

# Predictors of Childbearing Willingness in the Center of Iran in 2019: A cross Sectional Study

**Sahebjan Torkian Valashani**

Isfahan University of Medical Sciences School of Public Health

**Zahra Heidari**

Isfahan University of Medical Sciences

**Elaheh Shoushtari-Moghaddam**

Isfahan University of Medical Sciences School of Public Health

**Fereshteh Zamani-Alavijeh** (✉ [f\\_zamani@hlth.mui.ac.ir](mailto:f_zamani@hlth.mui.ac.ir))

Isfahan University of Medical Sciences <https://orcid.org/0000-0002-5683-9089>

---

## Research

**Keywords:** Predictor, Childbearing, Health Center, Iran

**Posted Date:** August 11th, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-53261/v1>

**License:** © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

---

# Abstract

**Background:** Childbearing is an important phenomenon in demographic changes. The current fertility rate does not have the necessary level for proper succession of generations in Iran. Therefore, the present study aimed to determine roles of predictors of childbearing willingness in the center of Iran due to the important of childbearing and its association with fertility.

**Methods:** The present cross-sectional study was conducted on 400 married citizens referred to comprehensive health centers in central Iran and they were selected by convenience sampling. Data was collected using a researcher-made questionnaire, and analyzed by SPSS 20. Descriptive and analytical tests of ordinal regression and factor analysis were also performed; and the significance level was considered to be less than 0.05.

**Results:** In the present study, the mean (standard deviation) of participants' marriage age was 21.11 years. Results of the present study indicated that there were relationships between variables, namely family strength motivation, economic self-efficacy, emotional and religious motivation, physical barriers and childbearing tendency ( $P < 0.05$ ). The chance of childbearing willingness increased by 7% by enhancing family strength motivation scores, 20% by increasing economic self-efficacy, and 6% by increasing emotional and religious motivation, but decreased by reducing physical barriers.

**Conclusion:** Strengthening family strength motivation, economic self-efficacy, religious-emotional motivation, and efforts to remove physical barriers were effective in increasing childbearing.

## Plain English Summary

Childbearing is an important phenomenon in demographic changes.

Overcoming physical barriers, including infertility treatment, and improving illness and disability in motivating for childbearing.

Strengthening behavioral motivational factors such as hope for future, the impact of children on family strength, and helping the elderly are effective in childbearing tendency.

Increasing the economic self-efficacy, including increasing income, meeting economic needs and economic well-being increase the incentive for childbearing.

Reinforcing emotional and religious motivations can be somewhat effective in increasing childbearing.

## Background

Childbearing is an important phenomenon in demographic changes (1) and an important issue that should occur in a hopeful context because couples will be encouraged to have children if ideal conditions

are provided (3, 2). Fertility rates have fallen below the succession level (less than two children per woman) in most developed countries and some developing countries, including Iran (1).

Over the past two decades, the overall fertility rate of Iran (the average number of children per woman) has remained below the succession level, so that the frequency of two children per woman in 2000 (4) decreased to 1.8 in 2006 and then to 1.6 in 2016 (6, 5, 2). The continuation of rate of succession level is a concern of many low-fertility countries as it accelerates the population aging and reduced labor force and then has negative consequences for the national economic development (7). Some countries believe that the larger population will enhance the power of country (8). Evidence indicates that Iran has entered a second phase of demographic transition that considers the low fertility persistence related to the cultural shift from traditional family-centered values to individual-centered moral values and norms. This cultural shift first occurred in Europe, and then expanded to north of America and Asia (9). Therefore, it is necessary to have a good understanding of the formation of a married person's fertility intention to achieve a proper population policy to counteract the continuation of fertility below the succession level in a country since fertility intention is a key predictor of fertility behavior (4).

Recent studies indicate that fertility is affected by individual choice (11, 10) and social values, cultures and norms (12) as well as socioeconomic conditions (13). The decline in childbearing tendency is associated with a list of demographic, social, and cultural issues that need to be analyzed and resolved (14). Due to the increased number of single and childless families, delay in marriage and family creation, increased divorce rates and decaying marriages, there are increasing rates of miscarriage (15). The variables, namely age, monthly income, employment status and residential place do not make a difference in couples' fertility attitude in terms of number and sex of future offspring (16). Current fertility does not have the necessary level for proper succession of generations. Decreasing fertility rates and disruption of national age balance can cause irreparable economic and social damage to a country (17).

In recent years, there has been a growing need for a deeper understanding of decision-making about childbearing (18). Demographers have often emphasized the research on identifying predictors of fertility at the individual level (3). Given that Iran is also experiencing a decline in population growth; and determinants of fertility are significantly important to prevent this phenomenon, the researchers sought to determine predictors of childbearing willingness in the present study in Iran.

## **Materials And Methods**

### **Design and sampling**

The present study was cross-sectional and data analysis is another article (19) predictive power of the variables was obtained by using advanced statistical tests and its sample size was estimated to be 400; and 420 questionnaires were given to eligible married people according to the possible sample loss. The final sample size was 400 by consideration of 20 loss of cases. The convenience (haphazard) sampling

was performed, and people, who referred to comprehensive health centers, were randomly selected in the study within a specified period.

The research sample was obtained by random sampling. The sample size was determined by referring to results of the national survey to determine the childbearing tendency and its related factors from the viewpoint of urban and rural people in Iran (17). According to results of the present study, 158 out of 777 participants in Isfahan, 158 ones had a tendency to have children; hence, ( $p = 0.2033$ ). According a confidence level of 95% and an error of 4%, the sample size was estimated to be 400.

The sample size was 400 (58 males and 342 females) married people in 4 cities and 2 villages of Khomeyni Shahr city in Isfahan. Persons with no Iranian nationality were excluded from the study.

## Research tools

Data was collected using a researcher-made questionnaire including two sections of demographic variables (gender, age, marriage age, education, occupation, family income status, number of sons, number of daughters, marital status, how to meet spouse, place of birth, opinion on childbirth) and 51 questions about dependent variables on a Likert scale (strongly agree, agree, no idea, disagree, and strongly disagree) with confirmed validity and reliability (17) and it was formulated according to research purposes. Specifically, participants were asked to state their driving and inhibiting factors for childbearing willingness. We examined the predictive and affective variables in the childbearing tendency. To this end, variables, namely health and economic conditions of society, family strength motives, economic self-efficacy, emotional and religious motivations, physical and socioeconomic barriers, fear of future, and emotional barriers were determined as predictors of childbearing willingness after performing a factor analysis test and collecting questions.

## Data analysis

Continuous and categorical variables were represented as mean (Standard deviation (SD)) and frequency (percentage), respectively. To assess the relationship between related factors with childbearing, ordinal logistic regression analysis was performed in different models. Adjusted ORs with 95% CI are presented in 4 different models. First, we adjusted for demographic variables including for sex, age, and marriage age, In the second model, further adjustments were made for sex, age, marriage age, literacy, occupation, income, and number of children. Additional adjustment was conducted for sex, age, marriage age, literacy, occupation, income, number of children and opinion on childbearing in the third model. Data analyses were performed using Statistical Package for Social Sciences version 15 (IBM Corp, Armonk, NY, USA). *P*-values less than 0.05 were considered statistically significant.

## Ethical Considerations

Ethical approvals were obtained from the Ethics Committee of Isfahan University of Medical Sciences IR.MUI.RESEARCH.REC.1397.208. After explaining the research objectives, methodology, as well as the advantages and disadvantages for persons, they were ensured of the voluntary participation in the study and the possibility of leaving the research at any desired time. In addition, the subjects were assured of the confidentiality terms regarding their personal information. A written consent was obtained from all participant.

## Results

In the present study 58 males (14.5%) and 342 females (85.5%) participated, and 128 ones were under 29 years of age (32%) and 272 were 29 years old and over (68%). Mean (standard deviation) of their marriage age was 21.11 years (5.06). 380 (95%) ones were married under the age of 29 and 20 ones (5%) after that. 390 participants were first married and 10 were remarried. The majority of participants in this study had a high school diploma (38.5%) and a middle-income status. Most of individuals were Housewife (Table 1).

Table 1  
Demographic characteristics of participants 2019 (N = 400, 100%)

Variables		N(%)
Gender	Female	342(85.5)
	Male	58(14.5)
Age	<29	128(32)
	≥29	272(68)
Marriage Age	<29	380(95)
	≥29	20(5)
Male children Number	0	143(35.7)
	1	174(43.5)
	2	76(19)
	3	7(1.8)
Female children Number	0	153(38.2)
	1	177(44.2)
	2	55(13.7)
	3	13(3.2)
	4	2(0.5)
Education	Illiterate	9(2.3)
	Primary school	34(8.5)
	Secondary school	68(17)
	High school diploma	154(38.5)
	Academic	135(33.7)
Job	Employed	107(26.7)
	Housewife	267(66.7)
	Retired	5(1.3)
	Student	6(1.5)
	Unemployed	3(0.8)
	Others	12(3)
Family income status	Under 1 million	123(30.7)

Variables		N(%)
	1 to 1.5 million	146(36.5)
	1.5 to 2 million	75(18.7)
	2 to 2.5 million	41(10.3)
	Above 2.5 million	15(3.8)
Marital status	First marriage	390(97.5)
	Remarriage	10(2.5)
How to meet spouse	Introducing by family	207(51.7)
	Introducing by friends	59(14.7)
	Introducing by others	87(21.8)
	Myself	47(11.8)
Place of birth	City	355(88.7)
	Village	45(11.3)
Opinion on childbearing	It only depends on God's will.	226(56.5)
	It only depends on me.	91(22.8)
	It only depends on the wishes of those around me.	2(0.5)
	It only depends on environmental factors.	19(4.8)
	No idea.	62(15.5)
Spouse age Mean $\pm$ SD		35.55 $\pm$ 7.32
Number of daughters Mean $\pm$ SD		.86 $\pm$ .77
Number of daughters Mean $\pm$ SD		.83 $\pm$ .81
Desired number of daughter Mean $\pm$ SD		.53 $\pm$ .90
Desired number of son Mean $\pm$ SD		.45 $\pm$ .81
←1\$=15000Toman		

Crude and adjusted OR and 95% CI for evaluating related factors with childbearing willingness are presented in Table 2. In the crude model and also after adjustment for confounding variables, Positive motivation for family strength (OR, 1.07; 95% CI, 1.02–1.12), economic self-efficacy (OR, 1.20; 95% CI,

1.15–1.26), Emotional and religious motivation (OR, 1.06; 95% CI, 1.00 -1.13) and also Physical barriers (OR, 0.95; 95% CI, 0.92–0.97), were significantly associated with greater odds of childbearing willingness.

Table 2

Crude and adjusted odds ratio (95% confidence interval) for evaluating related factors with childbearing willingness

<b>Independent variables</b>		
<b>Crude Model</b>	OR* (95%CI)	P-Value <sup>*****</sup>
Economic and of economic conditions of society	1.02 (0.99–1.06 (	0.099
Positive motivation for family strength	1.07 )1.02–1.12 (	0.003
Economic self-efficacy	1.20 )1.15–1.26 (	< 0.001
Emotional and religious motivation	1.06 )1.00 -1.13 (	< 0.024
Physical barriers	0.95 )0.92–0.97 (	< 0.001
Socio-economic barriers	1.00 )0.97–1.03 (	0.847
Fear of future	1.00) 0.94–1.06 (	0.842
Emotional barriers	1.03) 0.98–1.09 (	0.169
<b>Model I**</b>		
Economic and of economic conditions of society	1.03 (0.99–1.06 (	0.069
Positive motivation for family strength	1.08 )1.03–1.14 (	0.001
Economic self-efficacy	1.19 )1.14–1.25 (	< 0.001
Emotional and religious motivation	1.06 )1.00 -1.13 (	0.033
Physical barriers	0.96 )0.93–0.98 (	0.003
Socio-economic barriers	0.99 )0.96–1.03 (	0.945
Fear of future	1.01) 0.95–1.07 (	0.705
Emotional barriers	1.03 )0.98–1.08 (	0.213
<b>Model II***</b>		
Economic and of economic conditions of society	1.02 )0.99–1.06 (	0.119
Positive motivation for family strength	1.09 )1.04–1.14 (	< 0.001
Economic self-efficacy	1.20 )1.14–1.26 (	< 0.001

\*OR = odds ratio

\*\*Model I: adjusted for sex, age, and marriage age; \*\*\*Model II: adjusted for sex, age, marriage age, literacy, occupation, income, and number of children; \*\*\*\*Model III: adjusted for sex, age, marriage age, literacy, occupation, income, number of children and opinion on childbearing. \*\*\*\*\*Values obtained ordinal logistic regression for evaluating related factors with childbearing willingness.

<b>Independent variables</b>		
Emotional and religious motivation	1.05) 0.99–1.11 (	0.088
Physical barriers	0.96 )0.94–0.99 (	0.014
Socio-economic barriers	1.00 )0.97–1.03 (	0.891
Fear of future	1.00 )0.94–1.06 (	0.829
Emotional barriers	1.02 )0.97–1.08 (	0.350
<b>Model III****</b>		
Economic and of economic conditions of society	1.02 (0.99–1.06 (	0.095
Positive motivation for family strength	1.10 )1.05–1.15 (	< 0.001
Economic self-efficacy	1.21 )1.15–1.27 (	< 0.001
Emotional and religious motivation	1.05 )0.99–1.12 (	0.064
Physical barriers	0.97 )0.94–0.99 (	0.027
Socio-economic barriers	1.00 )0.97–1.03 (	0.740
Fear of future	1.01 )0.95–1.07 (	0.696
Emotional barriers	1.02 )0.97–1.07)	0.420
*OR = odds ratio		
**Model I: adjusted for sex, age, and marriage age; ***Model II: adjusted for sex, age, marriage age, literacy, occupation, income, and number of children; ****Model III: adjusted for sex, age, marriage age, literacy, occupation, income, number of children and opinion on childbearing. *****Values obtained ordinal logistic regression for evaluating related factors with childbearing willingness.		

In the model I and also after adjustment for adjusted for sex, age, and marriage age, Positive motivation for family strength (OR, 1.08; 95% CI, 1.03–1.14), Economic self-efficacy (OR, 1.19; 95% CI, 1.14–1.25), Emotional and religious motivation (OR, 1.06; 95% CI, 1.00–1.13) and also Physical barriers (OR, 0.96; 95% CI, 0.93–0.98), were significantly associated with greater odds of childbearing willingness.

In the model II and also after adjustment for adjusted for sex, age, marriage age, literacy, occupation, income, and number of children Positive motivation for family strength (OR, 1.09; 95% CI, 1.04–1.14), Economic self-efficacy (OR, 1.20; 95% CI, 1.14–1.26), Emotional and religious motivation (OR, 1.05; 95% CI, 0.99–1.11) and also Physical barriers (OR, 0.96; 95% CI, 0.94–0.99), were significantly associated with greater odds of childbearing willingness.

In the model III and also after adjustment for adjusted for adjusted for sex, age, marriage age, literacy, occupation, income, number of children and opinion on childbearing, Positive motivation for family strength (OR, 1.10; 95% CI, 1.05–1.15), Economic self-efficacy (OR, 1.21; 95% CI, 1.15–1.27), and also

Physical barriers (OR, 0.97; 95% CI, 0.94–0.99), were significantly associated with greater odds of childbearing willingness (Table 2).

## Discussion

In the present study, the researchers examined predictors of childbearing willingness in order to achieve the audience motivation in childbearing and increase fertility and take an effective step towards promoting health plans by providing behavioral predictors for relevant authorities and also providing suggestions in this regard. According to results, there are relationships between variables, namely family strength motivation, economic self-efficacy, emotional and religious motivation, physical barriers, and childbearing tendency. The more the desire for fertility and childbearing increases, the more factors that contribute to family strength motivation, economic self-efficacy, and emotional and religious motivation are strengthened and efforts are made to resolve physical barriers.

A study by Tavousi et al. (2016) indicated that the current trend of population decline could be corrected through careful study of factors influencing this phenomenon and planning for its change (17). In a study by Keshavarz et al., the family income was a variable that influenced childbearing (20). Ling Young noted that the increasing costs of having a child decreased the tendency to have children and increased the tendency to do a business (21).

In a study by Abbasi Shovazi and Khaje Salehi in Sirjan, women's education and social participation played decisive roles in explaining variable changes in childbearing tendency, so that increasing both factors decreased the childbearing tendency (22). In a study by Miri et al., it was found that 60.7% of employees did not want to have children in the future. They stated that female employees faced other priorities in their family life than having children (23).

A study by Hayford et al. indicated that women, whose religion played an important role in their lives, had more children (0.69 on average) than the rest of women (24). Cooke et al. indicated that roles of media and high confidence in infertility treatment methods were effective in women's belief about enough time to have children (25).

Results of the above studies and some other studies were consistent with the present study on the impact of predictors of childbearing behavior and tendency. In the present study, removing physical barriers such as infertility treatment and improving illness and disability can reinforce motivational factors such as hope for the future, the impact of children on family strength, and help the elderly according to the individuals' religious beliefs, and innate desire to become parents and love the children that God has given to humans, and also increase fertility and ultimately the childbearing.

More importantly, the social policies are not along with childbearing (26, 17) to create the childbearing desire. It seems to be at the forefront of authorities' measures. Affording costs of infertility treatment, providing economic stability and supporting families to afford their childbearing costs and providing social security, future jobs and education are cases that cannot be easily overcome. In this calm context,

people find motivation for fertility and childbearing and hope for their future and children. Findings of the present study can provide a small picture of the current state of willingness and unwillingness to have children in society and can act as a guide for authorities to play roles in short, medium and long terms.

## **Conclusion**

According to the results of the present research, the focus on reinforcing driving factors such as strengthening family strength motivation, economic self-efficacy, religious-emotional motivation, and efforts to remove physical barriers could be somewhat effective in creation the motivation for fertility and childbearing.

## **Limitations**

The short duration of follow-up was one of the limitations of this study, hence the recommendation that similar studies be performed with larger sample sizes and longer duration to assess the behavior of childbearing in married persons.

## **Abbreviations**

SD  
Standard deviation  
OR  
Odds ratio

## **Declarations**

## **Competing interests:**

The authors declare that they have no competing interests.

## **Ethical approval and consent to participation**

All participants provided informed consent. This study was further reviewed and approved by the Isfahan University of Medical Science's Institutional Review Board, meaning the Ethics and Research Committee under ID IR.MUI.RESEARCH.REC.1397.208.

## **Availability of data and materials:**

Data used for this manuscript will be available upon reasonable request, meaning no personal identifying information can be shared by the corresponding author of this manuscript.

## Funding:

This work was supported in part by grants from Student Research Center, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran. The project was registered under the ID '[number197098]'.

## Authors' contributions:

ST-V, MS student in health education, is responsible for the collection of data, critical review of data, the concept of the paper, the review of the literature, the interpretation and discussion of the results, and writing the article., ZH, PhD, is responsible for the supervision of data collection and the critical review of data, analysis and interpretation of the results, and manuscript content revisions. ESH-M., MS student in health education, is responsible for the critical review of the manuscript and the interpretation of the results. FZ-A\*, PhD, made substantial contributions to the conception and design, being responsible for the supervision of data collection, the concept and development of the paper, and the interpretation and discussion of the results.

All authors read and approved the final version of the manuscript.

## Acknowledgments:

This research was supported by Student Research Committee of Isfahan University of Medical Sciences (Grant No. 197098). Therefore, we are grateful to the research deputy of Isfahan University of Medical Sciences and the Student Research Committee of Faculty of Health for their support in collecting data, and also the Deputy of Health of Isfahan Universities of Medical Sciences and Khomeini Shahr Health Network for necessary coordination, as well as all participants in the study for their cooperation in the study.

All authors accept full responsibility for the contents of this publication.

## Consent for publication

Not applicable

## References

1. Firouzbakht M, Tirgar A, Hajian-Tilaki K, Bakouei F, Riahi ME, Nikpour M. Social capital and fertility behaviors: a cross-sectional study in Iranian women health care workers. *BMC Womens Health*. 2020;20(1):83. DOI:10.1186/s12905-020-00943-5.
2. Haghdoost AA, Safari-Faramani R, Baneshi MR, Dehnavieh R, Dehghan M. Exploring perceptions of policymakers about main strategies to enhance fertility rate: A qualitative study in Iran. *Electronic*

- physician. 2017;9(10):5568–77. doi:10.19082/5568.
3. Joyce T, Kaestner R, Korenman S. On the validity of retrospective assessments of pregnancy intention. *Demography*. 2002;39(1):199–213. DOI:<https://doi.org/10.1353/dem.2002.0006>.
  4. Erfani A. Localization of determinants of fertility through measurement adaptations in developing-country settings: The case of Iran: Comment on "Analysis of economic determinants of fertility in Iran: a multilevel approach". *International journal of health policy management*. 2014;3(7):413–5. doi:10.15171/ijhpm.2014.127.
  5. Erfani A. low fertility intention in thran, iran: the role of attitudes, norms and perceived behavioural control. *J Biosoc Sci*. 2017;49(3):292–308. DOI:<https://doi.org/10.1017/S0021932016000109>.
  6. 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):6927–34. doi:10.19082/6927.
  7. Moeeni M, Rashidian A, Aghajanian A. Women's relative status and childbearing intentions: Empirical evidence from Iran. *PloS one*. 2018;13(4):e0195428. doi:10.1371/journal.pone.0195428.
  8. Nikpour M, Tirgar A, Ghaffari F, Ebadi A, Nasiri Amiri F, Firouzbakht M. Reproductive health problems among female shift workers: a qualitative study in Iran. *Journal of gynecology obstetrics human reproduction*. 2019:101653. <https://doi.org/10.1016/j.jogoh.2019.101653>.
  9. Behjati-Ardakani Z, Navabakhsh M, Hosseini SH. Sociological Study on the Transformation of Fertility and Childbearing Concept in Iran. *Journal of reproduction infertility*. 2017;18(1):153–61. PMID: 28377894. PMCID: PMC5359852.
  10. [10.1073/pnas.1420441111](https://doi.org/10.1073/pnas.1420441111)  
Lesthaeghe R. The second demographic transition: A concise overview of its development. *Proceedings of the National Academy of Sciences*. 2014;111(51):18112-5. DOI:10.1073/pnas.1420441111.
  11. 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 health promotion*. 2018;7:175. doi:10.4103/jehp.jehp\_175\_18.
  12. Rostami Dovom M, Ramezani Tehrani F, Abedini M, Amirshkari G, Hashemi S, Noroozzadeh M. A population-based study on infertility and its influencing factors in four selected provinces in Iran (2008–2010). *Iranian journal of reproductive medicine*. 2014;12(8):561–6. PMID: 25408706. PMCID: PMC4233315.
  13. Amerian M, Kariman N, Janati P, Salmani F. The Role of Individual factors in decision making for the first Childbearing. *Payesh (Health Monitor)*. 2016;15(2):143 – 51. URL: <http://payeshjournal.ir/article-1-182-en.html>.
  14. Taghizadeh Z, Behmanesh F, Ebadi A. Marriage Patterns and Childbearing: Results From a Quantitative Study in North of Iran. *Global journal of health science*. 2015;8(3):1–9. doi:10.5539/gjhs.v8n3p1.

15. Bull S, Hogue CJ. Exploratory analysis of factors associated with teens' repeated childbearing. *J Health Care Poor Underserved*. 1998;9(1):42–61. DOI:10.1353/hpu.2010.0511.
16. Pedro J, Brandão T, Schmidt L, Costa ME, Martins MV. What do people know about fertility? A systematic review on fertility awareness and its associated factors. *Ups J Med Sci*. 2018;123(2):71–81. <https://doi.org/10.1080/03009734.2018.1480186>.
17. Tavousi M, Motlagh ME, Eslami M, Haerimehrizi A, Hashemi A, Montazeri A. Fertility desire and its correlates: a pilot study among married citizens living in Tehran, Iran. *Payesh (Health Monitor)*. 2015;14(5):697–702. URL: <http://payeshjournal.ir/article-1-221-en.html>.
18. Santangelo N. Contemporary studies about fertility changes: common trends or contextual variations? *Italian Sociological Review*. 2011;1(1):50. DOI:10.13136/isr.v1i1.13.
19. Torkian Valashani S, Zamani Alavijeh F, Heidari Z, Shoushtari Moghadam E. Fertility desire: Facilitators and inhibitors. *Payesh (Health Monitor)*. 2019;18(3):241-9. URL: <http://payeshjournal.ir/article-1-1067-en.html>.
20. Keshavarz H, Bahramian M, Mohajerani A, Hosseinpour K. Factors effective in changing of reproductive behaviors of nomadic and non-nomadic tribes in the Semirom Province, Iran. *Health System Research*. 2012;8(3):456–65.
21. Jang I, Jun M, Lee JE. Economic actions or cultural and social decisions? The role of cultural and social values in shaping fertility intention. *International Review of Public Administration*. 2017;22(3):257–75. <https://doi.org/10.1080/12294659.2017.1368004>.
22. Abbasi Shovazi M, Khaje Salehi Z. Assessing the impact of independence, social participation, and education of women on the tendency to childbearing (case study of Sirjan city). *Woman in Development and Politics. (Women's Research)*. 2013;11(1):45–64.
23. Miri M, Moasheri B, Moodi M, Soorgi Z, Hoseini H. Behavioral intention model (BIM) application in productivity behaviors of employed women in Birjand University of Medical Sciences. *Journal of Birjand University of Medical Sciences*. 2005;12(3):9–15. URL: <http://journal.bums.ac.ir/article-1-77-en.html>.
24. Hayford SR, Morgan SP. Religiosity and fertility in the United States: The role of fertility intentions. *Soc Forces*. 2008;86(3):1163–88. <https://doi.org/10.1353/sof.0.0000>.
25. Cooke A, Mills TA, Lavender T. '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*. 2010;47(10):1317–29. <https://doi.org/10.1016/j.ijnurstu.2010.06.001>.
26. Azmoude E, Behnam H, Barati-Far S, Kabirian M. The Relationship of Socio-Demographic Factors, Fertility Behavior and Child's Perceived Value with Fertility. *International journal of community based nursing midwifery*. 2017;5(2):123. PMID: 28409166. PMCID: PMC5385235.