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COMMENT



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Beyond fertility figures: towards reproductive rights and choices

It is widely documented that population growth is closely related to overall economic growth. Given the close link between the two, the global decline in fertility rates has led to an increasing number of governments implementing pronatal policies aimed at encouraging childbearing. However, this article seeks to emphasise the significance of policy solutions that prioritise the needs, choices, and decisions of individuals. Rather than compelling people to have (or not have) children, it is imperative that the reproductive autonomy of individuals be respected and supported. In a global environment that demands continuous population growth, the spotlight should always remain on the people behind the fertility numbers. A shift in the pro-natal policy paradigm towards a rights-based approach is necessary to prioritise individuals' family aspirations, break down institutional barriers, and promote equity in family formation.

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Introduction

irth rates are declining globally (United Nations, Department of Economic and Social Affairs, Population Division, 2020). The 2022 revision of World Population Prospects reports a decrease in the global total fertility rate from 4.86 to 2.32 live births per woman between 1950 and 2021 (United Nations, Department of Economic and Social Affairs, Population Division, 2022). Around 48% of countries and territories have fertility rates below the replacement level, which refers to the average number of children per woman required for a population to replace itself without migration. The rapid and widespread decline in fertility has sparked fervent debates among government officials, the media, and scholars (Fig. 1). Many governments actively encourage their citizens to have children and have introduced policies to support this agenda (United Nations, Department of Economic and Social Affairs, Population Division, 2021). In light of these trends, this commentary raises concerns about problematising the effects of demographic change and prioritising population targets. Amid the increasing clamour to raise birth rates, there is a clear need for a more humanistic perspective on fertility that centres on solutions that respect an individual's reproductive autonomy.

To accomplish this, this article begins by outlining the current demographic transitions that have motivated policy intervention and then compares the concepts of reproductive justice and pronatalism. It subsequently discusses the necessary changes that should be made to policy paradigms as well as potential policy considerations.

Demographic transitions

Many high-income countries have experienced the 'demographic transition', which involves a shift from high birth and death rates to low birth and death rates (Notestein, 1945; Thompson, 1929). Several links between the demographic transition and reproductive health have been identified (Fig. 2). In countries that have not undergone the demographic transition, the Programme of Action drafted by the 1994 International Conference on Population and Development affirms individuals' fundamental right to freely and responsibly determine the number and spacing of their children, while also prioritising access to the information and education necessary for individuals to make informed decisions. Specifically, Sustainable Development Goal 3.7 was established to address the global need for family planning and ensure universal access to sexual and reproductive healthcare services (United Nations, 2016).

While some elements of antinatalism have emerged in the Global South in the form of various family planning initiatives, the primary goal of these initiatives is to empower individuals, particularly women and marginalised communities, to make informed choices about family planning and contraception (FP2030 United Nations Foundation, 2023). They prioritise

education, healthcare, and accessible family planning services aimed at reducing maternal mortality and promoting gender equality. In contrast, a similar level of coordination for integrating reproductive autonomy principles into national pro-natal strategies has yet to be adequately established in the Global North.

Questions about the sustainability of population growth have arisen following the decline in fertility rates, evoking both existential concern and hope. There are two schools of thought on the decline in fertility:

- Unfavourable: Low fertility rates lead to population ageing and decline, which hinders long-term economic development.
- 2. Favourable: Population decline can lead to improved quality of life and positive environmental outcomes.

Currently, many governments adhere to the first school of thought, which is focused on the negative implications of fertility decline, including an ageing population, smaller succeeding generations, and a reduced labour force (Bloom et al., 2010; Lee et al., 2014). Prolonged periods of low fertility may result in negative population momentum and increase the likelihood of long-term population shrinkage (Schoen and Kim, 1998). Given the potentially adverse economic and social consequences, this school of thought drives societies to find solutions to sustain replacement-level fertility rates to avert existential threats.

The second school of thought views low fertility as beneficial to human welfare (Skirbekk, 2022) and environmental quality (Brauner-Otto, 2014) despite concerns about its impact on an ageing population and long-term sustainability. The argument is that the fertility transition—characterised by countries undergoing a transition from higher to lower birth rates—may result in a more sustainable population structure. These population structures could result in improved human welfare by providing individuals with more opportunities to access higher education and employment while promoting greater reproductive autonomy and gender equality through the use of contraceptives (Skirbekk, 2022). Population decline may also reduce the strain on natural resources, potentially leading to improved plant density, biodiversity, and species richness (Brauner-Otto, 2014; De Sherbinin et al., 2007). Consequently, proponents of this school of thought view low fertility rates as a positive outcome that promotes human welfare and environmental conservation.

The tension between these two schools of thought is problematic, as it creates a false dilemma by emphasising two conflicting agendas. This tension often leads to the belief that policies should focus on human reproduction as the primary solution. Nevertheless, there are other ways of achieving environmental sustainability and economic growth that do not involve painting low fertility rates as the problem or the solution.

For example, concerns have been raised about the environmental consequences of an increasing number of children. However, unsustainable consumption patterns and harmful

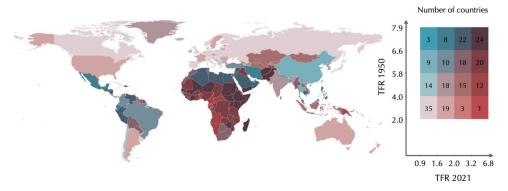


Fig. 1 Change in total fertility rate by country/territory, 1950-2021. The figure illustrates the contrast in total fertility rates between 1950 and 2021. Source: United Nations World Population Prospects 2022.

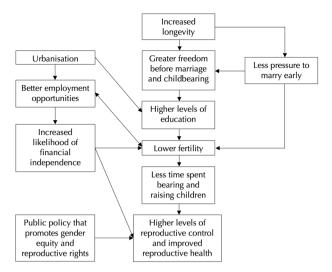


Fig. 2 Links between the demographic transition and reproductive health.

The figure provides a simplified representation of the demographic linkages between the fertility transition and reproductive health. Source: Adapted from Weeks (2021).

industrial practices can persist even in smaller populations. Therefore, it is important to recognise that the impact of climate change is not solely determined by the size of populations but by the actions of individuals, corporations, and governments. To mitigate environmental concerns, policies should shift towards reducing activities that harm the environment, restoring damaged ecosystems, and protecting vulnerable communities from the consequences of environmental degradation (Isbell et al., 2015; Petrie, 2022). Encouraging collective efforts aimed at preserving Earth's resources shifts the focus away from population restrictions and safeguards the rights of future generations to a viable and sustainable environment.

Apart from environmental concerns, discussions of demographic changes often highlight economic considerations. Proponents of population and economic expansion may, at times, focus their concerns about demographic changes through the lens of economic growth, especially when it concerns changes resulting from immigration (Whittaker, 2021). Indeed, their underlying concerns tend more towards the potential displacement of dominant sub-populations and heightened competition for resources rather than economic development (Chung and Hosoki, 2017). Nevertheless, it is crucial to recognise that well-managed migration can make a positive contribution to a nation's economic and population growth by promoting a diverse workforce, meeting the labour demands of the economy, and increasing the nation's access to skill sets that are essential for fostering innovation and progress (Jeronimo and Enrique, 2013).

In addition, it is important to note that people are not necessarily refusing to have children. Low fertility rates often reflect diverse socioeconomic and institutional realities that may lead people to have fewer children than they desire (Gietel-Basten, 2019). The gap between an individual's family aspirations and reality highlights an inability to realise their childbearing intentions. Surveys conducted in various countries across Europe, North America, Asia, and Oceania consistently reveal that people's desired and ideal family size remains constant at two children (Gietel-Basten, 2019; Hagewen and Morgan, 2005; Sobotka and Beaujouan, 2014). However, fertility rates often fall below these values, suggesting that childlessness occurs more frequently than intended (Beaujouan and Berghammer, 2019; Casterline and Gietel-Basten, 2018). Therefore, beyond the economic and demographic challenges associated with low fertility, this article

seeks to address this gap while highlighting the need to focus on the reproductive rights of individuals.

Reproductive justice versus pronatalism

Reproductive justice combines the concepts of reproductive rights and social justice, grounded in the right *not* to have a child, the right to *have* a child, and the right to *raise* children under safe and dignified circumstances (Ross and Solinger, 2017). It emphasises personal choices and the shared responsibility of both the government and society to establish conditions that are conducive to the realisation of these choices (Ross, 2017). This framework supports sexual autonomy and gender freedom, with a focus on activism and the examination of reproductive experiences (Morison, 2021; Price, 2020).

In contrast, pronatalism sees higher birth rates as essential to community or national well-being and influences societal perceptions of masculinity and femininity, contributing to specific ideals and roles. It views declining birth rates as a potential threat to economic growth, cultural identity, and social stability (Benatar, 2006; Heitlinger 1991). Pronatalism can take many forms, from ideologies to policies, often emphasising motherhood as a core aspect of a woman's identity (Park, 2005; Turnbull et al., 2017). It places moral, patriotic, and economic pressure on women to procreate (Graham et al., 2013). Women who do not conform to these pro-natal norms because they have chosen not to have children or are infertile frequently find themselves at risk of stigmatisation and social exclusion (Benyamini et al., 2017; Remennick, 2000).

Reproductive justice and pronatalism thus represent two contrasting perspectives. The former focuses on the right of individuals to make choices about their reproductive health and family planning, free from discrimination and coercion, while the latter prioritises collective interests and the role of childbearing in preserving cultural identity, driving economic growth, and maintaining societal well-being. These paradigms highlight the tension between individual autonomy and communal imperatives.

Shifting the policy paradigm

Despite ongoing calls for reproductive justice, the political world and public sphere mostly favour a pro-natal stance. Low fertility narratives tend to follow crisis rhetoric in the media, describing the perils of ageing and depopulation (Whittaker, 2021). Influenced by the discourse surrounding low fertility, an increasing number of governments have adopted a pronatalist approach to boosting birth rates. Based on the United Nations' tracking of population policies, the proportion of countries with explicit pronatal policies has increased from 10% in 1976 to 28% in 2019 (United Nations, Department of Economic and Social Affairs, Population Division, 2021).

Although governments expect these policies to increase fertility rates, there are concerns that such interventions may be coercive or result in unintended adverse consequences (Botev, 2015). One example of a coercive intervention aimed at increasing fertility is the restriction of access to abortion and contraception, which infringes upon reproductive rights and can lead to unsafe abortions and maternal health risks (Telli et al., 2019). However, incentives such as birth grants and child allowances are perceived as less coercive but often fail to adequately address the diverse circumstances of individuals and families, including their personal preferences, financial situation, and sociocultural context (Boccuzzo et al., 2008; Tan, 2023). In addition, these 'top-down' policies may not be able to effectively adapt to demographic change, as they are predominantly focused on achieving population targets without adequately considering people's desire for children and their accompanying longterm needs. Instead of urging citizens to have children, it is more beneficial for governments to shift their approach from the

universal promotion of reproduction to providing support for people's aspirations for childbearing.

An additional complication is infertility, which is clinically defined as the inability to achieve a pregnancy after 12 months or more of regular and unprotected sexual intercourse (Zegers-Hochschild et al., 2017). The World Health Organisation (2020) recognises infertility as a public health issue and estimates that it affects approximately one in six people of reproductive age worldwide. Furthermore, in contemporary societies, family formation is increasingly delayed due to the extended duration of education and the need to establish stable employment, achieve financial independence, and find a suitable life partner. These delays may lead to an increase in involuntary childlessness. Consequently, the focus of pro-natal policies could inadvertently contribute to stigma and exclusion, exacerbating the distress experienced by individuals dealing with fertility challenges.

From a rights-based perspective, the focus is clear: there is a significant proportion of individuals whose reproductive outcomes are not aligned with their intentions or expectations. This begs the question: how can we address the mismatch between an individual's desired and actual number of children?

Policy considerations

Existing pronatalist policies that provide financial assistance aimed at alleviating the costs of raising children and supporting the balance between work and family life play a crucial role in facilitating an individual's childbearing aspirations (McDonald, 2002; Thomas et al., 2022). However, the central issue lies in the discourse surrounding these policies, which often conveys a mandate to have children (Whittaker, 2021). The current pronatalist discourse is problematic as it tends to overlook individual autonomy and the complexities of family planning and places an excessive emphasis on promoting childbearing. This may pressure individuals or couples into making decisions that do not align with their personal desires, lifestyles, and economic circumstances, as well as potentially stigmatising those who choose not to have children.

An emphasis on reproductive justice can address these issues by acknowledging the importance of individual rights and choices. Policy efforts should begin by respecting a person's autonomy to make decisions about their bodies, creating a more conducive environment for family planning. Rather than incentivising childbirth, efforts that align with these principles should involve improving people's knowledge and access to resources related to fertility and well-being, providing affordable access to family planning services and reproductive technologies, supporting a healthy work-life balance, ensuring access to adequate healthcare, and respecting diverse family structures.

More practically, significant institutional shifts in the labour market that enable greater flexibility in work arrangements, such as remote working (flexible workplace), customised starting and ending times (flexible work hours), and working compressed weeks or job sharing (flexible workload), could help parents find a better balance between their work and family lives (Shreffler et al., 2010).

Although women's involvement in the labour market has increased, they still tend to take on a disproportionate share of household and childcare responsibilities (Kan et al., 2022). To alleviate this, publicly subsidised childcare and paternity leave can help encourage fathers' involvement in the household and reduce the heightened work-family conflict experienced by many working mothers (Luci-Greulich and Thevenon, 2013).

Beyond these structural barriers, which may be more challenging to overcome, it is important to consider the individual realities and circumstances of couples when attempting to help them achieve their fertility goals. A recent randomised controlled trial conducted in Singapore found that providing ovulation test

kits to participants could allow couples to accurately time intercourse during the fertile window (if they wanted to), potentially assist them in achieving their fertility ideals (Tan and Lim-Soh, 2023). Small adjustments like this may help bridge the gap between people's fertility aspirations and outcomes.

Recently, governments have shown an increased interest in alternative policy solutions that can help couples meet their desired fertility ideals. One such solution is increased access to assisted reproductive technology, including social egg freezing. This practice has recently been legalised for non-medical reasons in countries like Singapore (Chew, 2022). Combined with a more supportive discourse and an increased awareness of available tools for achieving fertility goals, these initiatives may empower individuals to make informed decisions and fulfil their reproductive aspirations.

More broadly, a holistic approach that encourages overall health and well-being not only supports individual autonomy in family planning but also fosters a healthier and more informed society (Hammarberg et al., 2013). For example, governments can initiate educational campaigns to raise awareness about potential environmental or lifestyle factors that may impact health and fertility, such as smoking, alcohol consumption, and diets (Dada et al., 2012; Rotondo et al., 2021). Meanwhile, efforts to reduce environmental stressors and the implementation of fertility-friendly policies, such as subsidised or free access to fertility treatments, can also empower individuals to make choices that align with their reproductive goals.

Finally, population-based research on reproductive health and the well-being of individuals in same-sex or other domestic partnerships is a relatively new field of study challenged by the availability and accessibility of relevant data (Reczek et al., 2017). There has also been a lack of policy developments on this front, and many societies have failed to provide the same level of support for childbearing to these groups as heterosexual couples, especially in more conservative societies (Kirubarajan et al., 2021; Lau et al., 2023). Nevertheless, the reproductive choices and decisions of this understudied population are important. As a first step, it is worth reiterating and echoing the longstanding calls for improved data sources and research to support individuals within sexually- and gender-diverse populations (Reczek et al., 2017; Umberson et al., 2015; Zhang et al., 2021).

Conclusion

It is fundamental that the reproductive rights and autonomy of individuals are respected. In a global environment that demands higher birth rates, this article proposes that the focus should always be on the needs of the people. Although it remains to be seen whether low fertility is indeed detrimental or beneficial (Basten et al., 2014), this article hopes to bring to the fore the humans behind fertility statistics. While this article does not seek to provide a comprehensive overview of the complex phenomenon of declining fertility, it acknowledges that existing solutions (as with most of the demographic literature) are predominantly geared towards heterosexual couples (Engeli and Allison, 2016; Mccann, 2009). However, it is undoubtedly important that all individuals are supported in their fertility aspirations, regardless of their gender identity or sexual orientation (Grzanka and Frantell, 2017). It is hoped that the way forward is inclusive and prioritises reproductive autonomy for all.

Data availability

Data sharing is not applicable to this research as no data were generated or analysed.

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Additional information

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