The Perspectives of Iranian Women on Delayed Childbearing: A Qualitative Study

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ABSTRACT

Background: Delayed childbearing is a growing trend in Iran.

Purpose: This study explores the perspectives of women on delayed childbearing.

Methods: A qualitative study using a content analysis approach was conducted on data acquired using private semistructured interviews with 23 women aged ≥30 years who were childless or pregnant for the first time in an urban area of Iran.

Results: Three main themes were developed using conventional content analysis: ''personal inclination,'' ''perceived beliefs about delayed childbearing,'' and ''social support.''

Conclusions: Although women in Iran hold favorable attitudes toward childbearing, a wide range of sociocultural and economic factors encourage these women to postpone their first pregnancy. The findings of this study are relevant and important for nursing and midwifery policymaking in countries with cultural and contextual backgrounds similar to Iran.

KEY WORDS:
content analysis, delayed childbearing, women's perspectives.

Introduction

Iran has experienced a significant decline in the fertility rate over the past 3 decades. In 1986, National Census data reported a 3.2% annual population growth rate and a 40% increase in population since 1976 (Abbasi-Shavazi, McDonald, & Hosseini-Chavoshi, 2009) to 49.3 million. In response, in 1988, the Iranian government sponsored a major population control program resulting in a fertility rate decline from seven births per woman in 1979 to 1.8 births in 2011 (National Census, 2011). According to the latest National Census (2011), the population growth rate is now 1.3%. Iran has achieved the largest and fastest fertility decline in the world as a result of governmental policies that have expanded education and adult literacy, expanded the health network system, and promoted smaller families in rural areas (Abbasi-Shavazi et al., 2009). The rise in delayed childbearing behavior has become an issue of concern in developing countries like Iran in recent years (Abbasi-Shavazi & Razaghi-Nasrabadi, 2010). About 30% of women experience their first pregnancy after 5 years of marriage, and around 4% remain childless after 10 years of marriage. Furthermore, the proportion of women delivering infants at the age of 30 years or older has been increasing (Abbasi-Shavazi & Razaghi-Nasrabadi, 2010). Behboudi-Gandevani, Ziaei, Khalajabadi-Farahani, and Jasper (2013) showed that women in Iran are largely unaware of the potential complications of delayed childbirth and that this issue appears to be ignored by the Iranian healthcare system. The increasing trend toward postponing pregnancy appears to be a worldwide phenomenon that is particularly pronounced in developed countries (Cooke, Mills, & Lavender, 2010). Increased age at first birth accentuates the problem of the low fertility rates in European and other developed countries. There is a lack of consensus regarding the definition of delayed childbearing. From a biological perspective, fecundity begins declining as early as the late 20s for women, with further reductions starting around the age of 35 years (Dunson, Colombo, & Baird, 2002). Some studies consider conceiving at 30 years old and over to be delayed childbearing (Cooke et al., 2010). Therefore, delayed childbearing in this study was defined as the personal choice to postpone childbearing in nulligravida married women over 30 years old.

Delayed childbearing is associated with a wide range of adverse social, health, and demographic outcomes. It carries the risk of involuntary childlessness and, by reducing the time span

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for having more children, diminishes completed cohort fertility (te Velde, Habbema, Leridon, & Eijkemans, 2012). In addition, the risks of adverse obstetric complications such as cesarean section, placental complications, miscarriage, ectopic pregnancy, and subfertility are multiplied (Virtala, Vilska, Huttunen, & Kunttu, 2011). It also carries higher risks of pregnancy-associated chronic diseases and neonatal adverse outcomes (Cleary-Goldman et al., 2005). The trend of delayed parenthood and risks associated with advanced-age childbearing also apply to men, with a large decline in male fecundity (Bray, Gunnell, & Smith, 2006). Studies in developed countries have associated delayed childbearing with increased educational levels and work opportunities for women (Mac Dougall, Beyene, & Nachtigall, 2013). Furthermore, incompatibility between caring for children and having a professional career decreases motivation for pregnancy (Mills, Rindfuss, McDonald, & te Velde, 2011). In developed societies with higher gender equality, women have educational and employment opportunities similar to men, which may result in women having fewer children at a later age (Mills et al., 2011). Although this phenomenon is an evolving issue ubiquitous across the world, little is known about delayed childbirth in transitional countries such as Iran, which differ dramatically in terms of economic development, political and social structure, family organization, educational levels, women's status, child survival, social diffusion mechanisms, availability of contraceptive technology, and level of government commitment to fertility reduction. No data are available in Iran on factors associated with this phenomenon. Therefore, this study was conducted to explore and describe the perspectives and rationales of Iranian married women on delayed childbearing.

Methods

A descriptive qualitative design was used for data collection and analysis. The qualitative descriptive approach is appropriate to describe a phenomenon when existing theory or literature is limited (Vaismoradi , Turunen, & Bondas, 2013). In this approach, researchers avoid using preconceived categories and immerse themselves in data to allow new insights to emerge that provide a richer understanding of the phenomenon (Hsieh & Shannon, 2005). Qualitative data contain in-depth information about cultural and contextual factors that influence the phenomena as experienced by human beings that cannot be explored using a quantitative design (Sandelowski, 2010).

Setting and Participants

Twenty-three women aged over 30 years who had no children or were pregnant for the first time were chosen using purposeful sampling (Coyne, 1997) from February to December 2011. Being childless for at least 5 years; having been referred to a prenatal, gynecology, or infertility treatment clinics; and willingness to participate were the main criteria used for selection. The sample was adequately diverse in terms of economic status, level of education, employment status, and fertility treatment experience.

Ethical Considerations

Ethical approval for this study was obtained from the ethics committee of Tarbiat Modares University. The aims and methods of this study were explained to potential participants, and they were assured of their anonymity throughout the study and that their identities would not be disclosed to anyone with the exception of the first researcher. There was no therapeutic relationship between the researchers and the participants that would affect willingness to participate. All participants were free to withdraw at any time. Finally, written informed consent to participate and to permit the tape recording of interviews was obtained.

Data Collection

Semistructured interviews were conducted at places convenient to the participants. With regard to the interview sessions, three people were interviewed twice, and one person was interviewed thrice. All other participants were interviewed once. In total, 28 interview sessions were held with the participants. Demographic data including age, education, ethnicity, and occupation were collected using a questionnaire. An interview guide that focused on the following three questions was used:

- What is your understanding of delayed childbearing?
- Why have you decided to delay childbearing?
- Are you satisfied with your decision to delay childbearing?

The interviews lasted between 20 and 40 minutes based on the tolerance and interest to continue of each participant. Probing questions followed the participant's responses to the initial three questions to increase the depth of the interviews. For example, if they mentioned discrimination against pregnant women in the workplace, they were asked to provide examples and describe incidences of discrimination that they had experienced.

Data Analysis

A conventional content analysis approach was used to analyze the data. Data analysis was conducted concurrently with data collection. Interviews were discontinued when no new data were collected and data saturation was reached (Graneheim & Lundman, 2004). The interviews were transcribed verbatim and read several times to reach an overall understanding of each participant's perspective on delayed childbearing. The meaning units were determined as words, sentences, or paragraphs that contained aspects related to each other through their content and context. All data were abstracted and encoded. Finally, the codes were sorted into subthemes and themes based on their similarities and differences (Graneheim & Lundman, 2004).

Rigor

Peer checking was used to confirm data credibility. The researchers coded and categorized the data independently and

compared the results, with discussion used to achieve consensus in cases of disagreement. Interview transcripts and a primary report of data analysis were returned to 10 participants to permit them to check to confirm that researchers had accurately presented their perceptions. In cases of disagreement, additional discussions on the data analysis process were held between the researchers, with subsequent results forwarded to the participants. This process continued until full agreement from all participants was obtained. To ensure the dependability of the results, an audit trail was maintained from the initial collection of data to the generation of themes. In addition, impartial peers who were expert on both the study topic and qualitative methodology examined the transcriptions, final report, and general methodology in a peer-debriefing process. Feedback was provided to enhance the credibility of findings (Rolfe, 2006).

Results

Demographic Data

The mean age of the participants was 36.97 years (*SD* = 4.88 years), and the mean length of delayed childbearing was 6.63 years (*SD* = 5.13 years). Table 1 summarizes the demographic data for the participants.

TABLE 1.
Participant Demographic Characteristics (N = 23)

Characteristic	Nullipara	Pregnant
Age (years)		
30–34	7	2
35–40	6	5
41–45	1	2
Highest level of education		
<High school	2	2
High school	3	1
Bachelor	6	2
Master	2	3
PhD	1	1
Ethnicity		
Muslim	18	3
Non-Muslim	1	1
Current main activity		
Employed	10	3
Unemployed	4	6
Experience with the fertility treatment		
Yes	5	3
No	11	4
Household income (self-report)		
Very poor	2	1
Poor	5	2
Well-off	6	1
Wealthy	4	2

The Perspectives of Participants on Delayed Childbearing

Data analysis highlighted three main themes: "personal inclination," "perceived beliefs about delayed childbearing," and "social support." The detailed discussion below includes the identification of the respondents in terms of age and number of years of delay in childbearing.

Personal inclination

The participants described their readiness for childbearing in terms of being well and free from pregnancy-related complications, not only in terms of physical health but also in terms of psychological well-being and financial security. Participants perceived that readiness facilitated optimally selecting the time for childbirth. Most participants stated a strong belief that childbearing later in life enabled them to be prepared to undertake what was perceived as a heavy responsibility. This theme consisted of three subthemes: "physical and mental readiness," "stable relationship with husband," and "reaching socioeconomic stability before childbearing."

Physical and mental readiness. Participants identified that chronic diseases such as heart disease, diabetes mellitus, and other health-related problems hindered their choice in childbearing. One participant said:

> *I was 29 year old when I got married. At that time, my physician informed me that I had diabetes. I was worried about having an abnormal child. Thus, I postponed the pregnancy until had I controlled the disease. After that, I faced the new problem of being unable to conceive.* (Nulligravida, 35 years old, 6 years)

Most participants declared that having a child and building a family required the mental readiness of both partners. This was characterized by feelings of maturity, transition from childhood to adulthood, having patience, being calm under stressful conditions, and collaboration between husband and wife. It was believed that older parents may be more emotionally and mentally prepared for parenthood.

> *I think my husband and I aren't mature enough to be parents. We should experience more…For example: learning how to be more patient.* (Nulligravida, 32 years old, 7 years)

Achieving self-efficacy was identified as another aspect of mental readiness. Many participants lacked the confidence to make decisions on childbearing and to undertake this responsibility. In addition, they expressed uncertainty about their ability to handle the different situations encountered in motherhood. Therefore, they delayed childbearing to avoid the problems of parenthood.

It is difficult for me to think about becoming a mother. I am scared, when I think about it. I feel that I cannot handle the difficulties of having a baby. I cannot handle it. (Nulligravida, 31 years old, 7 years)

Stable relationship with husband. The participants expressed a preference for delaying having a child until they were secure in their relationships with their husbands. In other words, they felt they needed to be sure about the reliability of their spouse in various aspects of life. The participants commented that starting a family influenced the dynamic relationship between wife and husband.

I waited until my husband showed that I could trust him. We made a strong relationship. I was sure that I wanted to continue my life with him [husband]. (Pregnant, 37 years old, 7 years)

Mostly, they believed that the stable relationship between couples would provide a nurturing atmosphere for the emotional growth of their child.

We frequently experience several common areas of conflict. This is inescapable. However, time helps us to develop stable communications. Starting a family requires calm. Children need this atmosphere. (Nulligravida, 33 years old, 5 years)

Reaching socioeconomic stability before childbearing. The decision to have a child depends on achieving socioeconomic stability, with the belief that pregnancy should be postponed until the woman completes her education and has begun her career, as childbirth may limit the ability to study and work. The participants expressed the belief that childbearing interrupts the expectant mother's social career building and negatively impacts income-earning potential.

I am a student now and I need to find a job to improve myself economically. Having a baby may interfere with my education and employment. (Nullipara, 33 years old, 8 years)

Meeting basic needs and reaching high standards of living and wealth were perceived as the advantages of financial stability. Delayed childbearing among poor or better-off couples was a strategy for surviving economically and a way of securing family management resources.

If I become pregnant, I need to stay at home for at least one year and cannot earn enough. Thus, I prefer to stay at work. (Nulligravida, 35 years old, 6 years)

Because the participants could not predict their future socioeconomic circumstances, fear of insecurity persuaded them to delay childbearing.

I do not know what will happen in the future. We should save enough money first to support a child. (Nulligravida, 31 years old, 5 years)

Perceived beliefs about delayed childbearing

Positive attitudes toward delayed childbearing mixed with misperceptions and disillusionment about making this choice influenced the decisions of participants. Childbearing may impact daily activities, limit life trajectories, and negatively affect the spousal relationship. In addition, gender beliefs encouraged participants to seek work opportunities that were equal to those of their husbands. From the perspective of participants, delayed childbearing protected them from social inequality.

Some participants had little knowledge regarding the effects of age on their reproductive system. Nevertheless, most believed that science or the will of God could ensure fertility at any stage of life. Attitudes toward childbearing, underestimation of the risks of delayed childbearing, gender beliefs, and concerns regarding the impact of childbearing on life were the subthemes of this theme.

Attitudes toward childbearing. Although all of the participants expressed holding positive attitudes toward childbearing and none professed to wanting to remain childless, they expressed the belief that delaying having a child would help improve their life quality. Having a baby was considered by participants both as a human need and necessary to complete the identity of women.

I think every women needs to be a mother. Having a child helps you to be a real women and build your identity. (Nulligravida, 34 years old, 5.5 years)

Religious beliefs played an important role in the development of such attitudes. According to the participants, religious doctrine supported and helped childbearing. Thus, God could help them become pregnant at any age.

Of course I can get pregnant at any age if God wishes it. (Nulligravida, 38 years old, 7 years)

Delayed childbearing is encouraged by both the older and younger generations, with those in the older generation almost equal to their younger counterparts in terms of their strong support of delayed childbearing.

My mother strongly supported my postponing childbearing. (Nulligravida, 35 years old, 7 years)

Furthermore, most participants desired only one child, commenting that small families were more successful because resources would be shared among a smaller group of people.

Having one child is enough for my family. Smaller families are more successful than larger ones. If I have

more children, I will have to share facilities with them. (Nullipara, 34 years old, 5 years)

Gender beliefs. This subtheme was related to the newly developed and widespread perspective in Iranian society that early marriage and childbearing were outdated traditions and a remnant of the patriarchal society of the past.

In the past, women were forced to become pregnant after marriage. It is an old idea that you should have a baby so soon. Now, I would never let anyone force me to have a baby before I'm ready. (Nullipara, 34 years old, 6 years)

Some participants stated that women were equal to men and should thus be empowered to participate in the same social activities. Women stressed that finding a job and working outside the home were important symbols of this equality. They believed that working outside home put women in a stronger position to make decisions on their life and that delayed childbearing offered the opportunity to make the most of work opportunities.

I do not want to get pregnant soon. I am working outside the home like my husband. Early childbearing may limit my decision-making power within the family. (Nulligravida, 37 years old, 6 years)

Underestimation of the risks of delayed childbearing. The thoughts of the participants regarding delayed childbirth tended to be highly idealistic, with participants downplaying the risks of childbearing later in life. Their perceptions presented a combination of awareness of the adverse outcomes of delayed childbearing and ambivalence about early childbearing. Some of the participants had inadequate knowledge regarding fertility and the aging process and expected midwives or obstetricians to contribute to the prevention of serious consequences.

Although I had heard that subfertility occurs over 40 years of age, nobody warned me seriously about it to help me make an appropriate decision about having a child. (Pregnant, 38 years old, 5 years, with 2 years of infertility treatment)

Other participants, although understanding the risks, chose to overlook them and remain optimistic about becoming pregnant later in life. The belief that advances in reproductive technology could reverse the effects of age on fertility was pervasive.

The nurse described the probable complications of delayed childbearing, but I feel that I can be a healthy mother even when I'm older. The reproductive technologies have been improved, and problems can be treated using new treatments. (Nulligravida, 35 years old, 6 years)

The successful experiences of relatives or close friends with delayed childbearing helped persuade the participants of the potential to delay having children and convince them that there was no risk associated with delayed childbearing.

My neighbor became pregnant after 14 years of marriage. She is 40 years old now and her son is three years old. (Nulligravida, 37 years old, 6 years)

Concerns about the impact of childbearing on life. The participants expressed concern about the negative impact of having a child on their life. They related that they would not be able to integrate work with motherhood, because of the focus and concentration required to be a mother.

I have much work to do before having a baby. Childbearing may interfere with my own life plans. (Nulligravida, 32 years old, 7 years)

The participants equated early childbearing with unpleasant, life-related changes that might negatively impact on the emotional and sexual aspects of married life. They expressed concern about the diminution of their confidence, eagerness, exhilaration, and sexual pleasure in life during and after their pregnancy.

If we have a child, we will lose our mood to enjoy our sexual life. We got married when we were around 30. We studied and worked hard during our youth. Now, we feel that we have lost chances for pleasant times in our life. We are looking forward to enjoying life much more than before. (Nulligravida, 36 years old, 5 years)

The participants equated pregnancy and childbirth with having a reduced sexual relationship with their husbands for an extended period. They expressed that they would feel guilty if their husbands were not satisfied.

I feel terrible if my husband asks me and I cannot respond. If he is not satisfied, I feel guilty. (Nulligravida, 35 years old, 7 years)

In addition, some of the participants expressed the concerned that, if their husbands were not sexually satisfied for a long time, they might seek out extramarital relationships. Therefore, participants preferred to postpone childbearing to preserve their current lives.

Childbirth disrupts sexual relationships for a long time. I don't know what would happen if I stopped engaging in sexual relationships for a long time, but I would not tolerate it if my husband asks another! (Nulligravida, 35 years old, 6 years)

There was also a noticeable fear of losing and not recovering physical attractiveness and functions because of childbearing.

I will become fat during pregnancy, which is so ugly. I may have a vaginal birth. In addition, I should breastfeed my child. These all may threaten my beauty. It might be irreversible. (Nulligravida, 35 years old, 8 years)

Social support

Social support refers to the tangible and psychological (emotional, instrumental, and informational) resources available to individuals through their relationships with family, friends, neighbors, work associates, and others. Informal (e.g., extended family and friends) and formal (e.g., written materials, professionals, and policies) social supports are key factors of influence on delayed childbearing in Iranian society. Regardless of the economic status, social class, and attitudes toward pregnancy of the participants, delayed childbearing was perceived as the norm. This theme consisted of two subthemes: social acceptability and social facilities.

Social acceptability. The participants suggested that social values had made delayed childbearing an acceptable norm in society. Statements such as "access to educational and economic resources" illustrate the impact of such a change on the childbearing decisions of Iranian women.

Others expect me to postpone childbearing. I cannot say how, but I can feel it. Getting pregnant soon is not acceptable in the workplace or even to family members. I am expected as an educated woman to carry some responsibility in the family. Nowadays, being an educated and employed woman increases the value of women in society. (Pregnant, 37 years old, 6 years)

Educational programs in schools and universities provide information on population growth and contraception to women, with the most common ideologies promoted being "a small family is equal to a successful and happy family" and "lower child numbers bring a better life." In addition, the media generally present a picture of older mothers and their successful pregnancies with a focus on the issues of population growth rather than the adverse outcomes of delayed childbearing.

In the family-planning course at the university, I learned about the outcome of population growth. Also, I was introduced to different sorts of contraception. (Pregnant, 37 years old, 8 years)

Women mentioned that childbearing was a barrier to becoming a successful woman in society. The transition from a traditional society to a modern society has fostered this perspective.

My mother is a rural woman. In that culture, it is a disgrace if a woman does not get pregnant soon after marriage. (Nulligravida, 32 years old, 8 years)

The participants expressed the belief that early childbearing would isolate them socially.

My sister missed further opportunities because she got pregnant immediately after marriage. She became isolated socially. If a woman wants to be accepted by society, she should become pregnant later. (Nulligravida, 34 years old, 5 years)

Social facilities. For some of the participants, the availability of social support and facilities played a primary role in their decision making on the timing of childbearing. Most worried about the lack of efficient social facilities, the lack of laws and policies such as insurance to support pregnant women and mothers, having no help with childcare, and the lack of financial support during pregnancy.

When I got pregnant, I was dismissed from my job indirectly and I could not find another job. There are no specific laws to support me. (Pregnant, 31 years old, 6 years)

The availability or lack of high-quality childcare facilities was a crucial factor of influence in making decisions on starting a family.

Around my workplace, there is no nursery. Also, I cannot trust anyone to care for my child. If I want to have a baby, I should quit my job. (Nulligravida, 36 years old, 7 years)

The family planning program was revived with massive financial and policy support from government and religious leaders in Iran. Information, education, and advertisement campaigns addressing family planning services have been strongly and continuously implemented throughout the country. Therefore, various modern contraception methods are freely available to the public, and using these methods is not considered to be against religious beliefs.

I can get the oral pills free from the health clinic. I will use it without any problems until I decide to get pregnant. (Nulligravida, 35 years old, 5 years)

Discussion

This study shows that delayed childbearing is influenced by multiple and complex factors. In the first theme, personal inclination was perceived to affect the delayed childbearing of participants. Physical and mental readiness and achieving financial stability were perceived as basic requirements for childbearing. Benzies et al. (2006) studied 45 Canadian women aged 20–48 years to identify factors that affect women's decisions on the timing of motherhood. Their findings revealed that health issues influenced these decisions across the lifespan (Benzies et al., 2006). Although the participants in this study with existing medical conditions preferred to delay having a child until after they had controlled these conditions, they may experience subfertility related to aging. The feelings of

being sufficiently mature to take responsibility for childcare and achieving a stable spousal relationship were important aspects of mental readiness for childbearing. Our findings parallel the international perspective that, for many people, being mature and ready to have a child are prerequisites for becoming a parent. Benzies et al. in a qualitative study in Canada found that a stable relationship influenced the decision of women regarding the timing of motherhood (Benzies et al., 2006). This study identified uncertainty and lack of self-efficacy as additional aspects of mental readiness. Moreover, having no authority to make decisions independently and being doubtful about assuming the responsibility of starting a family further increased the uncertainty of participants with regard to starting a family. Fostering self-efficacy in women with the help of healthcare providers may empower women to make appropriate decisions on the timing of childbearing and to prepare to adapt to new stressful situations (Lin, Shieh, & Wang, 2008). In addition, concerns over uncertain socioeconomic conditions acted to prevent the participants from having a child early in their marriage. This is supported by the findings of a survey conducted on female university staff in Germany, in which 67% of women with delayed childbearing cited socioeconomic reasons as very import. Similarly, a qualitative study conducted by MacDougall et al. (2013) on first-time, in vitro fertilization parenting in people over 40 years old in the United States reported that establishing careers, financial security, career-time flexibility, emotional preparedness, and having committed co-parenting relationships were the most important achievements of delayed childbearing. In contrast, an interview study of 45 American childless women in their 30s found that only 11% cited financial problems as motivators to remain childless (Robinson, Garner, Gare, & Crawford, 1987). Some articles in the literature contradict our finding that many participants hold the feeling that they would be better parents after the age of 40 years. Their contradictory findings cite either no improved effects beyond the age of 30 years or negative psychological and health effects attributable to delayed childbearing (Balasch & Gratacós, 2011). In the second theme, underestimation and misperceptions of the risks of delayed childbearing predominated the perspectives of participants. Cooke, Mills, and Lavender (2012) in a qualitative phenomenological study on 355 participants in the United Kingdom described a lack of awareness of the adverse outcomes of delayed childbearing in women over 35 years old. Similarly, Virtala et al. (2011) in a survey study conducted in Finland showed that one third of women had incorrect information about the conception difficulties associated with age. Peterson, Pirritano, Tucker, and Lampic (2012) in a survey of American male/female undergraduate university students found a lack of awareness regarding fertility and an overestimation of the age at which women experience declining fertility. Our study identified a new subgroup that, although fully informed, nevertheless denied the associated risks of delayed childbearing because of religious beliefs. In this respect, providing education and counseling opportunities for the public and religious leaders to aid informed decisions on childbearing is suggested.

Some of the concerns of participants that encouraged delayed childbearing in this study were related to the negative impact of childbearing on the continued conduct of daily activities as well as on their emotional and sexual lives. To the authors' knowledge, fear of experiencing sexual dysfunction because of childbearing appears to be a new concept not yet mentioned in the literature.

Furthermore, gender beliefs were associated with delayed childbearing. In the transition from traditional society, modern patterns of living have provided the opportunity for Iranian women to become more independent. Women are now increasingly involved beyond the confines of the home and are approaching the participation rate of men in education and the labor market. In contrast, some studies suggest that greater egalitarian gender role attitudes result in higher rates of fertility (Puur, Oláh, Tazi-Preve, & Dorbritz, 2010). In agreement with our findings, Westoff and Higgins (2009) showed that increasing gender equality results in lower fertility rates (Westoff & Higgins, 2009). They found a negative association between the egalitarian attitudes of men and rates of fertility not only in selected European countries but also in many other developed countries. In the last theme, the impact of social support on childbearing was emphasized in terms of the existence of positive publicity in the community, the availability of modern contraceptive methods, and the encouragement by public education of delayed childbearing. In agreement with our findings, Benzies et al. (2006) stated that public opinion impacts on the timing of starting a family. With regard to the relationship between the lack of social facilities and supportive policies and the decision for childbearing, Castles (2003) suggests that childcare facilities for children under the age of 3 years are vital factors in encouraging childbearing (Castles, 2003). Milligan (2005) also suggests that incentive policies such as direct cash payments, improving work–family compatibility, and inadvertent policies facilitate early childbearing (Milligan, 2005). However, some other studies have shown modest or no effects resulting from incentives related to childbearing (Gauthier, 2007; Kearney, 2004). With regard to the limitation of this study, the participants were chosen from an urban area and thus may have experiences and perspectives that differ from women living in rural areas. Therefore, future studies may explore the perspectives of women living in rural areas in Iran to develop a more complete picture of this phenomenon. The authors believe that the findings of this research may be applicable to other transitional and developing countries at a similar socioeconomic level to Iran. Exploring the experiences of delayed childbearing in women is important to better understand and influence reproductive interventions and policies.

Conclusions

The decision of women to postpone childbearing is a complicated process that involves mutually interconnected factors that are related to the individual, the family, the couple, and

the society. Advantages of later parenting include greater opportunities for educational and occupational improvement, feelings of maturity, and financial stability. Although these forces may persuade women to delay having a child, delaying childbirth leads to biological and social disadvantages that are mostly overlooked by or unknown to these women. This study highlights the inadequacies in the knowledge and awareness of the risks of postponing childbearing among both women and relevant policymakers. The findings of this study caution healthcare providers and policymakers against ignoring this phenomenon and urge the provision of counseling opportunities and suitable social facilities to help promote better-informed decision making on childbearing.

References

Abbasi-Shavazi, M., & Razaghi-Nasrabadi, H. (2010). Patterns and factors affecting marriage to first birth interval in Iran. *Journal of Population Association*, *5*, 75–107.

Abbasi-Shavazi, M. J., McDonald, P. F., & Hosseini-Chavoshi, M. (2009). *The fertility transition in Iran: Revolution and reproduction*. New York, NY: Springer.

Balasch, J., & Gratacós, E. (2011). Delayed childbearing: Effects on fertility and the outcome of pregnancy. *Fetal Diagnosis and Therapy*, *29*(4), 263–273. doi:10.1159/000323142

Behboudi-Gandevani, S., Ziaei, S., Khalajabadi-Farahani, F., & Jasper, M. (2013). Iranian primigravid women's awareness of the risks associated with delayed childbearing. *European Journal of Contraception and Reproductive Health Care*, *18*(6), 460–467. doi:10.3109/13625187.2013.832195

Benzies, K., Tough, S., Tofflemire, K., Frick, C., Faber, A., & Newburn-Cook, C. (2006). Factors influencing women's decisions about timing of motherhood. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, *35*(5), 625–633. doi:10.1111/j.1552-6909.2006.00079.x

Bray, I., Gunnell, D., & Smith, G. D. (2006). Advanced paternal age: How old is too old? *Journal of Epidemiology and Community Health*, *60*(10), 851–853. doi:10.1136/jech.2005.045179

Castles, F. G. (2003). The world turned upside down: Below replacement fertility, changing preferences and family-friendly public policy in 21 OECD countries. *Journal of European Social Policy*, *13*(3), 209–227. doi:10.1177/09589287030133001

Cleary-Goldman, J., Malone, F. D., Vidaver, J., Ball, R. H., Nyberg, D. A., Comstock, C. H., … D'Alton, M. (2005). Impact of maternal age on obstetric outcome. *Obstetrics & Gynecology*, *105*(5, Pt. 1), 983–990.

Cooke, A., Mills, T. A., & Lavender, T. (2010). ''Informed and uninformed decision making''—Women's reasoning, experiences and perceptions with regard to advanced maternal age and delayed childbearing: A meta-synthesis. *International Journal of Nursing Studies*, *47*(10), 1317–1329. doi:10.1016/j.ijnurstu.2010.06.001

Cooke, A., Mills, T. A., & Lavender, T. (2012). Advanced maternal age: Delayed childbearing is rarely a conscious choice: A qualitative study of women's views and experiences. *International Journal of Nursing Studies*, *49*(1), 30–39. doi:10.1016/j.ijnurstu.2011.07.013

Coyne, I. T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? *Journal of Advanced Nursing*, *26*(3), 623–630. doi:10.1046/j.1365-2648.1997.t01-25-00999.x

Dunson, D. B., Colombo, B., & Baird, D. D. (2002). Changes with age in the level and duration of fertility in the menstrual cycle. *Human Reproduction*, *17*(5), 1399–1403. doi:10.1093/humrep/17.5.1399

Gauthier, A. H. (2007). The impact of family policies on fertility in industrialized countries: A review of the literature. *Population Research and Policy Review*, *26*(3), 323–346. doi:10.1007/s11113-007-9033-x

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, *24*(2), 105–112. doi:10.1016/j.nedt.2003.10.001

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. doi:10.1177/1049732305276687

Kearney, M. S. (2004). Is there an effect of incremental welfare benefits on fertility behavior? A look at the family cap. *The Journal of Human Resources*, *39*(2), 295–325. doi:10.2307/3559016

Lin, M. L., Shieh, C., & Wang, H. H. (2008). Comparison between pregnant Southeast Asian immigrant and Taiwanese women in terms of pregnancy knowledge, attitude toward pregnancy, medical service experiences and prenatal care behaviors. *The Journal of Nursing Research*, *16*(2), 97–108.

Mac Dougall, K., Beyene, Y., & Nachtigall, R. D. (2013). Age shock: Misperceptions of the impact of age on fertility before and after IVF in women who conceived after age 40. *Human Reproduction*, *28*(2), 350–356. doi:10.1093/humrep/des409

Milligan, K. (2005). Subsidizing the stork: New evidence on tax incentives and fertility. *The Review of Economics and Statistics*, *87*(3), 539–555. doi:10.1162/0034653054638382

Mills, M., Rindfuss, R. R., McDonald, P., & te Velde, E. (2011). Why do people postpone parenthood? Reasons and social policy incentives. *Human Reproduction Update*, *17*(6), 848–860. doi:10.1093/humupd/dmr026

National Census. (2011). *Final national census 2011. Statistical Centre of Iran*. Retrieved from http://www.amar.org.ir/

Peterson, B., Pirritano, M., Tucker, L., & Lampic, C. (2012). Fertility awareness and parenting attitudes among American male and female undergraduate university students. *Human Reproduction*, *27*(5), 1375–1382. doi:10.1093/humrep/des011

Puur, A., Oláh, L. S., Tazi-Preve, M. I., & Dorbritz, J. (2010). Men's childbearing desires and views of the male role in Europe at the dawn of the 21st century. *Demographic Research*, *19*, 1883–1912. doi:10.4054/DemRes.2008.19.56

Robinson, G. E., Garner, D. M., Gare, D. J., & Crawford, B. (1987). Psychological adaptation to pregnancy in childless women more than 35 years of age. *American Journal of Obstetrics and Gynecology*, *156*(2), 328–333. doi:10.1016/0002-9378(87)90277-8

Rolfe, G. (2006). Validity, trustworthiness and rigour: Quality and the idea of qualitative research. *Journal of Advanced Nursing*, *53*(3), 304–310. doi:10.1111/j.1365-2648.2006.03727.x

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, *33*(1), 77–84.

te Velde, E., Habbema, D., Leridon, H., & Eijkemans, M. (2012). The effect of postponement of first motherhood on permanent involuntary childlessness and total fertility rate in six European countries since the 1970s. *Human Reproduction*, *27*(4), 1179–1183.

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*, *15*(3), 398–405. doi:10.1111/nhs.12048

Virtala, A., Vilska, S., Huttunen, T., & Kunttu, K. (2011). Childbearing, the desire to have children, and awareness about the impact of age on female fertility among Finnish university students. *The European Journal of Contraception and Reproductive Health Care*, *16*(2), 108–115. doi:10.3109/13625187.2011.553295

Westoff, C. F., & Higgins, J. (2009). Relationships between men's gender attitudes and fertility. *Demographic Research*, *21*, 65–74. doi:10.4054/DemRes.2009.21.3