Eximia Journal

(ISSN 2784-0735)

Vol. 13

2024

Eximia Journal
Vol. 13, 1080-1089, January, 2024
ISSN: 2784-0735
www.eximiajournal.com

Fertility Decline and its Demographic Impact

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Abstract. This paper examines the global issue of declining fertility rates and its demographic impact, focusing on Europe and Qatar as case studies. Infertility is explored both biomedically and as a social construct, influenced by societal perceptions and individual desires for parenthood. Globally, declining fertility rates pose significant challenges, particularly in developed nations facing aging populations and shrinking workforces. The paper analyzes the intricate relationship between fertility, family planning, and socio-economic development, highlighting how access to information and reproductive choices empowers women and influences family size. Factors affecting fertility, including age-related decline and delayed childbearing, are discussed. The role of gender equality in fertility transitions is emphasized, arguing that more significant gender equity within families is crucial for achieving desired fertility rates. European fertility trends, characterized by below-replacement levels, are analyzed in relation to social security systems, family support policies, and employment policies. Finally, the paper examines Qatar's demographic challenges and aspirations outlined in its National Development Strategy 3 (NDS3), which aims to increase marriage, reduce divorce, and raise fertility rates through various social and financial incentives. Thus, the paper adopts a descriptive-analytical methodology to conclude with recommendations for reform, focusing on work-life balance, family-centered policies, and individual empowerment to address declining fertility rates and promote sustainable demographic environments.

Keywords. fertility rates, demographic impact, infertility, Socioeconomic development, gender equality, policy, reform

Introduction

Fertility preservation addresses the preservation of reproductive potential, allowing individuals to safeguard their ability to conceive and bear children in the face of medical treatments, age-related decline, or unforeseen circumstances. This practice offers hope for parenthood and empowers individuals to make informed choices about their reproductive journey. Yet, infertility is common among women of reproductive age, with approximately one in seven couples affected in developed countries and one in four in developing nations. In specific areas such as South Asia, parts of sub-Saharan Africa, the Middle East, North Africa, Central and Eastern Europe, and Central Asia, the prevalence of infertility can even extend to around 30%.[1] Hence, infertility, commonly described within the biomedical framework, refers

[1] Borght and Wyns (2018)

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Vol. 13, 1080-1089, January, 2024
ISSN: 2784-0735
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to the incapability of conceiving even after engaging in regular unprotected sexual activity for a period of 12 months.[2]

As a social construct, Infertility can be comprehended as a process shaped by societal factors in which individuals perceive their capacity to conceive as an issue, define the characteristics of this issue, and develop a suitable action plan in response. Thus, the social construction of infertility is evident in unique ways. Couples don't label themselves as infertile unless they desire parenthood. Infertility is viewed as affecting couples, not just individuals, and involves negotiations within couples and societal networks. Unlike medical conditions, infertility is marked by the absence of a desired state rather than symptoms. Treatment alternatives include embracing voluntary childlessness, adoption, fostering, or changing partners.[3]

This paper is mainly concerned with highlighting the importance of addressing infertility in general, taking Europe as an example, and reflecting on Qatar's approach and aspirations in this concern. Thus, the paper will delve into the demographic dimension of infertility, explore family planning and its relationship with fertility, and investigate factors that influence fertility. As gender has been a global concern for several decades, the paper will examine the relationship between gender equality and fertility. Hence, the paper will investigate the fertility trends in Europe. Finally, the paper will conclude by reiterating Qatar's approach and aspirations regarding demographic concerns and fertility rates, summarizing its discussion with recommendations.

Demographic Impact of Infertility[4]

Fertility, along with infertility, and more precisely denoted by fertility rates, which represent the average count of live births per woman, have a significant influence on the trajectory of population growth or decline. Global regions exhibit notable variations in their demographic patterns, characterized by swift population expansion and elevated fertility rates in economically disadvantaged nations. Conversely, developed countries are concerned about dwindling populations, aging societies, and extremely low fertility rates.

Hence, the United Nations projections for developing regions foresee the total fertility rate gradually reaching and falling below the so-called replacement threshold of slightly over two births per woman across all areas. Regions already attaining fertility rates below replacement are anticipated to experience marginal increases, with such rates causing population decline in the long term, where replacement fertility indicates the point at which each generation precisely replaces the prior one, yielding zero population growth in the absence of mortality shifts and migration. While Asia and Latin America's total fertility rates now closely approach replacement levels, Africa progresses at a slower pace toward replacement fertility due to persistently high fertility rates. Contrastingly, the persistently low fertility rates in Europe and North America are projected to persist below replacement levels, driving population decline in select countries.

Overall, fertility rates, reflecting average live births per woman, significantly impact population trends. Developing regions are projected to approach slightly over two births per woman, while areas with already low rates may experience slight increases, leading to population decline. Replacement fertility, where each generation replaces the previous, shapes

[2] Greil et al. (2010)
[3] Ibid.
[4] Borght and Wyns (2018)

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ISSN: 2784-0735
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these dynamics, with Asia and Latin America nearing replacement, Africa lagging due to high fertility, and Europe and North America facing decline.

Fertility and Family Planning[5]

An intricate relationship between access to information, family planning, and socio-economic development shapes fertility trends. In societies where women lack resources to disassociate sex from childbearing, larger families become the default. Misinformation on contraception compounds the issue, fostering fear around adopting modern family planning methods. However, it is argued that in societies devoid of child marriage, where women are empowered with access to diverse contraceptive options, accurate information, and safe abortion services, family sizes tend to decrease. This underlines the notion that when women have control over their reproductive choices, family size naturally diminishes. Conversely, when family planning is accessible, it contributes to smaller family sizes and propels economic growth and education dissemination. This illuminates how empowering women with family planning can accelerate development and education, thereby promoting fertility decline.

It is crucial to note that factors contributing to fertility decline are multifaceted and encompass broader development indicators. The argument that development acts as the most effective contraceptive underscores the correlation between socioeconomic progress and fertility reduction. In high-fertility countries, the presence of numerous barriers obstructing women from crucial information and technologies to limit childbearing is evident. Removing these barriers is proposed as pivotal in regulating fertility. This suggestion asserts that addressing these barriers could be essential and sufficient in reducing family sizes, irrespective of the educational or socio-economic status of women or couples, except in societies where child marriage is prevalent. In such cases, tackling barriers to fertility regulation holds the potential to play a pivotal role in shaping population dynamics.

Factors Influence Fertility[6]

In the context of fertility, the timing of unsuccessful attempts at conception significantly impacts subfertility severity. About 80% of pregnancies occur within the first six cycles of regular intercourse during the fertile window, while 20% of couples without conception may achieve it in the subsequent six cycles. Couples facing 12 unsuccessful cycles are categorized as infertile, yet 55% achieve spontaneous live births within 36 months. After 48 months, around 5% are definitively infertile with minimal chance of spontaneous pregnancy.

Delaying childbearing, driven by personal preferences and education, is common in Western societies. However, fertility decline begins around 25-30 years, with significant decreases after 35. Age-related fertility loss is characterized by a gradual increase from 4.5% at 25 to almost 100% by 50. Oocyte depletion, deteriorating quality, and various reproductive changes contribute to this decline. Despite this, many women are unaware of the risk of infertility with delayed childbearing. Misconceptions exist around fertility treatments like IVF addressing age-related fertility decline. This emphasizes the need for informed reproductive choices and education to bridge the gap between personal preferences and biological realities.

Overall, the most significant cohort of women pursuing fertility preservation comprises those desiring to delay childbirth due to personal factors. Age poses the foremost risk to their fertility. More women delay starting families until the opportune moment, often due to

[5] Campbell et al. (2013)
[6] Borght and Wyns (2018)

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ISSN: 2784-0735
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partner absence, unstable relationships, or career and financial considerations. Over the past four decades, the age at which women endeavor to conceive their first child has continuously increased.[7]

Gender Equality and Fertility[8]

The role of gender within fertility transition theory involves two propositions. Firstly, fertility decline results from individual actions of both men and women to prevent births. Sustained low fertility prompts significant shifts in women's lives. Gender equity, not a personal trait but a societal characteristic, influences individual decision-making in fertility change. The concept of birth control spreading is inherent in fertility transition, with its dissemination being relevant. Secondly, lower fertility alters society and particularly women's lives, challenging traditional roles. The prevailing high fertility gender system emphasizes women's roles in childbearing, but declining fertility indicates a societal shift. The transition involves women having fewer children to alter their futures. This future-oriented approach aligns with household economics, though institutionally constrained. Focusing on the onset of fertility decline may not capture the enormous scope of sustained decline's dynamics across diverse cultures, making exploration of continued fertility decline more valuable.

The importance of considering family reproduction and organization in fertility transition theory is highlighted. Gender equity's role is emphasized, as it has been a glaring omission in conventional theories. Family organization varies across societies, influencing fertility transition. Pre-transition societies have socially determined high fertility. The transition to lower fertility coincides with increased gender equity within families. Factors like education, women's confidence, healthcare, and family planning programs promote gender equity, expediting fertility decline. Fertility can decrease significantly while gender inequity persists outside the family. However, low fertility eventually leads to greater demand for gender equity in broader institutions. This realization fuels conservative reactions to birth control. In developing countries, advanced contraceptive technology and shifting gender equity may lead to a faster transition compared to the West's historical path.

Over the past two centuries, the growth of individual rights and freedoms in the West has led to the rise of institutions oriented towards individuals, exemplified by democratic voting rights and education. However, this progress initially benefited men, with women's rights gradually advancing. Historical gender inequities were prominent within individual-oriented institutions, promoting the male breadwinner model. Over the years, women gradually gained rights in education, property ownership, and employment, marking revolutionary shifts. Nonetheless, gender equity within family-oriented institutions, like the family itself, has evolved slowly. While women gained substantial control over fertility, gender roles in caring, income-earning, and household maintenance work within families haven't achieved full equity. This inequality is present in Western societies and developed East Asian economies experiencing low fertility rates.

The fertility transition from high to low levels is closely linked to improving gender equity within family-oriented institutions, particularly within the family. This transition involves women achieving more desirable birth rates by gradually changing the family system. However, family changes occur slowly due to conservative influences like religion and idealized family morality. The 20th century saw a revolution in gender equity within individual-

[7] Donnez and Dolmans (2017)
[8] McDonald (2000)

oriented institutions in developed countries. Despite this advancement, many women still experience low equity as wives or mothers, leading them to achieve lower fertility than initially desired. Lower fertility is manifested through relationship delays, childlessness, and delayed childbearing, ultimately resulting in very low fertility rates. The persistence of high gender equity in individual-oriented institutions means low fertility rates will endure unless gender equity within family-oriented institutions increases significantly. Higher gender equity in family-oriented institutions could raise fertility rates in contexts with high equity, while the reverse is argued for contexts with low equity.

Fertility Trends in Europe[9]

Fertility rates in all European Union (EU) Member States have dropped below replacement level, raising concerns for the economies. The aging population challenges social security systems as the working-age population shrinks while elderly care needs increase. The decline in human capital, reduced productivity, and strained healthcare resources are potential consequences. These issues create barriers to achieving EU Social Agenda goals of full employment, economic growth, and social cohesion.

Trends

Fertility patterns in the EU have declined across all member states, although the decrease has slowed since the mid-1990s. Over a 20-year span from 1982, most countries exhibited total fertility rates (TFRs) below replacement level. In the past decade since 1992, several nations, such as Germany and Italy, consistently reported TFRs below 1.5 children per woman. These trends inevitably lead to a decline in natural population growth and a reduction in the younger population segment.

Reform

An alternative strategy for mitigating the financial stress associated with population aging and moderating the growth in demands on public pension systems is the reform of social security structures. Governments could consider raising the eligibility age for retirement or early retirement benefits, decreasing standard retirement benefits, boosting pension system revenues, or transitioning from a pay-as-you-go approach to advanced funding of pension schemes. While some suggest that lowering pension levels, increasing contributions, and raising retirement ages are viable due to the generosity of existing social security systems, others contend that these adjustments must be substantial to counteract ongoing demographic shifts. Various policies are available to counter the shrinking labor force. Governments might encourage labor force participation among underrepresented groups like women, youth, and the elderly. Additionally, investing in lifelong learning could maintain or enhance workforce productivity. Despite this, there is a claim that current lifelong education efforts have mostly benefited college-educated individuals and have limited impact on extending work-life span.

Family Support Policy

Preventive policies encompass measures directly affecting marriage, cohabitation, and fertility decisions. While industrialized countries have hesitated to intervene in family life or population structure, specific initiatives exist. Family allowances and childcare policies have focused on poverty reduction and child welfare rather than fertility enhancement. Family

[9] Grant et al. (2005)

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support systems, like monthly government cash payments based on children's number, aim to alleviate financial strain. While economic incentives correlate with fertility to some extent, their long-term impact remains uncertain. Other forms of assistance, such as housing provisions and low-interest loans for couples, could indirectly influence marriage and fertility decisions.

Health Policy

The implementation of reproductive health policies targeting the prevention of unwanted births through methods like abortion, contraception, or sterilization is acknowledged as contributing to Europe's fertility decline. Spain, which shifted from a pro-natalist regime under Franco to a democratic one, exemplifies this trend. Former communist Eastern European countries, like Romania, offer insight into the use of abortion policies. After restrictions were placed on abortion in Romania in 1966, birth rates surged, but the increase wasn't sustained. Abortion legalization in 1989 led to a sharp drop in fertility rates. While Romania's case is unique, it highlights how changes in abortion policies can briefly impact fertility, prompting couples to adapt behavior in response.

Employment Policy

Policies focused on harmonizing maternity and work offer a dual advantage: (i) maintaining or raising fertility rates and (ii) expanding the labor force. Adaptable working conditions for pregnant and postpartum women enable a balance between employment and parenthood. Parental leave and childcare provision stand as the two prominent policy approaches. As female labor participation has surged since the 1960s, maternity and paternal leave has gained significance in supporting families. Despite some studies indicating no strong link between maternity leave and fertility, examples from Sweden, Hungary, and the German Democratic Republic highlight fertility-enhancing effects. Strategies like combining employment and family, as demonstrated in Sweden, and improving access to childcare are also meant to bolster fertility.

Qatar's Reality and Aspirations[10]

Background

The 2017-2022 Population Policy for Qatar aimed to increase marriage rates among Qatari citizens and maintain their fertility rate. However, Qatari fertility rates have declined since 2016, indicating a failure to achieve the fertility goal. Marriage rates have also shown a downward trend. Despite not having divorce-related goals, marital stability is crucial for a robust and sustainable family and demographic environment in Qatar.

Fertility Trends

Fertility is declining among Qatari citizens, but public statistics are misleading as they include non-citizen immigrants. Qatari citizen fertility is average in Gulf Cooperation Council (GCC) countries, with a rate of 2.65 children per woman in 2021, down from 3 in 2016. The 2017-2022 Population Policy for Qatar did not stabilize fertility. Despite the decline, Qatari fertility remains high compared to global standards, especially considering high incomes and education levels among Qatari women.

[10] Demographic Intelligence (2023)

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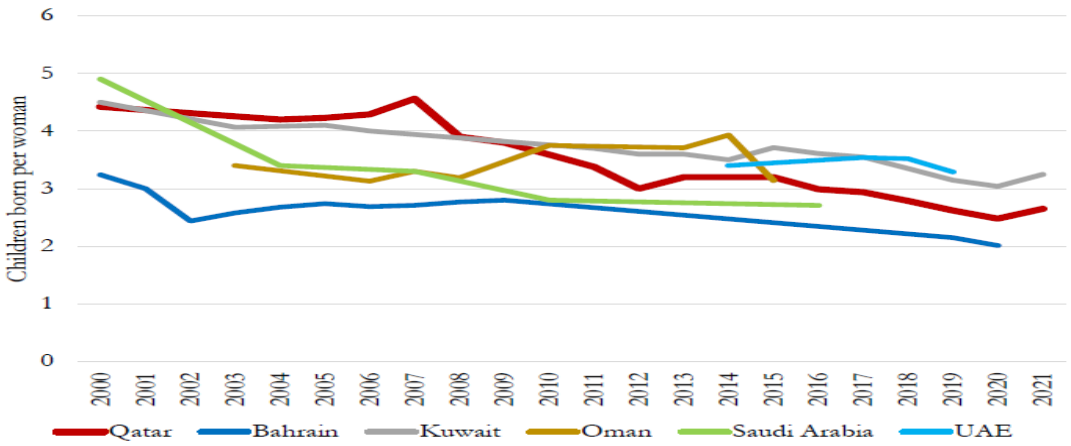
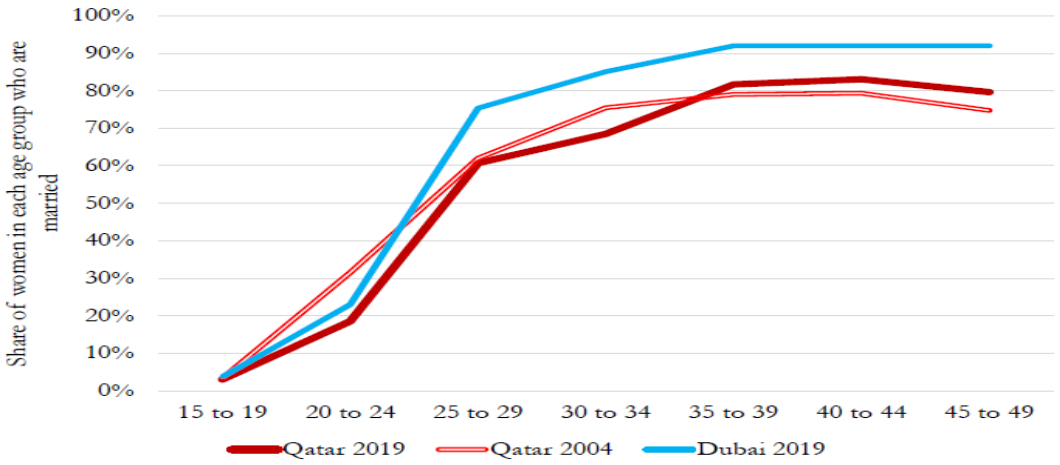


Marriage

Marriage significantly influences fertility behavior, though marital data reporting is inconsistent across Gulf states, including Qatar. For instance, women in Dubai marry more, particularly at older ages, explaining their higher fertility rate despite similar marital fertility rates in 2019. In Dubai, women spend more reproductive years married than in Qatar, resulting in higher fertility. Qatari marital behaviors shifted considerably between 2004 and 2019, potentially indicating limited success in implementing the 2017-2022 Population Policy's marriage-focused goals. Access to the 2015 Census data could reveal different trends between 2010-15 and 2015-20.



Divorce

While the 2017-2022 Population Policy lacked explicit divorce-related goals, divorce is vital for family stability and demographics. The estimation of the divorce rate involves divorces per 1,000 married individuals. Qatari divorce rates were stable compared to the US until 2018, declining by up to 25% from 2010 to 2018. However, Qatari divorce rates significantly surged in 2019, an unusual occurrence. The reason remains unclear, possibly due to better overseas divorce reporting or legal changes. The ongoing increase to 2021 lacks explanation, warranting further research by vital statistics and family experts.

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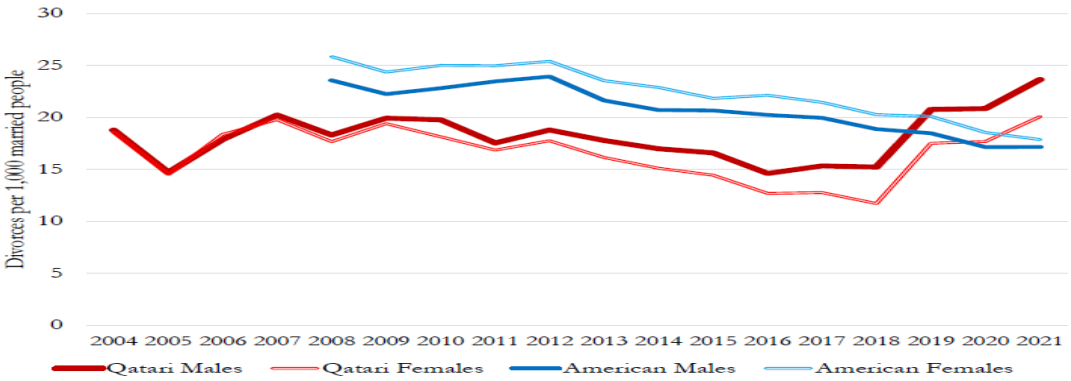

Qatar's Aspirations through NDS3[11]

In its pursuit of social cohesion, the National Development Strategy 3 (NDS3) for 2024-2030 acknowledges Qatar's fertility rate decline. This decline is attributed to various factors, including complex dynamics of marriage and divorce, lacking financial incentives for childbearing, inadequate work-life balance policies, shifting priorities in self-fulfillment for men and women, health issues due to changing lifestyles, and heightened expectations for individual living standards.

The background studies of NDS3 highlight several challenges, including differing marriage expectations, limited awareness of marital responsibilities leading to varied viewpoints, strain on spousal harmony due to arranged marriages, family interference in matrimonial matters, negative perceptions of marriage counseling, high household expenditures, and steep marriage costs. These challenges collectively impact marriage trends divorce rates, and subsequently contribute to declining fertility rates in Qatar.

NDS3 sets forth ambitious demographic goals. By 2030, Qatar aims to reduce divorce rates to 3.5 per 1000 population, increase the marriage rate to 15 per 1000 population, and raise the fertility rate to 3. These goals are to be achieved through strategically planned interventions that align with national priorities and encompass a range of initiatives translated into target-focused projects.

For instance, the NDS3's first outcome focuses on promoting strong families capable of navigating challenges. This will be realized through initiatives such as 'Strengthening Family Ties', 'Encouraging Population Growth', 'Supporting the Institution of Marriage, and 'Enhancing Domestic Financial Management'. Accordingly, NDS3's strategic projects are devised to support these outcomes. Hence, a dedicated project aims to develop national policies that financially incentivize procreation, including child-care allowances for families with children under five and rewards for newborns. Policy reforms will extend breastfeeding time-off for working mothers to 24 months, increase maternity leave to 90 days, and enable flexible work hours for caregivers. Additionally, awareness campaigns targeting a healthy lifestyle and its impact on reproductive health are in the pipeline.

Further initiatives encompass family counseling, facilitating marriage arrangements, and simplifying marriage requirements for couples. Financial education is also emphasized, with training workshops designed to educate young couples on effective domestic economic management. These collective efforts aim to address the challenges impacting family dynamics, marriage trends, and, ultimately, fertility rates in Qatar.

[11] Qatar National Development Strategy 3 (draft version)

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ISSN: 2784-0735
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Summary and Conclusion

Summary

The paper discusses the significance of fertility preservation, infertility as a social construct, and its demographic impact. It explores family planning, factors influencing fertility, gender equality's role, European fertility trends, and Qatar's approach through the National Development Strategy 3 (NDS3) to address declining fertility rates.

Conclusion

Infertility's impact on demographic trends, particularly fertility rates, is evident worldwide. In Europe, declining fertility challenges economies and social security systems due to aging populations. Policies involving social security reform, family support, healthcare, and employment play crucial roles in shaping fertility patterns.

Qatar, through NDS3, acknowledges the decline in fertility rates and aims to address the challenges. The strategy outlines ambitious goals to reduce divorce, increase marriage, and raise fertility rates. Strategic interventions encompass family ties, population growth, marriage institution support, and domestic financial management. By focusing on these aspects, Qatar seeks to promote strong families, empower women, and address the root causes of declining fertility.

In conclusion, fertility preservation, addressing infertility, and understanding the intersection of social constructs, policies, and societal norms are crucial in shaping population dynamics. In Europe or Qatar, addressing declining fertility rates requires a multi-faceted approach considering socio-economic, gender, and policy factors to create a sustainable demographic environment.

Recommendations for Reform

Work-life Balance Dimension

1. Governments and organizations should implement policies that support work-life balance, enabling families to make informed decisions about family size.
2. In developed countries, policies that support work-life balance, parental leave, and affordable childcare should be encouraged to alleviate concerns over low fertility rates and aging populations.

Family-centered Dimension

1. Invest in programs that promote family-friendly policies to incentivize individuals to have children and reduce barriers to starting or expanding families.
2. Focus on removing barriers to accessing family planning resources, such as geographical, cultural, and financial obstacles.
3. Provide counseling to couples facing unsuccessful attempts at conception, offering hope and information about potential outcomes.
4. Encourage open conversations about fertility and family planning, addressing the challenges posed by age-related fertility decline.
5. Promote family-friendly workplace policies to alleviate the pressure to delay childbearing due to career and financial considerations.

Individual-oriented Dimension

1. Develop policies and interventions that align with the future-oriented approach of household economics, considering institutional constraints for successful implementation.

2. Establish public health campaigns to educate women about age-related fertility decline and the risks of delayed childbearing.
3. Governments must carefully design and implement reproductive health policies that consider their impact on fertility rates and respond to changing societal norms and demands.

References

Borght, M. V. Wyns, C. (2018). Fertility and Infertility: Definition and Epidemiology. *Clinical Biochemistry, 62*(1), 2-10. www.elsevier.com/locate/clinbiochem

Campbell, M. M. Prata, N. Potts, M. (2012). The impact of freedom on fertility Decline. *Journal of Family Planning and Reproductive Health Care, 39*(1), 44–50.

Demographic Intelligence. (2023). *Qatari Demography: A Policy Proposal*. Qatar.

Donnez, J. Dolmans, M. M. (2017). Fertility Preservation in Women. *The New England Journal of Medicine, 377*(17), 1657-65. DOI: 10.1056/NEJMra1614676.

Grant, J. Hoorens, S. Sivadasan, S. Loo, M. Davanzo, J. Hale, L. Butz, W. (2006). Trends in European Fertility: Should Europe Try to Increase its Fertility Rate…or Just Manage the Consequences? *Journal of Andrology, 29*(1), 17-24. DOI:10.1111/j.1365-2605.2005.00634.x

Greil, A. L. Slauson-Blevins, K. McQuillan, J. (2010). The Experience of Infertility: A Review of Recent Literature. *Sociology of Health & Illness, 32*(1), 140–162. DOI: 10.1111/j.1467-9566.2009.01213.x

Home, J. M. (2008). The impact of public policies on European fertility. *Demographic Research: Volume 19*(10), 249-259. DOI: 10.4054/DemRes.2008.19.10

McDonald, P. (2000). Gender Equity, Social Institutions and the Future of Fertility. *Journal of Population Research, 17*(1).

McDonald, P. (2001). *Theory pertaining to low fertility*. International Perspectives on Low Fertility: Trends, Theories and Policies. Tokyo.

Ministry of Social Development and Family. (2023). *National Development Strategy 3*. Qatar. (Draft Version).