Caspian J Reprod Med, Year, 11 (2): 21-31

Caspian Journal of Reproductive Medicine

Journal homepage: www.caspjrm.ir

Review

Barriers to Fertility in Women: A Narrative Review Study

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Received: 16 Agu 2025 Accepted: 5 Sep 2025

Abstract

Background: Declining birth rates, population aging, and a reduced workforce have become major demographic concerns worldwide. Understanding the factors that discourage or prevent women from having children is essential for developing effective reproductive and population policies. This narrative review identifies and synthesizes key barriers influencing women's fertility and childbearing decisions.

Methods: A comprehensive search was conducted in PubMed, Scopus, and Web of Science, Google Scholar, and gray literature sources (OpenGrey) without limits on language, geography, or time until December 2023. Studies addressing fertility barriers were included; reviews, editorials, and papers on single-child issues were excluded. Two reviewers independently screened titles, abstracts, and full texts, and extracted relevant data.

Results: Out of 105 records, 39 studies (2017–2024) from 22 countries were included. Major barriers identified were decreased childbearing intention linked to higher socioeconomic status and women's empowerment; delayed childbearing due to advancing age (optimal fertility ≤31 years, declining after 35); inadequate policy support; work–family conflicts from employment; inverse relationships between education and parity; cultural stigma and media influence; high treatment costs limiting access to assisted reproductive technologies; poor counseling; environmental factors; and stigma related to HIV/AIDS.

Conclusion: Fertility barriers among women are multifactorial and context-dependent. Targeted interventions such as supportive family policies, reproductive education, and affordable fertility care are crucial to addressing declining fertility trends and promoting reproductive health.

Keywords: Barriers, Childbearing, Fertility, Reproduction, Women

Introduction

The dynamics are shaped by complex economic, social, cultural, and political factors (1). This issue remains a central concern for policymakers and planners worldwide. Global demographic transitions are accelerating (2). Among key influencing factors, fertility, migration, and mortality serve as critical indicators of population dynamics, significantly affecting population structure and growth (3). Fertility rates have plummeted in both developed and developing nations (4).

Low fertility leads to population aging, labor shortages, and rising healthcare burdens. Fertility trends, including birth spacing, fundamentally shape population trajectories (5).

Current fertility levels will shrink the working-age population while expanding the elderly cohort and associated costs (6). This will strain economies and erode social vitality (7). Family childbearing decisions thus influence both individual well-being and societal stability (8).

Understanding barriers to childbearing is therefore critical. This review synthesizes the literature on declining fertility rates from different aspects among women. We first define fertility, then examine its barriers and supporting evidence.

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Materials & Methods

We searched PubMed, Scopus, and Web of Science, Google Scholar, and gray literature sources (OpenGrey). No restrictions were placed on language, geography, or publication date; the search extended to 2023. A comprehensive narrative review was conducted to identify barriers to female fertility.

Selection process

To better understand barriers to female fertility, a comprehensive and systematic study was conducted. Inclusion criteria were studies and conference abstracts related to barriers to fertility. Exclusion criteria were studies on single-child complications, single childlessness, commentaries, opinions, and editorials.

Data extraction

Retrieved articles underwent a three-stage review process: title, abstract, and full text. Two independent reviewers assessed each article, with disagreements resolved through discussion with a third reviewer until consensus was achieved. Reviewers were not blinded to author names or journal titles. Data extracted for analysis and entered into an electronic datasheet included author, year, study location, methodology, and group sample sizes. Authors were contacted for additional information when articles were inaccessible through authorized databases. All studies were checked for duplication.

Results

A total of 105 records were identified through systematic searches. After removing 29 duplicates, 76 titles and abstracts were screened. Of these, 61 full-text articles were assessed for eligibility. Twenty-two articles were excluded (12 review/opinion/editorial pieces, 6 conference abstracts, 3 single-child complications studies, and 1 inaccessible full text). Ultimately, 39 original research studies published between 2017 and 2024 were included in this narrative review (Figure 1).

The characteristics of the included studies are summarized in Table 1. Studies were conducted in 22 countries/regions, representing both high-income (n=15) and low- to middle-income settings (n=24). Sample sizes ranged from 27 (qualitative) to 43,718 (DHS-based cross-sectional). Most studies employed cross-sectional designs (n=31), followed by qualitative approaches (n=4), systematic reviews/meta-analyses (n=2), multilevel mixed-effect analysis (n=1), and one case-control study. Data were collected primarily through surveys, interviews, and secondary analysis of national demographic health surveys.

Global decline of fertility

Infertility affects millions globally, with ~186 million women in developing countries impacted (12). It carries profound social, economic, and cultural consequences. The total fertility rate (TFR) exceeded 5 before 1965; it has since fallen below 2.5 globally (44). Around 80% of the global population resides in countries with TFR <3 (45). Fertility decline affects all nations; though secondary infertility predominates in developing regions. Infertility remains a persistent reproductive health challenge. In many societies, infertility stigmatizes women, causing psychological distress

Diverse barriers have been studied across contexts (39). These barriers affect families universally (46 Both actual and ideal family sizes have decreased across socioeconomic groups (47).

The decline in women's fertility intentions is influenced by a complex interplay of personal, socioeconomic, and structural factors. Family size preferences are increasingly shaped by education, income levels, and political stability, leading to a normative shift toward smaller families (25). Childbearing decisions are closely tied to perceptions of timing, resource availability, and personal readiness, which are often constrained by economic circumstances (48). The widespread trend of delayed childbearing driven by pursuit of higher education, career advancement, and financial security has become a dominant pattern across diverse contexts (25).

However, many women remain unaware of the sharp decline in fecundity with advancing maternal age or the heightened risks of obstetric and perinatal complications, underscoring a critical gap in reproductive health literacy (14). Contributing elements include partnership instability, evolving preferences for fewer children, and escalating workplace demands that exacerbate work–family tensions (49). Biologically, the probability of conception culminating in live birth is optimal prior to age 31, diminishing by approximately 50% at age 35 and to one-quarter by age 38 relative to women aged 30 or younger (43).

Political environments exert considerable influence on reproductive behavior, with governance structures and policy frameworks either facilitating or impeding fertility (15). In response to sustained sub-replacement fertility, some nations implement pronatalist incentives, while others impose restrictions on access

to infertility treatments or limit public funding for assisted reproductive technologies, creating disparities in reproductive autonomy (33). The expansion of female labor force participation is both a consequence and a driver of reduced fertility, as lower birth rates enable greater workforce engagement, yet employment-related pressures simultaneously diminish childbearing intentions through role conflict and opportunity costs (50).

As the labor market is increasing women want fewer children. Findings indicated that a declined fertility rate increases women's participation in the labor market (51). The historical changes in fertility rate seemed to start with industrialization and shifting from agriculture to manufacturing and servicing (32).

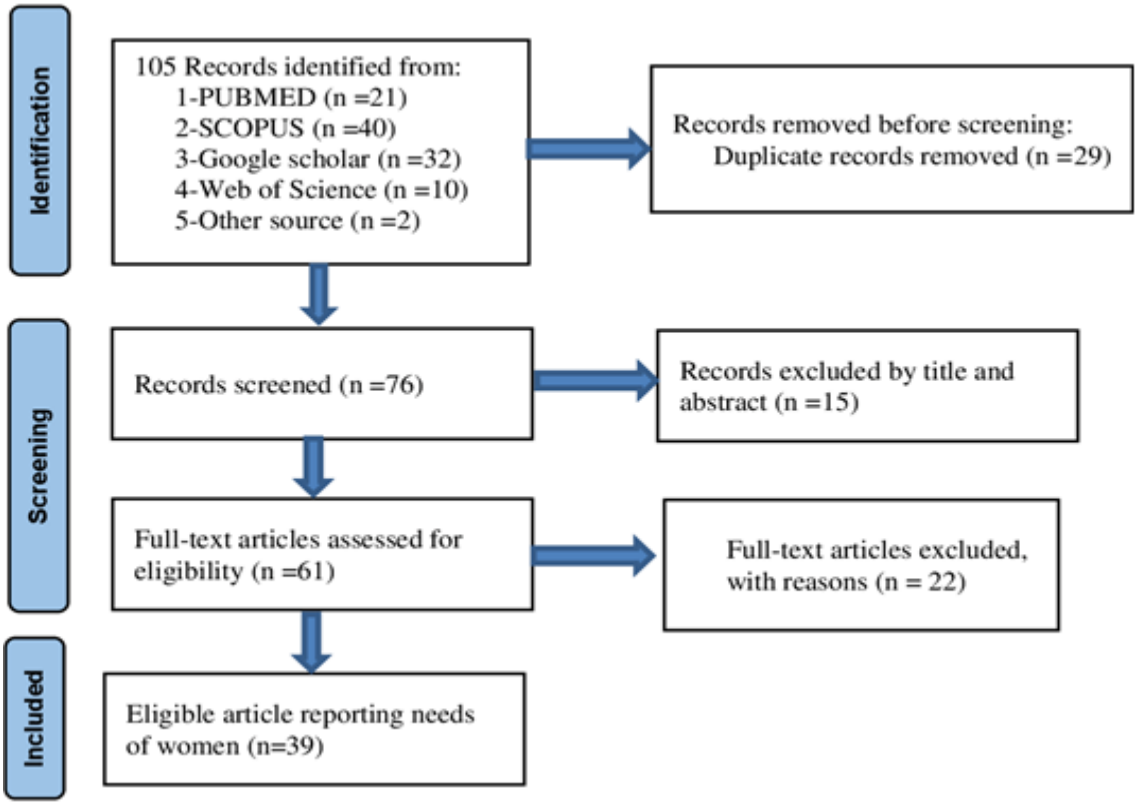

Figure 1. Flow diagram of study selection

Reduced desire for childbearing

Fertility rate and then ideal family size have been declined in different social levels. Family size is a personal choice related to education, income, political stability, etc. having fewer children is a self-reinforcing system for parents (25).

Desiring to plan a pregnancy needs to meet timing, capacity, and personal criteria. Their criteria need more sources so the desire to limit childbearing is mostly related to family wealth status (48).well-being, and his/her development, the timing of births is an important issue for employed women. However, family support can reduce the fertility pattern in different socio-economic groups (22). General measures indicated positive effects of labor on fertility timing and intentions in addition to, support from employing parts like children service, in-work cash transfer, and part-time, working can help women to reduce infertility (21).

Level of Education

The level of education is one of the most important predictors of the number of children in a family (30). Educated people know more about having healthy children instead of more children (11). Educated women reduce the gap between the desired and actual number of children (10). They know more about contraceptives and are more familiar with future policies of the country (10).

Table1. Study characteristics

No.	Author(s)/Year	Country/ Location	Sample Size	Key Findings (related to barriers of fertility)	Barrier Category	Study Design
1	Ahinkorah et al., 2020 (9)	Sub-Saharan Africa	43,718	Women's empowerment, education, wealth reduce desire for more children	Education, Economic, Labor	Cross-sectional (DHS)
2	Akhtar et al., 2021(10)	Pakistan	400	Cultural barriers & husband opposition limit contraceptive use	Culture	Cross-sectional
3	Akoku et al., 2022 (11)	Cameroon	625	Fear of side-effects & partner disapproval reduce contraceptive use	Culture, Education	Cross-sectional
4	Andeskebtso & Ugochukwu, 2023 (6)	Nigeria	400	Poverty & low education reduce family planning	Economic, Education	Cross-sectional
5	Bahadur et al., 2024(12)	India	200	Financial stress major barrier for infertile women	Economic	Case-control
6	Bakkensen et al., 2023(13)	USA	1,163	Career demands delay childbearing → higher infertility	Labor, Age	Cross-sectional
7	Boah et al., 2023(14)	Yemen	5,041	Low education, rural residence, poverty limit contraceptive use	Education, Economic	Cross-sectional (DHS)
8	Cheung & Lui, 2024(15)	Hong Kong	1,207	Political polarisation reduces fertility preferences	Political	Cross-sectional
9	Chwastek & Mynarska, 2024(16)	Poland	1,013	Career orientation strongly reduces motivation for early childbearing	Labor	Cross-sectional
10	Haeri-Mehrizi et al., 2017(17)	Iran	2,556	Economic problems most important reason for not wanting children	Economic	Population-based cross-sectional
11	Afrin et al., 2018(18)	Iran	400	Economic status & age strongly affect intention to have children	Economic, Age	Cross-sectional
12	Hartnett & Gemmill, 2020(19)	USA	9,000+	Economic uncertainty & career priorities reduce intentions	Economic, Labor	Repeated cross-sectional
13	Htay et al., 2024(20)	Southeast Asia	12,613	Empowerment & education reduce unmet need for family planning	Education, Labor	Cross-sectional (DHS)
14	Hussain et al., 2023(21)	Australia	537	Work-related stress delays fertility	Labor	Cross-sectional
15	Kane & Li, 2023(22)	China	1,200	Economic & work barriers persist despite two-child policy	Economic, Labor	Cross-sectional
16	Lakin et al., 2024(23)	Vietnam	32 interviews	Poor health-system counselling delays childbearing	Medical	Qualitative
17	Moulaei et al., 2024(24)	Iran	400	Economic factors, education, age strongest predictors of low tendency	Economic, Education, Age	Cross-sectional (ML)
18	Negash et al., 2023(25)	Ethiopia	4,969	Higher education & wealth reduce desire to limit childbearing	Education, Economic	Multilevel mixed-effect

No.	Author(s)/Year	Country/ Location	Sample Size	Key Findings (related to barriers of fertility)	Barrier Category	Study Design
19	Njagi et al., 2023(26)	LMICs	37 studies	High cost of ART major financial barrier	Economic	Systematic review of costs
20	Ojong et al., 2023(27)	Nigeria	400	Cultural beliefs & husband refusal limit health-seeking	Culture	Cross-sectional
21	Oyibo et al., 2024(28)	Nigeria	300	Lack of integrated fertility counselling in HIV+ women	HIV/AIDS, Medical	Cross-sectional
22	Penman et al., 2023(29)	Australia	27	Cost, transport, stigma barriers to fertility care	Economic, Culture	Qualitative
23	Pourmasumi et al., 2024(1)	Iran	400	Low income & high education reduce positive fertility attitudes	Economic, Education	Cross-sectional
24	Rahmati et al., 2019(30)	Iran	400	Low staff knowledge about fertility	Education, Medical	Cross-sectional
25	Rasoulzadeh Aghdam et al., 2020(31)	Iran	400	Media-driven cultural changes reduce tendency to >2 children	Culture	Cross-sectional
26	Rublein & Muschalla, 2022(32)	Germany	233	Childbirth fear & lack of knowledge delay fertility	Culture, Education	Cross-sectional
27	Savelieva et al., 2023(33)	Finland	1,549	Economic uncertainty & work–life conflict postpone childbearing	Economic, Labor	Cross-sectional
28	Stolk et al., 2023(34)	Global	27 studies	Transgender/gender-diverse face medical & social barriers	Medical, Culture	Systematic review
29	Guo et al., 2023(35)	China	30	Stigma & lack of counselling reduce fertility desire in HIV+	HIV/AIDS, Culture	Qualitative
30	Abebe et al., 2021(36)	Ethiopia	794	Harmful cultural practices (FGM, early marriage) limit fertility care	Culture	Community-based cross-sectional
31	Akokuwebe & Idemudia, 2022(37)	Nigeria	1,321	Economic & cultural factors limit fertility planning	Economic, Culture	Cross-sectional
32	Barrio-Ruiz et al., 2024(38)	Europe	27 studies	Language & cultural barriers reduce migrant women's access	Culture, Medical	Integrative review
33	Bayoumi et al., 2024(3)	Global	75 studies	Age, stress, pollution major risk factors	Age, Medical	Systematic review & meta-analysis
34	Digirolamo, 2024(39)	USA	Survey + review	Cost, access, awareness barriers in AYA cancer patients	Economic, Medical	Mixed
35	Huang et al., 2024(40)	USA	Survey	Lack of referral & high cost of fertility preservation	Economic, Medical	Cross-sectional
36	M Nabil Aboushady et al., 2021(41)	Egypt	200	Poor preconception knowledge; education level major barrier	Education	Cross-sectional
37	Oppel et al., 2024(42)	Europe	Population data	Habitat loss analogy to human systemic barriers	Medical (environmental)	Longitudinal
38	Stewart & Hall, 2024(43)	UK	1,200	Lack of knowledge of age-related fertility decline	Age, Education	Cross-sectional
39	Zhou et al., 2024(7)	China	1,053	Poor working environment reduces fertility intention	Labor, Economic	Cross-sectional

In addition, the next generation has more opportunities and support. Also, various studies stated that higher education for women is related to lower fertility (41). Some believe that the finding is based on Gary Becker's theory – the framework models the demand for children in the way the demand for other goods in life is modeled, the demand for children is tied to the 'price' of a child (37). These women know more about sex and reproduction. Young women rely on information about contraception so they prevent unplanned and undesired pregnancies (30).

Culture

Changing fertility rates is a kind of changing social norms. In many countries having more than 4 children was a norm and now it has been replaced by having 2 children or fewer (31). The effect of media is significant in our societies. For rural, poor, illiterate populations television is the essential way to know about other people's lives (52). These people became familiar with lifestyles and socio-economic conditions as well. It shows that infertility is related to demographic transitions. A survey on cultural aspects indicated that suffering from infertility was a part of human life (27). However, we have progressed in medicine and social issues, there are still discussions in different cultural disciplines. In some cultures using infertility treatments is not allowed like using donor material for child birth resulting from assisted reproduction treatment (36). In addition, men often don't like to go to clinics because they don't want to be diagnosed as the one who has a problem in childbirth. Unwilling to use medical treatments declines in clinical and counseling practices (22).

Financial costs

Household income determines the amount of using infertility treatment, so the socioeconomic status is associated with a greater use of treatment (53) . Office visits, medication, and related expenses are average expenses for treatments but the IVF cost is higher than them (54). The costs prove to be barriers for low-income women hoping to access infertility treatments (55).

While more complicated and expensive procedures like intrauterine insemination (7%), surgery for blocked tubes (3%), and ART (3%) are less commonly used.

The prices of contraceptives vary in different countries and effect on family choices to use or not. In developing countries, the costs have been decreased so couples prefer to use them instead of child bearing. As evidences tell us, purchasing contraceptives is increasing all over the world (56). It shows that families in main social groups cannot afford the cost of clinical treatments. In addition to, the expenses of treating infertility in private facilities is higher than public sector (57). On the other hand, the infertility services are available in capital cities or in a few big cities and expenses of accommodation and traveling is added to treatment one (58). Therefore, many couples can nit use these specific cures because of their limited funds. These limitations confirm that the poor may be more likely to be infertile (26).

Medical barriers

Shelton et. al, (59) define medical barriers as "practices, derived at least partly from a medical rationale, that result in a scientifically unjustifiable impediment to, or denial of, contraception."

Most cases of infertility (85-90%) can be treated with therapies like drug treatment or surgery. However, when these treatments are either unavailable or unsuccessful, many turn to assisted reproductive technology (ART) (60).

When we talk about ART, it means handling eggs and embryos. This handling is done by surgical removing of eggs from ovaries and combining them with sperm in laboratory and then returning them to the body or to another woman as a surrogate (61).

Lower cost and less complex interventions like advice (29%), testing (27%), and ovulation medications (20%) account for the majority of common medical services received by women with fertility problems (62).

In fertility in context of HIV/AIDS

When we talk about the interaction between HIV and infertility, two conditions are determined. Firstly, couples with HIV who want children and are not able to conceive. Secondly, couples are called infertile when just one of them is infected with HIV (63). In the first case, this infection affects their childbearing directly and also they should follow medical care which is different from healthy couples. In the second case, they look for HIV's effect on their desire to have a child. In both cases, the professionals and policymakers are involved in this circumstance to find suitable solutions for the dilemma (64).

Discussion

Changes in fertility rate may be related to events like changes in contraception availability, economic factors affecting on various aspects of life or changes in people values (65, 66).

As women chose to have fewer children total fertility rate has fallen. As an example, Europe has fallen below replacement levels, about 1.5-1.7 children per woman for the cohorts born (67). This decline results from the decisions made by couples (mothers as an important partner for childbearing) because of barriers like instability of modern partnerships and the higher cost fertility, labor and etc. one of the barriers is government support, while government policies have only small effects on fertility rates, but can provide payments for assisted human reproduction. Education can be an important determinant too, as educated women are more familiar about reproduction and having an ideal family size (13, 24, 33). One of the most important barriers is economic status of the family because the treatments of infertility are expensive (68).

As an example 25% of average annual income in USA must be financed for fertility (19). In the study by Haeri-Mehrizi et al., (69) the results showed that overcoming economic problems was the most important reason for not wanting to have children. In the study by Afrin et al., (70) no relationship was found between the intention to have children and social support, but factors such as age and economic status were involved, so paying attention to economic issues is very important.

If the one of the couples or both of them suffer from a disease the cost will be higher, like infecting with HIV. In addition to, the role of culture and social barriers to infertility treatment should not be underestimated. For example, some religions forbid the use of certain ART procedures (71). The majority of the studies conducted were cross-sectional and lacked control groups.

Conclusion

Childbearing remains central to many women's identities, yet multiple barriers hinder reproduction. We examined infertility defined as failure to conceive after 12 months of unprotected intercourse—from social, medical, political, and financial perspectives. Solutions must be context-specific. Precise global estimates remain elusive due to data gaps.

Acknowledgements

The authors would like to thank all colleagues and experts whose published work contributed to the development of this narrative review. We also acknowledge the institutional support that facilitated access to scientific databases and resources necessary for conducting this study. No specific funding was received for this work.

Conflicts of Interest

The authors have no conflicts of interest to declare.

References

1. Pourmasumi S, Ayoobi F, Khalili P, Davarani MK, Jamali Z, Kazemipour S, et al. The Relationship of Demographic and Socio-economic Factors with Fertility Attitudes in the Married Couples. Journal of Midwifery & Reproductive Health. 2024;12(4).
2. Obeagu EI, Njar VE, Obeagu GU. Infertility: Prevalence and consequences. Int J Curr Res Chem Pharm Sci. 2023;10(7):43-50.
3. Bayoumi RR, Hurt L, Zhang N, Law YJ, Venetis C, Fatem HM, et al. A critical systematic review and meta-analyses of risk factors for fertility problems in a globalized world. Reproductive biomedicine online. 2024;48(3):103217.
4. Feng F. A Study on the Fertility Willingness and Influencing Factors of Urban Women of Childbearing Age from an Individualized Perspective.
5. Lakin K, Huong NT, Kane S. Childbearing Women's Experiences of and Interactions With the Health System in Vietnam: A Critical Interpretive Synthesis. Community Health Equity Research & Policy. 2024:2752535X241277678.
6. Andeskebtso AY, Ugochukwu NJ. Impact of socio-economic factors on women's family planning decisions in Taraba State, Nigeria. Jalingo Journal of Social And Management Sciences. 2023;4(4):262-75.
7. Zhou B, Wu X, Ge R, Zhuo D. Career women's mental wellbeing in the era of population decline: the effects of working environment and family environment on the mental wellbeing. Frontiers in Public Health. 2024;12:1462179.

8. Oppel S, Dobrev V, Arkumarev V, Saravia-Mullin V, Bashmili K, Bino T, et al. Long-term conservation efforts at flyway scale can halt the population decline in a globally endangered migratory raptor. Animal Conservation. 2024;27(3):374-85.
9. Ahinkorah BO, Seidu A-A, Armah-Ansah EK, Budu E, Ameyaw EK, Agbaglo E, et al. 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.
10. Akhtar S, Ahmed H, Khan G. Knowledge and practice of family planning methods in women of childbearing age. Journal of Bashir Institute of Health Sciences. 2021;2(2):63-73.
11. Akoku DA, Achombwom Vukugah T, Abena Tihnje M, Bigweh Nzubepie I. Childbearing intentions, fertility awareness knowledge and contraceptive use among female university students in Cameroon. Plos one. 2022;17(10):e0276270.
12. Bahadur A, Kumari S, Mundhra R, Khoiwal K, Das A, Heda A, et al. Anxiety, depression, and quality of life among infertile women: a case-control study. Cureus. 2024;16(3).
13. Bakkensen JB, Smith KS, Cheung EO, Moreno PI, Goldman KN, Lawson AK, et al. Childbearing, infertility, and career trajectories among women in medicine. JAMA network open. 2023;6(7):e2326192-e.
14. Boah M, Adokiya MN, Hyzam D. Prevalence and factors associated with the utilisation of modern contraceptive methods among married women of childbearing age in Yemen: a secondary analysis of national survey data. BMJ open. 2023;13(6):e071936.
15. Cheung AK-L, Lui L. The personal is political: Political attitudes, affective polarization and fertility preferences in Hong Kong. Population Research and Policy Review. 2024;43(2):22.
16. Chwastek A, Mynarska M. Navigating work and motherhood: exploring the link between career orientation and childbearing motivations in emerging adulthood. Journal of Reproductive and Infant Psychology. 2025;43(5):1288-300.
17. Haerimehrizi AA, Tavousi M, Sadighi J, Motlagh ME, Eslami M, Naghizadeh F, et al. Reasons for fertility desire and disinterest among Iranian married adults: A population-based study. Payesh (Health Monitor). 2017;16(5):637-45.
18. Afarini FS, Akbari N, Montazeri A. The relationship between social support and the intention of childbearing in women of reproductive age. 2018.
19. Hartnett CS, Gemmill A. Recent trends in US childbearing intentions. Demography. 2020;57(6):2035-45.
20. Htay ZW, Kiriya J, Sakamoto JL, Jimba M. Association between women's empowerment and unmet family planning needs in Low-and Middle-Income countries in Southeast Asia: A Cross-Sectional study. Women's Reproductive Health. 2024;11(1):17-32.
21. Hussain IM, Hartney N, Sweet L. A survey of Australian women's digital media usage in pregnancy and labour and birth. BMC Pregnancy and Childbirth. 2023;23(1):688.
22. Kane D, Li K. Fertility cultures and childbearing desire after the two-child policy: evidence from southwest China. Journal of Family Studies. 2023;29(2):576-94.
23. Lakin K, Huong NT, Kane S. Childbearing Women's Experiences of and Interactions With the Health System in Vietnam: A Critical Interpretive Synthesis. Community Health Equity Research & Policy. 2025;45(4):447-57.
24. Moulaei K, Mahboubi M, Ghorbani Kalkhajeh S, Kazemi-Arpanahi H. Prediction of childbearing tendency in women on the verge of marriage using machine learning techniques. Scientific Reports. 2024;14(1):20811.
25. Negash WD, Belachew TB, Asmamaw DB, Bitew DA. Predictors of desire to limit childbearing among reproductive age women in high fertility regions in Ethiopia. A multilevel mixed effect analysis. BMC Public Health. 2023;23(1):1011.
26. Njagi P, Groot W, Arsenijevic J, Dyer S, Mburu G, Kiarie J. Financial costs of assisted reproductive technology for patients in low-and middle-income countries: a systematic review. Human reproduction open. 2023;2023(2):hoad007.
27. Ojong F, Odinka G, Emeka J, Agba A, Iyang E, Angioha PU, et al. Determinants of Health Seeking Culture among Women of Childbearing Age. ARRUS Journal of Social Sciences and Humanities. 2023;3(1):65-78.

28. Opayele AV, Arege OT, Faneye AO, Olaleye DO, Odaibo GN. Prevalence of HIV, HBV and HCV among livestock merchants and slaughterhouse workers in Ibadan, Nigeria. African Health Sciences. 2024;24(1):16-24.
29. Vasilevski V, Huynh J, Whitehead A, Noble C, Machado C, Sweet L. The Green Maternity project: A midwife-led initiative to promote correct waste segregation on an Australian postnatal ward. Journal of Advanced Nursing. 2023.
30. Rahmati R, Khadivzadeh T, Esmaily H, Bahrami HR. Knowledge and Attitude of Staff Working in Healthcare Centers Regarding Childbearing. Journal of Midwifery & Reproductive Health. 2019;7(1).
31. Rasoulzadeh Aghdam S, Pourjabbar Akhouni F, Adlipour S. The role of cultural changes in the tendency to childbearing among women. Journal of Research and Health. 2020;10(2):103-10.
32. Rublein L, Muschalla B. Childbirth fear, birth-related mindset and knowledge in non-pregnant women without birth experience. BMC pregnancy and childbirth. 2022;22(1):249.
33. Savelieva K, Jokela M, Rotkirch A. Reasons to postpone childbearing during fertility decline in Finland. Marriage & Family Review. 2023;59(3):253-76.
34. Stolk TH, Asseler JD, Huirne JAF, van den Boogaard E, Van Mello N. Desire for children and fertility preservation in transgender and gender-diverse people: A systematic review. Best Practice & Research Clinical Obstetrics & Gynaecology. 2023;87:102312.
35. Mohamadi M, Aghamirzaee T, Roudbari JA, Afshar ZM, Yazdi MT, Kheirkhah F. Perceived challenges and barriers for medical students in the COVID-19 crisis. Journal of Education and Health Promotion. 2023;12(1):263.
36. Abebe H, Beyene GA, Mulat BS. Harmful cultural practices during perinatal period and associated factors among women of childbearing age in Southern Ethiopia: Community based cross-sectional study. PLoS One. 2021;16(7):e0254095.
37. Akokuwebe ME, Idemudia ES. Knowledge and risk perceptions of chronic kidney disease risk factors among women of childbearing age in Lagos State, Nigeria: From a health demography approach. International Journal of Nephrology. 2022;2022(1):5511555.
38. Fatunbi JA, Monseur BC, Berghella V, Morris JR. Factors Associated with Provider Counseling Against Breastfeeding in the Setting of Marijuana Use: A Population-Based Survey. Journal of Midwifery & Women's Health. 2024;69(4):455-61.
39. Digirolamo E. The Barriers to Fertility Preservation in Adolescents & Young Adults. LWW; 2024.
40. Huang EY, Shandley LM, Mehta A, Kobashi KC, Muthigi A. Fertility preservation for iatrogenic infertility: patient barriers and opportunities for the reproductive medicine workforce. Urology Practice. 2025;12(2):194-201.
41. M Nabil Aboushady R, Hegazy AE-k, M Ebrahim Abd Elnabi M. Knowledge, believes and behaviors toward preconception care among women at childbearing period: Suggested plan of action. Egyptian Journal of Health Care. 2021;12(1):1463-74.
42. Hending D, Randrianarison H, Andriamavosoloarisoa N, Ranohatra-Hending C, McCabe G, Cotton S, et al. Impact of forest fragmentation and associated edge effects on the population density of four nocturnal lemur species in North West Madagascar. Animal Conservation. 2024;27(4):522-37.
43. Stewart C, Hall J. Pregnancy preparation among women and their partners in the UK: how common is It and what do people do? Women's Reproductive Health. 2024;11(2):429-42.
44. Rachna PS. FEMALE INFERTILITY AND ITS CAUSES.
45. Li H-t, Tang J-L, Qiao J. China's declining fertility rate. British Medical Journal Publishing Group; 2024.
46. Stolk T, Asseler J, Huirne J, Van Den Boogaard E, Van Mello N. Desire for children and fertility preservation in transgender and gender-diverse people: A systematic review. Best Practice & Research Clinical Obstetrics & Gynaecology. 2023;87:102312.
47. Huang E, Shandley LM, Mehta A, Kobashi KC, Muthigi A. Fertility Preservation for Iatrogenic Infertility: Patient Barriers and Opportunities for the Reproductive Medicine Workforce. Urology Practice. 2024:10.1097/UPJ. 0000000000000735.

48. Yeatman S, Sennott C. Fertility desires and contraceptive transition. Population and Development Review. 2024.
49. Wingo E, Dehlendorf C. Lack of pregnancy intention or interest in pregnancy prevention now? How best to screen for desire for contraceptive care. Contraception. 2024;135:110303.
50. Schneider-Mayerson M. The environmental politics of reproductive choices in the age of climate change. Environmental Politics. 2022;31(1):152-72.
51. Ahinkorah BO, Seidu A-A, Armah-Ansah EK, Budu E, Ameyaw EK, Agbaglo E, et al. Drivers of desire for more children among childbearing women in sub-Saharan Africa: implications for fertility control. BMC Pregnancy and Childbirth. 2020;20:1-11.
52. Wilson L. Cultural Competence: Implications for Childbearing Practices. International Journal of Childbirth Education. 2012;27(1).
53. Barnet B, Rapp T, DeVoe M, Mullins CD. Cost-effectiveness of a motivational intervention to reduce rapid repeated childbearing in high-risk adolescent mothers: a rebirth of economic and policy considerations. Archives of pediatrics & adolescent medicine. 2010;164(4):370-6.
54. Chwastek A, Mynarska M. Navigating work and motherhood: exploring the link between career orientation and childbearing motivations in emerging adulthood. Journal of Reproductive and Infant Psychology. 2024:1-13.
55. Sonfield A, Hasstedt K, Kavanaugh ML, Anderson R. The social and economic benefits of women's ability to determine whether and when to have children. New York: Guttmacher Institute; 2013.
56. Devine K, Mumford SL, Goldman KN, Hodes-Wertz B, Druckenmiller S, Propst AM, et al. Baby budgeting: oocyte cryopreservation in women delaying reproduction can reduce cost per live birth. Fertility and sterility. 2015;103(6):1446-53. e2.
57. Johnson RW, Smith KE, Butrica BA. Lifetime employment-related costs to women of providing family care. Washington DC: Urban Institute Report Accessed June. 2023;1:2023.
58. Liefbroer AC. The impact of perceived costs and rewards of childbearing on entry into parenthood: Evidence from a panel study. European Journal of Population/Revue européenne de démographie. 2005;21:367-91.
59. Shelton JD, Angle MA. Medical barriers to access to family planning. The Lancet. 1992;340(8831):1334-5.
60. Barrio-Ruiz C, Ruiz de Viñaspre-Hernandez R, Colaceci S, Juarez-Vela R, Santolalla-Arnedo I, Durante A, et al. Language and Cultural Barriers and Facilitators of Sexual and Reproductive Health Care for Migrant Women in High-Income European Countries: An Integrative Review. Journal of midwifery & women's health. 2024;69(1):71-90.
61. Dong X, Ding A, Hu H, Xu F, Liu L, Wu M. Placental barrier on cadmium transfer from mother to fetus in related to pregnancy complications. International Journal of Women's Health. 2023:179-90.
62. Penman SV, Beatson RM, Walker EH, Goldfeld S, Molloy CS. Barriers to accessing and receiving antenatal care: Findings from interviews with Australian women experiencing disadvantage. Journal of Advanced Nursing. 2023;79(12):4672-86.
63. Oyibo S, Oghenewoke A, Balogun MO, Ugbe UM-J. Preconception and contraceptive care for women living with HIV/AIDS attending antiretroviral treatment clinics in Lagos State, Nigeria. African Health Sciences. 2024;24(1):25-35.
64. Guo Y, Chongsuvivatwong V, Songwathana P, Liu J, Wichaidit W. Fertility desire among HIV-positive individuals in the Chinese sociocultural context: a qualitative study. Journal of Education and Health Promotion. 2023;12(1):156.
65. George V, Wilding P. The impact of social policy: Routledge; 2023.
66. Gauthier AH. The impact of family policies on fertility in industrialized countries: a review of the literature. Population research and policy review. 2007;26:323-46.
67. Aassve A, Goisis A, Sironi M. Happiness and childbearing across Europe. Social indicators research. 2012;108:65-86.
68. Comolli CL, Neyer G, Andersson G, Dommermuth L, Fallesen P, Jalovaara M, et al. Beyond the economic gaze: Childbearing during and after recessions in the Nordic countries. European Journal of Population. 2021;37(2):473-520.

69. Ali Asghar Haerimehrizi, Mahmoud Tavousi, Jila Sadighi, Mohammad Esmaeil Motlagh, Mohammad Eslami, Fatemeh Naghizadeh, et al. Reasons for fertility desire and disinterest among Iranian married adults: A population-based study. Payesh (Health Monitor) Journal. 2017;16(5):637-45.
70. Fatemeh Sadat Afarini, Nahid Akbari, Ali Montazeri. The relationship between social support and the intention of childbearing in women of reproductive age. Payesh (Health Monitor) Journal. 2018;17(3):315-28.
71. Casebolt MT. Barriers to reproductive health services for women with disability in low-and middle-income countries: a review of the literature. Sexual & Reproductive Healthcare. 2020;24:100485.