI: 10.22038/JMRH.2022.67362.1973

## Introduction

Fertility is one of the main factors affecting the dynamics of population growth (1). Now, in most high- and low-income countries, the Total Fertility Rate (TFR) is either at the replacement level or even lower than the expected rate (2, 3). Iran is one of the countries that experienced a sharp decline in TFR, where it dropped from 6.5 children per woman in 1986 to 1.8 children per

woman in 2006 (4). Although, according to the last census in 2016, the population of Iran is increasing (5), a decrease in TFR and an increase in life expectancy led to the fast growth in the elderly population (6). Iran is experiencing the aging process faster compared with other countries (7).

\* Corresponding author; Najmeh Tehranian, Associate Professor, Department of Reproductive Health and Midwifery, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. Tel: 02138284560; Email: tehranian@modares.ac.ir

In the past, Iran was successful in reducing population growth, but since the TFR reached a level below replacement, the government decided to change the population policy (7). In this regard, the “fewer children, a better life” policy was replaced with a policy encouraging people to have children. This change in population policy is echoed differently by scholars; some believe that decreased childbearing is due to the previous policy, while others believe that Iranian society has changed greatly on several grounds, including attitudes toward having big families (8-9).

A population-based study performed in Iran showed that the most important reason for interest in childbearing was the wish to have a child, followed by the wish to experience parenthood. They indicated that the two most important barriers to childbearing were worry about the child’s future and financial difficulties (10). Similarly, a study on Kurdish women in Iran (2012) found that low childbearing had several reasons, including concern about body image, maintaining social activities, and worry about children’s futures (11). Thus, it is argued that childbearing barriers could be caused by a spectrum of reasons ranging from economic issues to worries for children’s futures to individual reasons and interests.

However, studies have shown that in the real world, several factors can influence childbearing decisions. Much is known about barriers and enablers to childbearing in high-income countries such as the USA (12), the UK (13), Canada (14), Spain, and Italy (15). In general, they indicated that personal circumstances, biomedical barriers, financial reasons, and feminist thoughts were some of the barriers to childbearing. In addition, some investigators argued that although policies related to financial benefits could have some impacts on childbearing in developing countries, policies related to work-family balance might have a more substantial effect on the childbearing decision (16).

The qualitative investigations in Iran surveyed specific aspects of barriers. A qualitative study investigated the effect of education on delayed childbearing (17), and another study only interviewed faculty members and postgraduate students (18). Also, the other study explored

voluntary childlessness where the investigators interviewed childless couples and found that the core reason for childlessness, was ‘individual concerns’ (19). Nevertheless, investigating childbearing-related issues from women’s perspectives is still a topic of interest since it directly relates to females’ reproductive health and well-being. Therefore, this study was performed to explore childbearing barriers among women with different reproductive backgrounds. It was hoped that the findings of the present study could shed some light on future planning and implementation of interventions for population growth.

## Materials and Methods

This qualitative study was carried out using qualitative content analysis with a conventional approach. This approach is usually used when an existing theory or research literature on the topic is limited. The purpose of the study was to discover the barriers to childbearing based on women’s perceptions. The qualitative content analysis with a conventional approach can discover and explain people’s perceptions of behaviour and daily life issues (20). The study was approved by the ethics committee of Tarbiat Modares University (IR. MODARES. REC.1397.008). In addition, permission was obtained from the Gorgan University of Medical Sciences for data collection in health centers. All participants were informed about the purpose and methods of the study. The individuals were assured of the confidentiality of their information. All participants signed written informed consent. The study was performed under the Declaration of Helsinki (21) and following the Consolidated Criteria for Reporting Qualitative Research (COREQ) (22).

The study was conducted in Gorgan, a city in northern Iran, from November 2018 to October 2019.

Purposive sampling was used on married women attending Gorgan Health Centers for routine care. To recruit women, the main investigator attended health centers during the study period and approached women who were attending the midwifery clinics. Participants were included if they had one of the following criteria: delayed pregnancy (fertile women avoiding pregnancy at least for four years after marriage based on a definition introduced by

the Iranian Ministry of Health) (7), history of induced abortion (illegal abortion without any medical indications), and women with voluntary childlessness at least four years after marriage who intended to be childless forever. Except for five women with induced abortions who refused to participate in the study due to fear of legal issues at the recruitment stage, other women accepted to participate in the study. The exclusion criterion was the unwillingness of the participant to continue the interview.

All 26 interviews were conducted by one researcher. The participants' characteristics were presented in Table 1.

**Table 1.** Demographic characteristics of participant women (n=23)

Variable	Frequency (%)
<b>Condition</b>	
Delayed childbearing	4 (17)
Induced abortion	9 (39)
Voluntary childless	10 (44)
<b>Age range (years)</b>	
23-32	5 (22)
33-42	11 (48)
43-51	7 (30)
<b>Marriage duration (years)</b>	
6-15	13 (57)
16-26	10 (43)
<b>Education</b>	
Higher	17 (74)
Secondary	6 (26)
<b>Occupation</b>	
Housewife	8 (35)
Teacher	6 (26)
Staff member	3 (13)
Midwife	3 (13)
Physician	1 (4)
Self-employed	2 (9)
<b>Self-reported economic status</b>	
Good	11 (48)
Intermediate	11 (48)
Poor	1 (4)

Also, an interview was done with three policymakers who work in the field of population policy to confirm the data, three politicians who worked in the field of childbearing were interviewed, from whom two were working in Golestan province health department and one in Iran's Ministry of Health.

In-depth, unstructured face-to-face interviews were conducted to collect data. The participants completed a short demographic questionnaire, including age, marriage duration, education, employment, and economic status. Sampling continued to reach saturation. Data saturation happened in the 18<sup>th</sup> interview. However, for more confidence, 23 women were interviewed. After a brief communication, the researcher asked, "Why have you voluntarily decided not to have a child?". Following the participants' answers, the interviewer asked more probing questions such as "could you explain more?" "What do you mean?" or "could you please give me an example to clarify yourself?" For example, a participant with voluntary childlessness said, "Having children is a form of cruelty." Then the researcher asked me to explain more about oppression. "Who is oppressed?" The participants chose the time and place of the interviews (home, workplace, and health center). The location was private, and each interview lasted for about 20 minutes to an hour.

The research team reviewed all interim results and coded the texts made ready for further analysis in accordance with Hsieh & Shannon's approach (2005) (20). Constant and comparative analysis were used to analyze the data.

All interviews were recorded and then transcribed verbatim. Data analysis started with reading all the data repeatedly to achieve immersion and obtain a sense of the whole, as one would read a novel. The data was then read word for word to derive codes, with the exact words from the text that appeared to capture key thoughts or concepts highlighted first. Next, the researcher approached the text by making notes of his or her first impressions, thoughts, and initial analysis. As this process continued, labeled codes emerged that were reflective of more than one key thought. These often come directly from the text and become the initial coding scheme. Codes were then sorted into categories based on how they were related and linked.

**Table 2.** Example of codes, subcategories, categories, and theme of economic hardship from content analysis of childbearing barriers in women

Meaning unit	Code	Sub-category	Category	Theme
In the first five years of our life, we went through very difficult economic conditions. I could not even go to the doctor. That is, our very small income was spending on the necessary expenses of life	Low salary	Family economic problems	Inability to meet the economic needs of the family	
We had bought a house and paid all the instalments and, we had to proceed with everything in instalments and, with financial problems	Loan payments			
My wife and I started our life from scratch. We wanted to increase the facilities of life and then have children	Lack of facilities and means of living			
I have been working for so many years, but I am still living in a rented house why would I want to bring another person into this life?	Rental housing	Inability to buy a home		Economic hardship
I had to have an abortion because we didn't have a house; we lived with my mother-in-law	Living with mother-in-law			
Having children needs a lot of money and facilities, and as a mother, I would like to fulfill my baby's wish	Concern about provide adequate facilities for the child	High expenses	Concerns about economic pressures and burdens	
We had made our decisions. We were not going to have children. We were not sure about the future of the child. Because of the conditions that existed in the country	Spouse insists on childlessness due to the fear from unable to provide for the need of the child			
I was always afraid of the costs of pregnancy and having children. Every day everything becomes more and more expensive, such as nurseries, clothes, and everything	High costs of kindergarten and child care			
Every day something new comes, mobile phones, tablets, all of this makes the cost of having children go up. The child wants to buy everything. Some of them are necessary to buy	Advances in technology as a factor of high cost			
The economic condition in the country is so unstable that you cannot plan for anything	The current state of the economy	Instability of the country's economic situation		
The conditions in the country are not good enough so that children have a good future	Fear of future economic conditions			

These emerging categories were used to organize and group codes into meaningful clusters (20). Finally, with the advancement of data analysis, the initial categories were developed and through merging them categories formed, from which overarching themes were emerged. The stages of data analysis from the initial to the formation of one theme are shown in Table 2.

The four criteria of credibility, dependability, conformability, and transferability were used to achieve trustworthiness.

The member check, prolonged engagement, peer debriefing, and external check were used to confirm the credibility of data. Referees did external check in the process of the project six-month review. Also, the diversity of participants increased the dependability of the findings.

The initial codes were sent to all participants for confirmation. Specifically, since there was some ambiguity in the three transcripts and codes, these were again given to the three participants. In addition, the codes and categories of interviews were given to the research team to verify and suggest ideas. From the start of the study to the end, review and code extraction were done continuously so that all important information could be included in the analysis.

## Results

In general, 287 meaning units, 71 codes, 53 subcategories, 20 categories, and seven themes were emerged. Seven themes emerged including 1) undesirable society, 2) economic hardship, 3) work-family conflict, 4) value change for motherhood and childbearing, 5) self-interest and convenience, 6) feeling of inadequacy in parenting, 7) worry about child suffering and loneliness (Table 3).

The women's ages ranged from 23 to 51. Ten women had delayed childbirth, nine had induced abortions, and four were voluntarily childless. Of the nine women who had induced

abortions, two reported that it was their first pregnancy, and seven stated that they had one child and this was their second pregnancy these seven themes were identified as seven barriers to childbearing among participating women. In the following sections, a brief description of these is presented.

### 1. Undesirable society

Women expressed concerns about society and its condition due to their sense of responsibility toward their children. They indicated several problems, including worries about education, employment, and the welfare of children, that prevent them from childbearing

The participants mentioned some childbearing barriers as follows: different forms of discrimination (gender, race, ethnicity, religion); inappropriate schools in terms of curriculum and training issues; injustice in society; and social instability.

One of the participants said:

"You know, when I see so many problems in society, I feel like I can't handle having a child." (Voluntarily childless, participant No. 21, 23y)

Another participant said:

"You can't plan; what is going to happen tomorrow? There is no sense of cohesion. The society can't support you. Thanks God my economic situation is not bad, but the things that worry me are his/her future, carrier, education, and life." (Delayed childbearing, participant No. 6, 36y)

A woman touched on the issue of welfare and pointed out:

"In my mind, I wanted to have two children, but the condition makes you feel like you don't like to have many children. I don't feel secure at all. If I were in a country like Norway, Sweden, or Denmark, maybe everything was different, and I might like to have three children. Society is not suitable for children." (Induced abortion in the second pregnancy, participant No. 13, 50y)

**Table 3.** Sub-categories, Categories, and theme of barriers childbearing in women

Sub-category	Category	Theme
Concern about the social situation in Iran Social insecurity Social injustice Unfavorable education system Lack of peace in society	Social dissatisfaction	
Lack of a clear picture of the future Worrying about the child's future due to social problems (entrance exam, studying)	Worries due to social instability	<b>Undesirable society</b>
Family economic problems Inability to buy a home	Inability to meet the economic needs of the family	<b>Economic hardship</b>
Instability of the country's economic situation High expenses	Concerns about economic pressures and burdens	
job problems of the couple (wife or husband) Lack of opportunity and time to take care of the children	Job engagements	<b>Work-family conflict</b>
Lack of job security for wife or husband Inadequate organizational support	Employment instability	
Belief in the necessity of having children Change in the attitudes and thinking Feelings of futility in life and the ambiguity of the philosophy of creation A different definition of motherhood	Disagreement with traditional thought toward family and childbearing	<b>Value change for motherhood and childbearing</b>
Uninterested in having children Becoming the norm of childlessness Lack of family pressure Opposition to childbearing from husband and his family	Change of value of childbearing	
No desire to have children No reason to have children	lack of maternal feeling and no need to have a child	
To avoid hurting yourself (physical, physical, mental) Self-centeredness Lack of mental preparation	Paying attention and focus on one's own health and comfort	
Sense of satisfaction without child Child as a barrier for travelling Harmful recreation	Spoiling the recreations	<b>Self-interest and convenience</b>
To achieve the goals (occupation, housing, education, comforts) Rising expectations Changing attitudes towards quality of life	Changing the welfare pattern	
Feeling very responsible in meeting the needs of the child Fear of not being able to accept parenting responsibilities Fear of not being able to raise a child	Feeling incompetency in parenting roles	<b>Feeling of inadequacy in parenting</b>

Sub-category	Category	Theme
Loneliness Taking care of the sick parents	Inadequate parental readiness	
Being a student Uncertainty about the readiness of the spouse	lack of appropriate support	
Being young High age	Believing in age limitation for pregnancy	
Compassion for child because of possible sufferings Possible dissatisfaction with being born in future	Preventing from child's existential suffering	
The child as an obstacle to make the right decisions during marital discord Getting to know spouse on a deeper level	The ability to decide freely in marital discord	<b>Worrying about child suffering and loneliness</b>
Marital discord in their parents Parental addiction Bitter memories of illness or sibling's death in childhood	Bitter childhood experiences	
Fear of pregnancy and its consequences for herself and the baby Spouse's illness Fear of death and child's illness	Concerns about the health of child and parents	

**2. Economic hardship**

Economic issues are one of the most important factors in every country and have a significant impact on people's lives. Unfortunately, in Iran, for different reasons, the ailing economy is a dominant problem. As a result, participants mentioned two effective variables as childbearing barriers: the economic condition of the family and society, ranging from insufficient income to living in a rented home or parent's house, high expenses to inflation, and insufficient organizational support.

One of the participants stated in this regard: "I must say I had extremely difficult economic conditions in the past five years, even for medical expenses. Because of the intensified economic situation, I changed my mind about having a child, and I gave it up completely." (Voluntarily childless, participant No. 23, 39y)

A woman, after fifteen years of marriage, said that:

"You know, I have been working for many years, but I am still living in a rented house; there is no reason to bring a child." (Voluntarily childless, participant No. 21, 23y)

Similarly, a participant indicated that:

"Because of economic instability, we decided not to have one child. We are worried about expenses after pregnancy." (Delayed childbearing, participant No. 3,37y)

In addition, participants were worried about expenses after pregnancy. For instance, a woman said:

"First, we decided to have three children (laughs), but now, with this current economic situation, we think one is enough... The financial situation is terrifying; there would be a lot of expenses after pregnancy that we believe we will be unable to bear."(Delayed childbearing, participant No. 7, 34y)

**3. Work-family conflict**

Participants indicated that work-family conflict was one of the major reasons they could not think about pregnancy and childbearing. They stated that their work responsibilities made pregnancy impossible, so they are currently childless. A childless woman said:

"Because of my husband's working conditions, he is self-employed, and he was alone, and he didn't have an assistant, so I worked as an accountant for him. So, we were in the situation

of not having a baby." (Delayed childbearing, participant No. 8, 37y)

Job insecurity was another concern pointed out by participants. A woman who had an abortion said:

"...My employer wanted to pay less than the standard wage; he refused to provide an insurance facility for me. So, I couldn't have maternity leave. I was afraid of losing my job. I love my job." (First pregnancy induced abortion, participant No. 16, 30y)

Another woman stated a similar interest:

"You know my job is my priority. When I got married, I told my husband, first work, then family life (smiling). You know, I think working outside the home could provide you with a social identity." (Delayed childbearing, participant No. 3, 37y)

#### 4. Value change for motherhood and childbearing

Some participants believed that married people did not have to have children. They did not believe in childbearing, and some participants indicated that being childless is becoming more global and that many people would prefer not to have children. Some participants rejected traditional family and childbearing beliefs, stating that there was no need for children and instead have a different definition of motherhood. One of the participants said in this regard:

"Yea, I don't feel maternal instinct; I think I don't love to give birth to a baby; first, I think about myself. Where am I? Where am I going? Emotionally, I didn't have a really strong maternal feeling." (Voluntary childless, participant No. 20, 40y)

Another woman said:

"When I told my husband about having children, he replied that the main aim of marriage is not to have children; I want to live together and experience living together for a long time." (Delayed childbearing, participant No. 4, 38y)

#### 5. Self-interest and convenience

Participants mentioned a variety of issues as obstacles to childbirth that could limit their enjoyment or cause difficulties (emotional or physical). Some women mentioned child-care difficulties as physical and mental issues, so they postponed childbearing. Some people

mentioned having children as a barrier to traveling and other recreational activities. However, others believed that they should improve their living conditions before having children.

A participant said in this regard:

"...you know, let me tell you, I love my husband very much; I would like to go out more together without any disturbance." (Induced abortion in third pregnancy, participant No. 18, 25y)

A participant stated that leisure activities were the main thing that kept them from having children. She said:

"I believe the biggest barrier to my pregnancy is recreational activities. I would like to smoke and drink with my friends and enjoy my life." (Delayed childbearing, participant 7, 34y)

A woman indicated that motherhood is equal to ignoring yourself, and therefore she did not want to become a mother. She said:

"... You must ignore you. You can't buy anything for yourself, you can't do what you want, and you should completely disregard yourself. I believe we should first think about ourselves and then others... Young people think like this. Attitudes have shifted. Contrary to tradition, people do not want everything for children." (Induced abortion in the second pregnancy, participant No. 12, 36y)

The previous experience also influenced women's judgments about childbearing. A participant said that:

"You know, for the first baby, I had a hard time. I don't want to repeat problems such as difficulty in sleeping, tiredness, and... I am terrified even to imagine these again." (Induced abortion in the second pregnancy, participant No. 14, 45y)

#### 6. Feeling of inadequacy in parenting

Some participants expressed concerns about parenting abilities as childbearing barriers. Worries included insufficient preparedness, inadequate parental readiness, fear of not being able to accept parenting responsibilities, a lack of appropriate support in the family, and an inappropriate age. They believed that these could make childbearing difficult or impossible.

A participant said in this regard:

"... I think yeah, all of my family lives in Tehran. So, I didn't have anybody to help me." (Delayed childbearing, participant No. 9, 29y)

A participant indicated that you should take on some responsibilities to become a mother, and since she had some concerns, she thus delayed childbearing:

"You know, I am afraid to take responsibility for someone else." (Delayed childbearing, participant No. 7, 34y)

Similarly, a participant said:

"I think about the newborn. Sometimes I think I will be a mother; I must sacrifice myself for my children in every way. .... You know, I felt maybe I neglected my responsibilities as a mother, so I preferred not to have any children. My husband is even worse than me." (Voluntarily childless, participant No. 22, 51y)

A woman with a one-year-old girl said that:

"My daughter didn't sleep at night; we stayed awake until morning. She slept for about one to two hours; I couldn't sleep. I was utterly fed up; I couldn't look after her. Finally, I satisfied my husband by terminating the second pregnancy, because having a nervous child raised by an angry mother is pointless. Maybe I thought I behaved violently toward her. I cannot raise her well; a child with a bad upbringing... It's better not to be, you know. I think the main factor was loneliness and being alone." (Induced abortion in the second pregnancy, participant 14, 45y)

### **7. Worry about child suffering and loneliness**

Several parents believed that if they had children, their children would face a variety of obstacles; therefore, feelings of shame and compassion made them reconsider parenthood. According to the participants, this suffering might range from existential suffering such as death and illness to parental divorce and life troubles. These concerns drove some women to postpone childbearing, while others chose to stay childless.

One of the women said in this regard:

"My husband and I have opposite views; I mean, we think differently. I was worried they wouldn't get along, and then I thought, "Why would I bring a child and make a miserable life for him or her?" (Delayed childbearing, participant No. 8, 37y)

A woman was worried that in the future, their child may experience suffering. She said that:

"You know, I am always thinking about why I was born. And if I bring a baby, I feel guilty; you

know that a baby can experience his or her father's or mother's illness or death. Anyway, maybe the child will grow up in an ideal way, but eventually, he or she will face these sufferings, and I feel great sympathy for that baby and his or her sufferings (smiling). (Voluntarily childless, participant No. 20, 40y)

### **Discussion**

The results of the present study showed that the participants experienced various childbearing barriers. Living conditions and instability were the most frequently mentioned barriers by participants. It was mostly structural factors, such as undesirable social and economic uncertainty, that affected women's decisions about childbearing. These require government interventions at the macro level. However, the findings indicated that some barriers were individual concerns. It is suggested that some of the more individual factors may be alleviated with psycho-educational initiatives such as promoting parenting skills and reducing women's fear of their children's loneliness and suffering. All initiatives should be for both women and men. Also, there is a need for initiatives that enable people to make informed childbearing decisions and support them in achieving their reproductive goals.

Some participants believed that they did not have enough skills to bear a child. In addition, they were worried if they could handle a child while he or she might have several vital needs. They indicated many factors, ranging from inappropriate age to how women succeed in childbearing without any support.

It seems like women had a realistic view of how hard it was to raise children without enough support. However, one could argue that women were perfectionists when it came to childbearing. Although being a perfectionist is not a negative issue by itself, it seems that providing appropriate social support and educational materials may improve women's self-efficacy in making an informed decision about childbearing. According to one study, there is a significant negative correlation between the time between marriage and the first pregnancy and maternal perceived self-efficacy. Also, the desired number of children had a significant positive correlation with maternal perceived self-efficacy (Khadivzadeh

et al 2017) (23). But none of the qualitative studies reported the feeling of inadequacy in parenting as a barrier to childbearing. This finding is one of the distinctions between the present study and the other studies in this field. Participants indicated that childbearing needs assurance about the future of the child. Their concerns about bringing a child were related to their fear of the child's loneliness and suffering in the future when they were not available to help them. Some quantitative (Haeri mehrizi et al 2017),(Erfani and Shojaei 2019) (10, 24) and qualitative studies from Iran (Ahmadi et al 2019),(Hoseini et al 2014) also showed similar findings, where they found that worry about children's futures was a significant barrier to childbearing (19, 25). Miller (1995) refers to this as "fear of parenthood" and believes that it may have a negative relationship with fertility motivation (26). Since some women do not have children because of their circumstances and not because they do not want to have children, perhaps health providers should recognize such concerns and provide help and support for this group of women. Rezaee et al (2022) found that counseling was effective in promoting the motivation of childbearing in female students (27).

Another barrier was the family-friendly work policies. Women indicated that childbearing may put their jobs at risk. They believed that because there has been a significant increase in the number of skilled and educated women in recent years if you prioritize childbearing and family issues, you will easily lose your job. Several studies from Iran and elsewhere reported similar results where women indicated that employment could interfere with child care because of a lack of job instability (18, 28, 29, 30,31). In contrast, some other studies from Iran (32) or other countries found that employed women had more desire for childbearing. They explained that such a desire might be due to the better economic situation of this group. However, in the present study, women with full-time jobs delayed pregnancy because of job engagement. Interestingly, a study from Belgium (Wood and Neels 2017) showed that these women tended to have children because of achieving a better income (33). It seems the difference between findings might be explained

by differences in organizational support, labour laws for women after delivery, and child care facilities in workplaces in different countries.

The results of this study showed that some of the themes had to do with structural factors. The relationship between socio-economic problems and childbearing barriers was not unexpected because many families think having a new child imposes an extra burden on their difficult economic situation. Similarly, some people who took part in a quantitative online survey in the UK with people from 64 different nationalities (mostly from the UK, Canada, Australia, and the USA) said that social concerns kept them from having children (Avison and Furnham 2015) (28). The concerns about society found in this study were very similar to those found in the earlier studies.

Many people cite financial hardship and insufficient income as obstacles to having children. Similar findings were reported from Iran (34,36) and even other countries, including Canada and England (14, 28). In the current study, the participants stated that economic problems were a barrier from two perspectives: personal and societal.

For instance, a woman with good economic status stated that, despite her good economic status, we are doubtful about childbearing due to economic instability. However, the difference between the results of this study and other Iranian investigations might be attributed to the characteristics of the study participants. The present study interviewed participants who had delayed childbearing for at least four years, mostly due to economic barriers or similar reasons. Therefore, it seems the participants in this survey were very concerned about economic problems.

This study used a diverse group of women, including those who got pregnant late, had an abortion without a medical reason, and chose not to have children. It contributes to the richness and integrity of the data. However, the present study had some limitations: the participants were almost the same in terms of social, economic, and educational level, while economic status and educational level can affect the positive and negative motivations of fertility (Zare et al 2019) (37). In addition, refusal to participate in the study was high among women

with induced abortions. They were most concerned with confidentiality, and unfortunately, we were less successful in convincing this group of women. Thus, it is recommended that future studies focus on collecting such information during interviews. Also, it is suggested that future studies be performed to investigate the issues related to the enablers of childbearing, men's experiences, and perspectives. It is believed that these types of investigations might shed more light on the topic and help inform public policies for reproductive health and population growth.

### Conclusion

The findings of the present study suggested that structural and individual factors were the most important childbearing barriers among Iranian women. Perhaps some barriers, such as economic and social problems, could be resolved by advancing women's status in society, enacting equality policies, and providing paid parental leave. However, individual reasons, including parents' lack of confidence in parenting adequacy, fear of child suffering and loneliness, self-centered comfort, and self-interest, might be reconciled by implementing appropriate educational interventions ensuring that they assist people (i.e. women and men) to make informed childbearing decisions.

### Acknowledgements

This manuscript originated from the Ph.D. thesis at the Department of Reproductive Health, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. The authors would like to thank all participants who shared their views on this topic and particular thanks to Tarbiat Modares University and Golestan University of Medical Sciences for supporting this project.

### Conflicts of interest

Authors declared no conflicts of interest.

### References

- Roy S, Hossain SMI. Fertility differential of women in Bangladesh demographic and health survey 2014. *Fertility Research and Practice*. 2017; 3(1): 316. <https://doi.org/10.1186/s40738-017-0043-z>
- United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019*, Online Edition. Rev 1. File FERT/4: Total fertility. Available at: <https://population.un.org/wpp/Download/Standard/Fertility>. Accessed 5 May 2020.
- Abbasi-Shavazi M. J, Hosseini-Chavoshi M, McDonald P. The path to below replacement fertility in the Islamic Republic of Iran. *Asia-Pacific Population Journal*. 2007; 22(2): 91-112.
- Foroutan Y. Population dynamics of Iran from sociological approach. *Journal of Sociology of Social Institution*. 2019; 5(12): 101-122.
- Statistical Centre of Iran (SCI), Selected results of the 2016 National Population and Housing Census. Available at: [https://www.amar.org.ir/Portals/1/census/2016/Census\\_2016\\_Selected\\_Findings.pdf](https://www.amar.org.ir/Portals/1/census/2016/Census_2016_Selected_Findings.pdf) Accessed 15 October 2018.
- Mehri N, Messkoub M, Kunkel S. Trends. Determinants and the implications of population aging in Iran. *Ageing International*. 2020; 45: 327-343. Available at: <https://doi.org/10.1007/s12126-020-09364-z>
- Eslami M. Decreasing total fertility rate in developing countries. *Journal of Family and Reproductive Health*. 2016; 10(4): 163-164.
- Ranjbar F, Shirzad M, Kamali K, Akhondi MM, Ghodjani A, Behjati Ardakani Z, Parsaeian M, Mohammad K. Fertility behaviour of Iranian women: A community-based, cross-sectional study. *Archives of Iranian Medicine*. 2015; 18 (1): 2-5.
- Abbasi-Shavazi MJ, McDonald P. Fertility decline in the Islamic Republic of Iran: 1972-2000. *Asian Population Studies*. 2006; 2(-3): 217-237.
- Haeri mehrizi AA, Tavousi M, Sadighi J, Motlagh ME, Eslami M, Naghizadeh F, Montazeri A. Reasons for fertility desire and disinterest among Iranian married adults: A population-based study. *Payesh*. 2017; 16(5): 637-645. [Persian]
- Mahmudian, H., Rezaei, M. Women and Low Childbearing Action: The case study of Kurdish women. *Women's Strategic Studies*. 2012; 14(55): 173-225. [Persian]
- McQuillan J, Greil AL, Shreffler K, Wonch-Hill PA, Gentzler KC, Hathcoat JD. Does the Reason matter? Variations in childlessness concerns among U.S. women. *Journal of Marriage and Family*. 2012; 74(5): 1166-1181.
- Gillespie R. Voluntary childlessness in the United Kingdom. *Reproductive Health Matters*. 1999; 7(13): 43-53.
- Daniluk JC, Koert E. Between a rock and a hard place: the reasons why women delay childbearing. *International Journal of Healthcare*. 2017; 3(1): 76.

15. Bodin M, Holmström C, Plantin L, Schmidt L, Ziebe S, Elmerstig E. Preconditions to parenthood: changes over time and generations. *Reproductive Biomedicine & Society Online*. 2021; 13: 14-23. Available at: <http://doi.org/10.1016/j.rbms.2021.03.003>.
16. Rondinelli C, Aassve A, Billari F. C. Women's wages and childbearing decisions: Evidence from Italy. *Demographic research*. 2010; 22(19): 549-578. Available at: <http://doi.org/10.4054/DemRes.2010.22.19>.
17. Razezghi-Nasrabad HB, Para effect of education on childbearing postponement: A qualitative study among female students in Tehran universities. *The Socio Cultural Strategy Journal*. 2016; 5 (20): 167-190.
18. Safari-Faramani R, Haghdoost AA, Baneshi MR, Dehnavieh R. Exploring the perception of childbearing barriers in a low fertility subgroup of Iran: a qualitative study. *Electronic Physician*. 2018; 10(6): 6927-6934.
19. Ahmadi SE, Rafiey H, Sajjadi H, Nosratinejad F. Explanatory model of voluntary childlessness among Iranian couples in Tehran: A grounded theory approach. *Iranian Journal of Medical Sciences*. 2019; 44(6): 449-456.
20. Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. *Qualitative Health Research*. 2005; 15(9): 1277-1288.
21. Association WM. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. *Journal of the American Medical Association*. 2013; 310(20): 2191-2194.
22. Tong A, Sainsbury P, Craige J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007; 19(6): 349-357. Available at: <http://doi.org/10.1093/intqhc/mzm042>
23. Khadivzadeh T, Hadizadeh Talasaz Z, Shakeri MT. Predicting factors affecting the delay in first childbearing among young married women using the Bandura's social learning theory. *Hayat*. 2017; 23(3): 226-242. [Persian]
24. Erfani A, Shojaei J. Reasons for intending to have no children in Tehran, Iran. *Community Health*. 2019; 6(2): 116-129. [Persian]
25. Hoseini H; Pakseresht S; Rezaee M; Mehrganfar M. Qualitative analysis of childbearing action of Arab spouses in Ahwaz City. *Journal of Population Association of Iran*. 2014; 9(17): 141-169. [Persian]
26. Miller WB. Childbearing motivation and its measurement. *Journal of Biosocial Science*. 1995; 27(04): 473-487.
27. Rezaee P, Moradi M, Khadivzadeh T, Kimiaei SA, Jamali J. The Effect of Group Counseling Based on Motivational Interview on the Motivation of Childbearing in the Female Students of Mashhad University of Medical Sciences. *Journal of Midwifery and Reproductive Health*. 2022; 10(2): 3278-3289.
28. Avison, M., & Furnham, A. Personality and voluntary childlessness. *Journal of Population Research*. 2015; 32(1): 45-67.
29. Eshaghi M, Mohebi SF, Papynezhad SH, Jahandar Z. Childbearing challenges for working women: a qualitative study. *Woman in Development and Politics*. 2014; 12(1): 111-134. [Persian]
30. Vitali A, Billari F.C, Prskawetz A, Testa M.R. Preference theory and low fertility: A comparative perspective. *European Journal of Population*. 2009; 25(4): 413-438.
31. Davoudi F, Soleimanvandy Azar N, ezoji H, Ezoji Kh. Determinants of Employed Women's Attitude Towards Childbearing *Journal of Midwifery and Reproductive Health*. 2020; 8(4).
32. Hajizadeh Bandeghara F, Jannesari S, Ozgoli G, Nasiri M. Positive effect of woman's empowerment on childbearing: more children in working woman. *Iranian Journal Obstetrics, Gynecology and Infertility*. 2016; 19 (37): 51-61. [Persian]
33. Wood J, Neels K. First a job, then a child? Subgroup variation in women's employment-fertility link. *Advances in Life Course Research*. 2017; 33: 38-52. Available at: <http://doi.org/10.1016/j.alcr.2016.09.003>
34. Behboudi-Gandevani S, Ziaei S, Farahani FK, Jasper M. The perspectives of Iranian women on delayed childbearing: A Qualitative Study. *Journal of Nursing Research*. 2015; 23(4): 313-321.
35. Tavousi M, Motlagh ME, Eslami M, Haerimehrizi A, Hashemi A, Montazeri A. Fertility desire and among Iranians living in Tehran: reasons for desire and disinterest. *Payesh*. 2016; 15(6): 663-668. [Persian]
36. Baki-Hashemi S, Kariman N, Ghanbari S, Pourhoseingholi MA, Moradi M. Factors affecting the decline in childbearing in Iran: A systematic review. *Advances in Nursing and Midwifery*. 2018; 27(3): 11-19.
37. Zare Z, Kiaetabar R, Laal Ahangar M. Fertility motivations and its related factors in women of reproductive age attended health centers in Sabzevar, Iran. *Journal of Midwifery and Reproductive Health*. 2019; 7(1): 1544-1552.