

Investigating the Factors Influencing Childbearing and Fertility Preferences in Couples Aged 15–45 in Dezful, Iran, with Emphasis on Access to Emergency Healthcare and Counseling Services

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Abstract

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Background: Numerous nations are experiencing a demographic imbalance and are confronting the challenges that arise from it. Projections suggest that the global population is expected to decline by the year 2050. The aim of this study was to clarify the elements that affect young couples' aspirations for parenthood, with a specific focus on the potential role of healthcare access, including emergency obstetric and counseling services, and to gain insight into the fundamental motivations driving these desires.

Methods: A cross-sectional study was conducted in 2023 on a sample of Iranian couples attending a premarital counseling clinic in Dezful. A total of 736 couples, aged 15–49 years old, participated. A questionnaire was used to collect data on demographics, attitudes, fertility preferences, behavioral intentions for childbearing, and perceptions of accessibility to essential health services, such as emergency perinatal care and immediate counseling support.

Results: Overall, the mean age was 22.9 ± 6.1 years for females and 27.6 ± 5.6 years for males. Findings showed a significant difference between women (32.8%) and men (40.7%) in terms of childbearing intention ($P=0.001$). There was a significant relationship between childbearing desire and childbearing motives ($p=0.001$ and $r=0.223$). Independent t-tests showed a significant difference between the mean scores of marital satisfaction, religious beliefs, and economic status with intention for childbearing ($P < 0.05$). Furthermore, preliminary analyses indicated that concerns about the availability and quality of emergency health services were tangibly associated with fertility apprehensions among a subset of participants.

Conclusion: It seems that the desire to have a child has not increased, and population policies have not led to a significant change in attitude towards having children. The findings suggest that ensuring reliable access to comprehensive healthcare, including emergency medical and psychological services, may be a critical but overlooked factor in fertility decision-making. It appears that merely demonstrating the beauty of parenthood is insufficient without addressing foundational concerns about safety and support.

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Introduction

Numerous nations are experiencing a demographic imbalance and are confronting the socioeconomic

challenges that arise from it. Projections suggest that the global population is expected to decline by the year 2050 (1-4).

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Iran is among the nations experiencing a rapid decline in population growth. The reduction in the birth rate in Iran began in 2011 and has accelerated since 2015 (5). According to the statistics center, the average birth rate in Iran is currently below two children per woman (6, 7). The World Bank's report indicates that Iran's population growth rate is projected to fall below 1 percent by the year 2025 (4). While national policies have aimed to reverse this trend, the focus has often been on financial incentives, overlooking critical infrastructural factors such as the accessibility and perceived quality of essential healthcare services, including emergency obstetric and neonatal care, which are fundamental to maternal security and reproductive confidence (8).

A national survey conducted in Iran in 2015 revealed that Khuzestan province ranked fourth in terms of childbearing desire, with a fertility rate of 49.9%. Additionally, findings from various studies across the nation suggest that over 40% of couples perceive their desire to have children as moderate (9-13). This ambivalence may be rooted not only in economic concerns but also in apprehensions about the healthcare system's capacity to provide timely and effective support during pregnancy-related emergencies.

The statistical survey conducted in 2024 in Dezful revealed that the average age of marriage for women has reached 23.5 years and for men 28 years, which has increased compared to previous years. Also, the average age of women at the first child has reached 27.3 years and 32 years for men (Dezful Health Center). The demographic of individuals aged 18 to 30 in Dezful has decreased from approximately 30% to below 17%. Meanwhile, the proportion of the elderly population has risen from 6.5% to 9.7%. In addition, the prevalence of infertility in Dezful is higher than the national average at more than 30%. These shifts place greater importance on understanding the decision-making of each potential childbearing couple, where perceived risks, including those related to emergency healthcare access, become paramount.

The age distribution of a population is recognized as a crucial factor influencing economic growth. Previous research has highlighted concerns about an impending low-fertility crisis globally, where declining and aging populations may lead to reduced economic expansion (14).

The process of having children, while natural, involves a complex range of qualitative and quantitative considerations, where safety and support systems are key determinants (15). Research indicates that multiple elements affect fertility rates, including delayed marriage, women's empowerment, increasing educational attainment, and the availability of government-provided healthcare services (16). Crucially, the quality and

immediacy of these services, particularly in emergency situations, can significantly influence perceived risk and reproductive planning.

Another study revealed that economic and social independence, lack of government welfare facilities, cultural issues, and even self-support (physical, social, and psychological) significantly influence decision-making regarding childbearing in Iran (17). Within this framework, the assurance of rapid medical intervention during obstetric emergencies is a critical component of "physical support" that remains under-investigated.

Governments bear the responsibility of executing population policies; this is not merely a singular concern but rather a multifaceted and intricate set of political, social, and economic challenges that necessitate targeted interventions, including robust public health infrastructure (18, 19).

In 2021, the Iranian government initiated a strategy aimed at promoting childbirth and safeguarding the population. This initiative encompassed enhancements to maternity leave, as well as the provision of loans and housing assistance. However, two years following the implementation of these incentive plans, a critical question remains: have these policies effectively enhanced fertility intentions among couples, or do deeper concerns about health system readiness and emergency care accessibility persist as significant barriers?

Therefore, the objective of this research was to clarify the elements that affect young couples' aspirations for parenthood in Dezful, with a specific focus on gaining insight into the fundamental motivations driving these desires, including the potential influence of perceptions regarding access to emergency healthcare and counseling services.

Methods

Participants

The present research was a cross-sectional analytic study and emerged from a research project. The subjects of this study consisted of couples between the ages of 15 and 45 who sought services at a premarital counseling clinic located within the healthcare center of Dezful. The inclusion criteria were being Iranian, being in their first marriage, and providing consent for participation. The criteria for exclusion included individuals who provided incomplete responses to the questions and those who were unwilling to participate in the study.

Procedure

After receiving the code of ethics and required approval from Dezful University of Medical Science, sampling was started. The participants of this study were couples between the ages of 15 and 45 who sought

services at a premarital counseling clinic located in Dezful, Iran, during the years 2023 to 2024. In Dezful, there is only one clinic dedicated to premarital counseling, where couples are mandated to participate in "premarital training classes" prior to their marriage. The sample utilized for this study was obtained through a convenience sampling method. To incorporate the study's focus on healthcare access, a specific module was added to the standard procedure: following the completion of the main questionnaire, participants were verbally asked two supplemental, open-ended questions regarding their perceptions of local emergency obstetric services and the availability of immediate counseling support for pregnancy-related concerns.

Sample size

Drawing from analogous research (2, 23) and considering the inclination towards childbearing ($p=38$) along with a 5% margin of error and a 95% confidence level, the necessary sample size was determined to be 358 participants. To enhance the accuracy of the study, a total of 393 samples were evaluated, resulting in the collection of 368 pairs of questionnaires.

Data collection

The research employed a multi-section questionnaire as its data collection instrument. The initial section focused on personal demographics and included 20 inquiries regarding age, employment status, occupation, age difference between partners, residential location, income level, etc. Fertility preferences were assessed using Miller's questionnaire (1995), which comprises ten items. This instrument evaluated aspects such as the desire for childbearing. The third section of the questionnaire focused on the factors influencing the willingness or unwillingness to have children, comprising 5 items and a total of 34 questions. This section comprised four inquiries concerning economic status, twelve inquiries regarding social support, six inquiries focused on marital satisfaction, seven inquiries addressing childbearing issues, and five inquiries related to religiosity. The assessment of this part of the questionnaire utilized a Likert-type scale, which ranged from 1 (totally disagreement) to 5 (absolutely agreement), with certain items being scored in a reverse manner. The determination of the minimum and maximum scores was based on the quantity of questions present in each domain. For instance, in the economic sector, there were four questions, resulting in a scoring range from 4 to 20, where higher scores reflect a greater level of desire. We put some open-ended questions at the end of the questionnaire. Open-ended questions give respondents free control to express their opinions on any given topic.

The validity of the questionnaires was established through content validity and face validity assessments. These questionnaires were reviewed by ten faculty members from Dezful University of Medical Sciences, and subsequent to incorporating the required modifications, the finalized instrument was implemented.

The reliability of the questionnaire was established through a test-retest methodology. In this process, ten couples initially completed the questionnaire, and after a two-week interval, the same individuals were asked to respond to the identical questionnaire once more. The correlation coefficients between the two administrations ranged from 0.80 to 0.85 across various questions, thereby affirming the reliability of the instrument. Each couple received a questionnaire, and responses were provided independently by each partner. In instances where participants exhibited illiteracy or lacked adequate education, the questionnaires were administered through interviews. All couples engaged in the sampling process with full awareness and consent, and they were guaranteed the confidentiality of their responses, with the option to withdraw from the study at any point.

Data analysis

Data were analyzed using SPSS version 22. Descriptive statistics summarized the data. An independent t-test compared mean scores between groups. Pearson's correlation coefficient examined relationships between continuous variables. To evaluate the primary factors influencing childbearing intentions, multiple logistic regression analyses were performed. Additionally, qualitative responses from the healthcare access module were analyzed using conventional content analysis to identify recurring themes and concerns. A p -value < 0.05 was considered statistically significant.

Result

Of a total of 780 questionnaires, 44 were discarded due to incompleteness. In this research, surveys were conducted on 768 participants, comprising 368 women and 368 men. None of the participants had children, and all were entering their first marriage. The mean age was 22.9 ± 6.1 years for females and 27.6 ± 5.6 years for males. Among the women, 90 individuals (24.1%) were below the age of 18, specifically between the ages of 15 and 17; conversely, no male participants were under 18. The desire for children was notably low among women under 18, with only 28.7% expressing such a wish. The peak desire for childbearing was observed at age 18 for women (63.1%) and at age 22 for men (67.2%).

(Table 1) demonstrates that a significant proportion of women possessed a high school education, accounting

for 49.2%, whereas a larger share of men, at 45.7%, held university degrees. Additionally, 80.3% of the participants resided in urban areas, in contrast to 19.7% lived in rural settings. Regarding income levels, 51.1% of the participants reported having adequate income, while 34.7% indicated an income below adequate, and 14.2% reported an income above adequate.

A total of 54.9% of participants expressed a desire to have two children, while 20.8% indicated a preference for having only one child. Additionally, 14.1% of couples showed an inclination towards having three children, as illustrated in (Table 2). A significant majority, specifically 72.3%, expressed a preference for having one daughter, and 66.4% of couples favored having one son. Furthermore, 46.5% of respondents believed that the optimal timeframe for starting a family is within the next three years. The predominant view among

participants (37%) was that the age range of 23 to 27 years is suitable for the first instance of childbearing. Notably, the study found no significant correlation between the desire to have children with the husband's age, religious affiliation, type of housing, or residential area. The desire to have children exhibited a significant relationship with the educational levels of women (0.009) and men (0.001), indicating that individuals with lower literacy rates showed a greater intention to have children. The age of women was negatively correlated with pregnancy intention (p=0.004). There was a significant difference between the mean scores of marital satisfaction and the intention to have children (P= 0.001). Findings showed a significant difference between women (32.8%) and men (40.7%) in terms of childbearing intention (P=0.001).

Table 1. Demographic variables of couples referring to premarital counseling clinics

| variable | N=736 | childbearing | no | childbearing | P |
|---------------------------------------------|--------------------------|--------------|------------|--------------|-------|
| Age /sex | women 22.9±6.1 | 32.8% | 67.2% | | 0.001 |
| | Men 27.6±5 | 40.7% | 59.3% | | |
| Employment | Employed 140(38%) | 52(37.1%) | 88(62.9%) | | >0.05 |
| | Unemployed 228(62%) | 77(33.8%) | 151(66.2%) | | |
| Husband's employment | Employed 329(89.5%) | 111(33.7%) | 218(66.3%) | | 0.001 |
| | Unemployed 38(10.5%) | 27(71%) | 11(29%) | | |
| Education | University 159(43.2%) | 55(34.6%) | 104(65.4%) | | 0.009 |
| | High school 181(49.2%) | 60(33.1%) | 121(66.9%) | | |
| | Elementary 21(5.7%) | 15(71.4%) | 6(28.6%) | | |
| | Illiterate 7 (1.9%) | 1(14.3%) | 6(85.7%) | | |
| Husband's education | University 168(45.7%) | 60(35.7%) | 108(64.3%) | | 0.001 |
| | High school 154(41.8%) | 53(34.4%) | 101(65.6%) | | |
| | Elementary 43(11.7%) | 25(58.1%) | 18(41.9%) | | |
| | Illiterate 3(0.8%) | 2(66.7%) | 1(33.3%) | | |
| Satisfaction with the start of married life | Yes 674(91.5%) | 257(38.1%) | 417(61.9%) | | 0.001 |
| | NO 15(2%) | 2(13.3%) | 13(86.7%) | | |
| | So so 47(6.5%) | 10(21.3%) | 37(78.7%) | | |
| Ethnic group | Bakhtiari/Lur 360(48.9%) | 132(36.7%) | 228(63.3%) | | 0.001 |
| | Dezfuli 245(33.2%) | 70(28.6%) | 175(71.4%) | | |
| | Arabs 91(12.3%) | 42(46.2%) | 49(53.8%) | | |
| | Kurds 23(3.3%) | 9(39.1%) | 14(60.9%) | | |
| | Turks 17(2.3%) | 11(64.7%) | 6(35.3%) | | |

Independent t tests showed a significant difference between the mean scores of marital satisfaction, religious beliefs and economic status with intention for childbearing (P < 0.05) (Table 3).

There was a significant relationship between childbearing desire and childbearing motives (p=0.001 and r=0.223). So, in those who considered the motivation to have children as a better life, the score of desire to have children was significantly higher than other items (Figure 1). There was no significant relationship between childbearing intention and the obstacles to having a child.

Discussion

Since the husband's opinion plays a notable role in the decision to have a child, we compared men and women as couples in this research. The participants were engaged to be married for the first time, with no prior parental experience, suggesting their responses reflect genuine, nascent opinions about parenthood. The choice to have a child is determined by a multifaceted interaction process that includes the reciprocal influences and negotiations between both partners (19-21). Notably, most participants were in traditionally arranged marriages.

Our study showed that 35.8% of couples expressed a definitive willingness to have children, a finding consistent with Iranian studies reporting rates around 36.8% (22-25). A significant gender disparity was observed, with men showing higher childbearing intention than women (P=0.001). This aligns with literature suggesting that fertility desires are gendered, influenced by differing social power, labor force

participation, and cultural norms (26-28). However, some studies, like Mynarska & Rytel, report no gender difference in childbearing desires (29), while others indicate women, particularly students, exhibit a reduced inclination towards future childbirth compared to men (30, 32). This underscores the complexity of gendered reproductive decision-making.

Table 2. Couples preferences for the number of, and the time for childbearing

| Variable | | N/% | intention for | no intention for | p | |
|---------------------------------------------|-----------------|-------------|---------------|------------------|-------|-------|
| Appropriate time for the first childbearing | the next year | 47(6.4%) | 39(83%) | 8(17%) | 0.001 | |
| | the 2 next yea | 170(23.1%) | 97(57%) | 73(43%) | | |
| | the 3 next year | 342 (46.5%) | 108(31.6%) | 234(68.4%) | | |
| | >3years | 177(24%) | 22(12.4%) | 155(87.6%) | | |
| The desired number of children | 1 | 153(20.8%) | 30(19.6%) | 123(80.4%) | 0.001 | |
| | 2 | 404(54.9%) | 150(37.1%) | 254(62.9%) | | |
| | 3 | 104(14.1%) | 39(37.5%) | 65(62.5%) | | |
| | 4 | 66(9%) | 37(56.1%) | 29(43.9%) | | |
| | >4 | 9(1.2%) | 6(66.6%) | 3(33.4%) | | |
| Appropriate age for the first childbearing | 18-22 | 241(32.7%) | 71 (29.5%) | 170(70.5%) | 0.001 | |
| | 23-27 | 272(37%) | 123(45.5%) | 149(54.8%) | | |
| | 28-32 | 209(28.4%) | 58 (27.8%) | 151(72.2%) | | |
| | >32 | 14(1.9%) | 5(35.7%) | 9(64.3%) | | |
| Preference for the sex of children | 0 | 42(5.7%) | 5(11.9%) | 37(88.1%) | 0.49 | |
| | 1 | 532(72.3%) | 193(36.3%) | 339(63.7%) | | |
| | 2 | 144(19.6%) | 59(40.9%) | 85(59.1%) | | |
| | 3 | 14(1.9%) | 4(28.6%) | 10(71.4%) | | |
| | ≥4 | 4(0.5%) | 1(25%) | 3(75%) | | |
| | 0 | 48(6.5%) | 6(12.5%) | 42(87.5%) | | 0.001 |
| | 1 | 488(66.4%) | 170(34.8%) | 318(65.2%) | | |
| 2 | 172(23.4%) | 73(42.4%) | 99(57.6%) | | | |
| 3 | 21(2.8%) | 8(38.1%) | 13(61.9%) | | | |
| ≥4 | 7(0.9%) | 5(71.4%) | 2(28.6%) | | | |

Table 3. The mean scores and standard deviation of factors influencing the childbearing intentions of couples

| Variable | Score | intention for | | no intention for childbearing | | r | P |
|-----------------------|-------|---------------|------|-------------------------------|------|--------|-------|
| | | Mean | SD | Mean | SD | | |
| Economic status | 11.5 | 2.8 | 1.05 | 3.5 | 1.04 | -0.102 | 0.006 |
| Religious beliefs | 17.3 | 3.2 | 1.1 | 2.8 | 1.2 | 0.153 | 0.001 |
| Social support | 39.6 | 2.4 | 1.2 | 2.5 | 1.02 | -0.096 | 0.009 |
| Marital satisfaction | 19.5 | 4.2 | 1.2 | 3.9 | 0.8 | 0.169 | 0.001 |
| Childbearing problems | 22 | 4.3 | 0.7 | 4.2 | 0.8 | -0.078 | 0.092 |

Internationally, the prevalence of childbearing desire varies widely—from 30% in a Swedish study (33) to 64.9% in sub-Saharan Africa (34)—highlighting the profound impact of cultural and socioeconomic context.

A significant relationship was found between childbearing intention and ethnicity in our diverse sample from Dezful, which includes Lur, Bakhtiari, Arab, Turk, and Kurdish populations. This suggests that factors influencing fertility can differ substantially among minority groups (35-38).

We found that 46.5% of participants intended to have children within the next three years. This "waiting period" among traditionally married couples may serve not only for spousal familiarization but also, as qualitative insights from our healthcare access module suggest, for assessing the stability and safety of their environment, including perceived readiness of local emergency obstetric services. Concerns about the adequacy of emergency care during delivery and

pregnancy complications emerged as a latent theme amplifying general anxieties about parenthood.

Consistent with prior research (41, 42), the decision to have a child is often driven by the desire to start a family. However, our engaged couples reported low immediate desire, with primary concerns centering on livelihood and housing. It is plausible that in contexts of

economic uncertainty, perceived weaknesses in the public health safety net—such as unreliable emergency care—compound financial fears, making the prospect of childbearing seem riskier. This intersection of economic and health security concerns warrants deeper exploration.

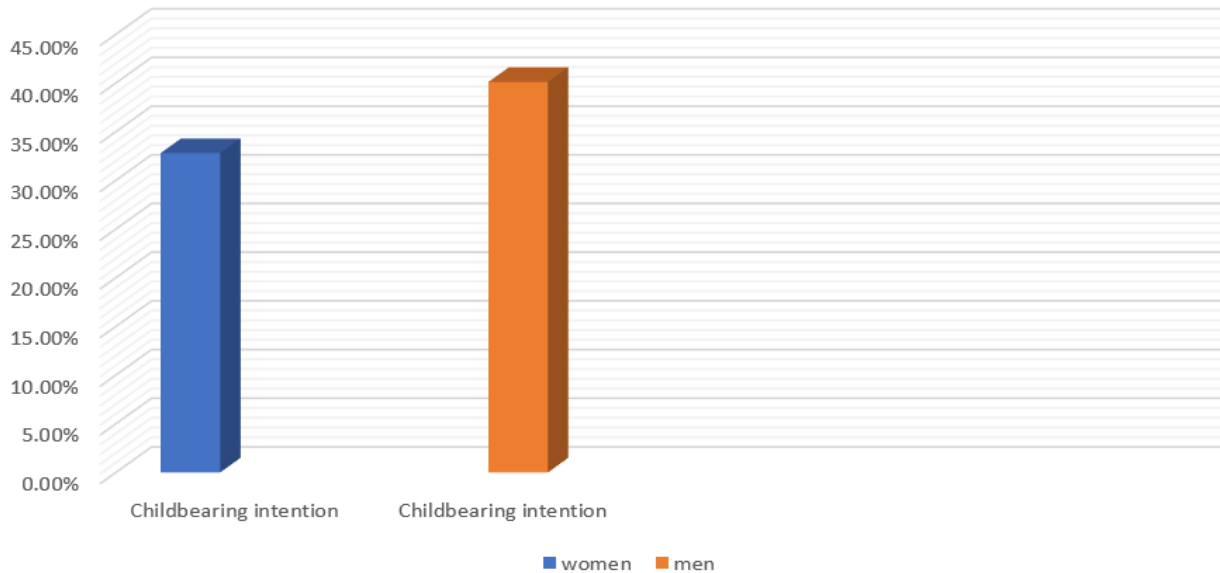


Figure 1. Percentage of women's and men's score of childbearing intention

Education level significantly influenced childbearing intention, a well-documented phenomenon where higher education often reduces fertility rates by enhancing autonomy and altering childrearing ideals (43).

Notably, our findings indicated no significant link between fertility intentions and fears related to the "discomforts of pregnancy and delivery," consistent with Mynarska & Rytel (29) but contrasting with studies linking childbirth-related fear to lower fertility intentions (44). This discrepancy in our sample may stem from their lack of direct experience. However, our supplemental qualitative data hints at a distinction: while general "discomfort" may not deter them, specific, serious concerns about potential emergencies and the system's capacity to handle them were voiced, suggesting that catastrophic thinking about healthcare failures may be a separate, potent inhibitory factor.

In line with established literature (45), marital satisfaction was positively associated with childbearing desire ($p=0.001$). Similarly, stronger religious beliefs correlated with a higher desire for children ($r=0.153$, $p=0.001$), although other Iranian studies have found no such correlation (47). This reaffirms that childbearing is a multifactorial decision.

In conclusion, while our quantitative results align with known determinants like gender, economics, and marital satisfaction, the integration of qualitative insights on emergency care perceptions reveals an additional, potentially crucial layer. Future population policies and clinical counseling, particularly in settings like Dezful, may need to address not just financial incentives but also concrete assurances and improvements in emergency healthcare infrastructure to build the confidence necessary for couples to realize their fertility desires.

Conclusion

In Iran, the dramatic decline in fertility rates has prompted a fundamental shift in national demographic policies towards encouraging childbearing. However, consistent with prior research, the findings of this study suggest that these broad policy measures—often focused on financial incentives and moral persuasion—have not significantly increased the desire for children nor fundamentally altered attitudes toward parenthood among young couples in Dezful. Merely extolling the virtues of parenthood is insufficient to overcome the complex web of concerns influencing reproductive decisions.

The study underscores that fertility preferences are shaped by a confluence of entrenched factors, including economic stability, marital satisfaction, educational attainment, and religious beliefs. Crucially, this research also highlights a potential critical gap in current policy frameworks: the overlooked role of healthcare security, specifically the perceived accessibility and reliability of emergency obstetric and counseling services. Qualitative insights suggest that apprehensions regarding the healthcare system's capacity to manage pregnancy-related emergencies act as a latent, yet powerful, deterrent, compounding more explicit economic anxieties.

Therefore, to effectively support and encourage childbearing, population policies must evolve beyond singular economic approaches. Future strategies should adopt a more holistic and security-oriented model that integrates robust support for public health infrastructure. This includes guaranteeing timely access to high-quality emergency maternal care and responsive counseling services. Building couples' confidence in the healthcare system's ability to ensure safety during childbirth may be as vital as addressing financial burdens. Ultimately, fostering a desired family size requires creating an environment that not only makes having children affordable but also makes it feel safe and supported at the most critical moments.

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Authors' contributions

MM and FY served as supervisors and principal investigators for the study, taking the lead in drafting the manuscript. SJ acted as an advisor for the research. MA was responsible for data collection. Each author was involved in the statistical analysis. All authors played a role in the design and data analysis and contributed to the preparation of the manuscript's final version. Furthermore, all authors reviewed and approved the final manuscript.

Ethical considerations

ethical issues Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc. have been completely observed by the authors.

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Conflict of interest

The authors declare that there is no conflict of interest.

Data availability statement

Raw data were generated at the healthcare center of Dezful. Derived data supporting the findings of this study are available from the corresponding author MM on request.

References:

- Hartnett CS, Gemmill A. Recent trends in US childbearing intentions. *Demography*. 2020;57(6):2035-2045.
- Ayazi R, Amini L, Montazeri A, Haghani S. Factors related to childbearing willingness in the women attending the health centers in Arak, Iran (2019). *Iran Journal of Nursing*. 2021;34(130):15-24.
- Cleland J, Machiyama K, Casterline JB. Fertility preferences and subsequent childbearing in Africa and Asia: A synthesis of evidence from longitudinal studies in 28 populations. *Population Studies*. 2020;74(1):1-6.
- Behmanesh F, Taghizadeh Z, Vedadhir AA, Ebadi A, Pourreza A, Abbasi Shavazi MJ. Explaining the causes of single child based on women's views: A qualitative Study. *Iranian Journal of Epidemiology*. 2019;15(3):279-288.
- Fathi E. The Phenomenon of Population Aging in Iran. *Ijoss Iranian Journal of Official Statistics Studies*. 2020;30(2):387-413.
- Razavizadeh N, Ghafarian E, Akhlaqi A. Grounds for low child seeking and delay in child bearing (case study: Mashhad women). *Scientific Journal Management System*. 2015;8(31):73-98.
- Hosseini-Chavoshi M, Abbasi-Shavazi MJ, McDonald P. Fertility, marriage, and family planning Tavousi M, Haerimehrizi A, Sadighi J, Motlagh ME, Eslami M, Naghizadeh F, Anbari M, Hasemi A, Montazeri A. Fertility desire among Iranians: a nationwide study. *Payesh*. 2017;16(4) :401-410.
- Vedadhir A, Taghizadeh Z, Behmanesh F, Ebadi A, Pourreza A, Abbasi-Shavazi MJ. Patterns of marriage and reproductive practices: is there any relationship? *Human Fertility*. 2017;20(1):30-36.
- Masoumi SZ. The status and marital satisfaction factors in nulliparous pregnant females attending clinics in Asadabad city during years 2015 and 2016. *Avicenna Journal of Nursing and Midwifery Care*. 2017;25(1):52-59.
- Mirabi S, Mirzaei H, Hassani Darmian GR. A Phenomenological Study on Married Women Awareness of Childbearing. *Journal of Applied Sociology*. 2020;31(3):1-20.

11. Azadeh MA, Arami S. A Study on Gender Socialization and Behavior in social dilemma A Study on Gender Socialization and Behavior in social dilemma. *Women's Studies Sociological and Psychological*. 2016;14(1):7-39.
12. Cerrato J, Cifre E. Gender inequality in household chores and work-family conflict. *Frontiers in psychology*. 2018;9(1):1330-1338.
13. YARAHMADI A, Feizi M, Karimi H. Determinants of Kurdish Women's Sub-Replacement Fertility. *The Women and Family Cultural Education*. 2019;14(48):97-120.
14. Rezaeinasab Z, Fotoohi S. Socio-cultural factors influencing the fertility of married women (49-15) in Ilam city. *a scientific journal of ilam culture*. 2017 Aug 23;18(54.55):112-33.
15. Jahanbakhshganjeh S, Jafari N. The Sociological Explanation of Fashionism, From the Female Students' Viewpoint in Kharazmi University. *Intercultural Studies Quarterly*. 2018;13(34):87-112.
16. Khadivzadeh T, Arghavani E, Shakeri MT. Attitude toward governmental incentives on childbearing and its relationship with fertility preferences in couples attending premarital counseling clinic in health centers in Mashhad. *Journal of Mazandaran University of Medical Sciences*. 2015;24(120):1-13.
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.
18. Preis H, Tovim S, Mor P, Grisar-Granovsky S, Samueloff A, Benyamini Y. Fertility intentions and the way they change following birth-a prospective longitudinal study. *BMC pregnancy and childbirth*. 2020;20(1):228-236.
19. Stein P, Willen S, Pavetic M. Couples' fertility decision-making. *Demographic Research*. 2014;30(1):1697-1732.
20. De Silva T, Tenreyro S. Population control policies and fertility convergence. *Journal of Economic Perspectives*. 2017;31(4):205-228.
21. Agadjanian V, Nedoluzhko L. Group Normative Propensities, Societal Positioning, and Childbearing: Ethno-linguistic Variation in Completed and Desired Fertility in Transitional Central Asia. *Population research and policy review*. 2022;41(4):1571-1596.
22. Wang D, Chi G. Different places, different stories: A study of spatial heterogeneity of county-level fertility in China. *Demographic research*. 2017;37(1):493-507.
23. Abbasishavazi M, Khani S. Economic insecurity and fertility: case study of married women in Sanandaj District. *Journal of Population Association of Iran*. 2014;9(17):37-76.
24. Su-Russell C, Sanner C. Chinese childbearing decision-making in mainland China in the post-one-child-policy era. *Family Process*. 2023;62(1):302-318.
25. Piltan F, Rahmanian M. Investigating factors affecting the tendency toward childbearing among married men and women (case of study: men and women aged 25 to 45 years old in Jahrom). *Journal of Iranian social development studies*. 2015;7(2):121-34.
26. Alfaraj S, Aleraj S, Morad S, Alomar N, Al Rajih H, Alhussain H, Abushrai F, Al Thubaiti A. Fertility awareness, intentions concerning childbearing, and attitudes toward parenthood among female health professions students in Saudi Arabia. *Int J Health Sci*. 2019;13(3):34.
27. Chen SL, Jones LK, Jackson M. Childbearing and quality of life decisions for women in Taiwan. *International Journal of Healthcare*. 2018;4(1):16-24.
28. Ghaffari F, Motaghi Z. Factors affecting childbearing based on women's perspectives: A Qualitative Study. *Navid No*. 2021;23(76):33-43.
29. Mynarska M, Rytel J. Fertility desires of childless poles: Which childbearing motives matter for men and women?. *Journal of Family Issues*. 2020;41(1):7-32.
30. Rijkjin AJ, Liefbroer AC. The influence of partner relationship quality on fertility. *European Journal Population*. 2009;25(1):27-44.
31. Tehsin F, Ali SI, Al Qarni G. Awareness and attitude towards fertility and parenthood: a comparative study among medical students in Saudi Arabia. *Khyber Medical University Journal*. 2024;16(1):16-24.
32. Miller WB. Differences between fertility desires and intentions: Implications for theory, research and policy. *Vienna Yearbook of Population Research*;2011.
33. Berninger I, Weiß B, Wagner M. On the links between employment, partnership quality, and the intention to have a first child: The case of West Germany. *Demographic Research*. 2011;24(1):579-610.
34. Janati S, Poormoosavi SM, Tirkesh F. Survey of the causes of infertility in patients referred to Dezful infertility center from 1393 to 1396. *Jundishapur Scientific Medical Journal*. 2019;18(4):347-354.
35. Virtala A, Vilska S, Huttunen T, Kunttu K. 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 & Reproductive Health Care*. 2011;16(2):108-15.
36. Lampic C, Svanberg AS, Karlström P, Tydén T. Fertility awareness, intentions concerning childbearing, and attitudes towards parenthood among female and male academics. *Human reproduction*. 2006;21(2):558-64.
37. Bühler C, Fratzek E. Learning from others and receiving support: The impact of personal networks on fertility intentions in Poland. *European societies*. 2007;9(3):359-82.
38. Hanappi D, Ryser VA, Bernardi L, Le Goff JM. Changes in employment uncertainty and the fertility intention-realization link: An analysis based on the Swiss household panel. *European Journal of Population*. 2017;33(1):381-407.
39. Speizer IS, Escamilla V, Lance PM, Guilkey DK. Longitudinal examination of changing fertility intentions and behaviors

over a four-year period in urban Senegal. *Reproductive Health*. 2020;17(1):38-47.

40. Duvander AZ, Brandén M, Ohlsson-Wijk S. Who decides about having children? Couples' childbearing plans and actual childbearing. In *2016 Annual Meeting*;2016.

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41. Araban M, Karimy M, Armoon B, Zamani-Alavijeh F. Factors related to childbearing intentions among women: a cross-sectional study in health centers, Saveh, Iran. *Journal of the Egyptian Public Health Association*. 2020;95(1):6-15.

42. Kjerulff KH, Velott DL, Zhu J, Chuang CH, Hillemeier MM, Paul IM, Repke JT. Mode of first delivery and women's intentions for subsequent childbearing: Findings from the First Baby Study. *Paediatric and perinatal epidemiology*. 2013;27(1):62-71.

43. Ambrosetti E, Novelli M, Angeli A. Childbearing intentions among Egyptian men and women. *Demographic Research*. 2021;44(1):1229-1270.

44. Ahinkorah BO, Seidu AA, Armah-Ansah EK, Budu E, Ameyaw EK, Agbaglo E, Yaya S. Drivers of desire for more children among childbearing women in sub-Saharan Africa: implications for fertility control. *BMC Pregnancy and Childbirth*. 2020;20(1):778-789.

45. Kim HW, Kim SY. Gender differences in willingness for childbirth, fertility knowledge, and value of motherhood or fatherhood and their associations among college students in South Korea, 2021. *Archives of Public Health*. 2023;81(1):110.

46. Bankole A, Singh S. Couples' fertility and contraceptive decision-making in developing countries: hearing the man's voice. *International family planning perspectives*;1998.

47. Soroush M, Bohrani SH. The relationship between religiosity, attitudes toward gender roles and attitudes actual and ideal number of children. *Women in Development & Politics*. 2013;2(1):209-221.