

Chile's demographic transition: from declining infant mortality to very low fertility

Abstract

Chile has undergone a profound demographic transition over the past century. The country has moved from a pattern characterized by high fertility and mortality to one marked by exceptionally low fertility, low mortality, and rapid population ageing. The decline in infant and maternal mortality was achieved through a combination of improvements in living conditions, nutrition, sanitation, healthcare, maternal and child health services, and the development of a national health system. The implementation of a national family-planning policy in the 1960s represented an important milestone in Chile's reproductive health history, particularly in addressing the high maternal mortality associated with unsafe abortion and high parity. Fertility subsequently declined substantially, in parallel with improvements in female education, participation in the workforce, urbanization, socioeconomic development, and access to reproductive healthcare. Chile has now entered a new demographic phase. Provisional official vital statistics for 2025 report 146,446 live births and a total fertility rate of 0.99 live births per woman, while infant mortality has declined to 5.8 deaths per 1,000 live births. These figures place Chile among countries experiencing very low fertility. This new demographic reality presents challenges for population ageing, the future workforce, social protection, healthcare, and family policy. The objective should not be to reverse the advances in reproductive autonomy achieved over previous decades, but to develop social policies that enable women and couples who wish to have children to do so without disproportionate economic, occupational, or social costs.

Keywords: demographic transition, fertility, total fertility rate, family planning, infant mortality, maternal mortality, Chile, reproductive health

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Abbreviations: NHS, National health service; TFR, total fertility rate

Introduction

The demographic transition describes the transformation from a demographic regime characterized by relatively high fertility and mortality to one characterized by low fertility and mortality.¹ The process began in Europe during the 18th century and subsequently spread to other regions of the world.² Although the timing and speed of this transition have varied considerably between countries, its general demographic pattern has been remarkably consistent.

The demographic transition is closely associated with profound social and economic transformations, including urbanization, improvements in living conditions, advances in healthcare, increased educational attainment, and changes in reproductive behavior. A recent analysis of age-specific population data from 200 countries over the past seven decades found broadly similar demographic trajectories across countries, with differences occurring primarily in the pace of change.³

The experience of Europe also demonstrates that the decline in mortality generally preceded the decline in fertility. In England and Wales, the reduction in mortality from infectious diseases was associated with improvements in nutrition, living conditions, sanitation, and other public-health conditions.^{2,3} Importantly, fertility decline began before the widespread availability of effective modern contraceptive methods. Historical evidence suggests that changes in reproductive behavior played an important role in this early fertility transition.^{2,4}

These observations are relevant to understanding the demographic transition in Latin America and, particularly, in Chile. This is an opinion article based on a narrative review of official statistics and published literature, mostly reporting the Chilean demographic changes from the first half of the 20th century to the present day.

The Chilean demographic transition

Latin America experienced a rapid decline in mortality and fertility during the second half of the 20th century. This transformation was associated with improvements in healthcare, vaccination, sanitation, nutrition, education, urbanization, and socioeconomic conditions, together with increasing access to contraception and reproductive health services.⁵

Chile provides an especially striking example of this process. During the first half of the 20th century, the country had high infant and maternal mortality and high fertility. Over subsequent decades, mortality declined substantially as the health system expanded and public-health interventions became increasingly effective.⁶

The creation of the Chilean National Health Service (NHS) in 1952 represented a major milestone in the development of the country's health system.⁷⁻⁹ The NHS consolidated a broad range of previously fragmented health services and contributed to the expansion of healthcare coverage. The subsequent decline in infant and maternal mortality cannot be attributed to a single intervention. Rather, it resulted from the cumulative effects of improvements in healthcare delivery, maternal and child health services, nutrition, sanitation, vaccination, socioeconomic conditions, and access to medical care.^{8,9}

Beginning in the 1970s, the activities of the Corporation for Infant Nutrition, under the leadership of Dr. Fernando Mönckeberg,

represented an important national initiative to address severe childhood malnutrition.¹⁰ Such interventions should be considered within the broader context of Chile's progressive improvement in nutritional status and health services.

The decline in infant mortality was sustained over subsequent decades. According to provisional official vital statistics, the infant mortality rate reached 5.8 deaths per 1,000 live births in 2025.¹¹

Family planning and reproductive health in Chile

The decline in fertility in Chile was accompanied by a major transformation in reproductive health policy. During the early 1960s, unsafe abortion was an important public-health problem and was associated with substantial maternal morbidity and mortality. The need to address this situation contributed to the development of organized family-planning services.

In 1965, Chile's NHS began the direct implementation of family-planning activities, establishing a formal public policy for fertility regulation.¹² Contemporary accounts indicate that the objectives included reducing maternal mortality associated with induced abortion, reducing the risks associated with high parity, reducing infant mortality, and promoting family welfare.^{13–15}

The introduction and expansion of family-planning services occurred at a time when Chile had a high fertility rate and substantial maternal and infant mortality. The availability of contraceptive methods and reproductive-health services gave women greater ability to determine the number and spacing of their children. Historical analyses have documented a substantial decline in fertility following the expansion of these services.^{14,15}

The relationship between family planning and the subsequent decline in fertility, however, should be interpreted carefully. The temporal association is compelling, but the demographic transition cannot be attributed exclusively to family-planning services. Increasing female education, greater participation of women in the workforce, urbanization, socioeconomic development, declining infant mortality, and changing reproductive preferences also contributed to the reduction in fertility.^{8,9,14,15}

The Chilean experience therefore illustrates the importance of distinguishing between an intervention that contributes to demographic change and a single intervention that independently causes that change.

Maternal mortality, abortion, and family planning

The historical importance of family planning in Chile is particularly evident when considering maternal mortality. During the 1960s, complications associated with unsafe abortion represented a major cause of maternal death. The expansion of family-planning services occurred in parallel with improvements in prenatal care, obstetric care, and access to healthcare.^{14–16}

Historical evidence indicates that maternal mortality subsequently declined substantially. The reduction was associated with several factors, including improved maternal healthcare, declining fertility, greater access to reproductive-health services, and a reduction in deaths associated with unsafe abortion.^{6,8,15}

Importantly, the Chilean experience demonstrates that reproductive-health policies may have consequences extending beyond fertility itself. Access to contraception can reduce unintended pregnancies and high-risk pregnancies and can contribute to reducing

the need for unsafe abortion. In this historical context, family planning should be understood primarily as a public-health and reproductive-health intervention rather than simply as a population-control strategy.

From high fertility to very low fertility

Chile has now entered a fundamentally different demographic phase. The country has moved from a situation characterized by high fertility and high infant mortality to one characterized by exceptionally low fertility and low mortality.

Provisional official vital statistics for 2025 reported 146,446 live births in Chile. The total fertility rate (TFR) declined to 0.99 live births per woman, meaning that, for the first time, the TFR fell below one birth per woman.¹¹ The infant mortality rate, in contrast, continued its long-term decline, reaching 5.8 deaths per 1,000 live births.¹¹

The magnitude of this demographic transformation is striking. Between 1993 and 2025, the number of annual births decreased from 275,916 to 146,446, representing a 46.9% reduction. During the same period, the TFR decreased by 59.4% and reached 0.99 children per woman.¹¹

A TFR of approximately 2.1 children per woman is conventionally considered the replacement level in populations with low mortality. Chile's current fertility level is therefore substantially below replacement.

Very low fertility has consequences that extend beyond the number of births. Persistent fertility below replacement contributes to population ageing and, over time, to a reduction in the relative size of the working-age population. These changes may affect healthcare systems, pension systems, social protection, long-term care, and the availability of workers in essential sectors.

In 2024, the TFR in Latin America and the Caribbean reached 1.8 children per woman, remaining below replacement level (2.1 children per woman) since 2015.¹⁷ TFRs ranged from 0.94 to 3.3 children per woman in 2024. In Latin America, Chile (1.14), Costa Rica (1.32), Uruguay (1.40) and Argentina (1.50) have the lowest TFRs, while in Caribbean countries and territories the lowest rates can be found in Puerto Rico (0.94), the British Virgin Islands (1.05) and Curaçao (1.07). TFRs average 1.46 across OECD countries in 2024, well below the level that ensures population replacement.¹⁸ Among OECD countries, the TFR is highest in Israel with 2.8 children per woman followed by Mexico at 1.9 and New Zealand at 1.7. It is by far the lowest in Korea at only 0.7 children per woman. Chile (1.1) and Italy, Japan, Lithuania and Spain (all 1.2 children per woman) also have very low rates. The last public policy that has attempted to increase fertility in Chile was begun in 2011: it increased maternity leave from 12 to 24 weeks postpartum. It has been associated with an increase in the duration of breastfeeding but has not been associated with an increase in fertility.¹⁹ Instead, the decline in the TFR and women's participation in the workforce were associated, highlighting the need for new social policies.

Regarding the infant mortality rate in 2024, Chile and Uruguay had the lowest rates, at 6 deaths per 1,000 live births, meanwhile the highest rates were observed in Bolivia,¹⁴ Guatemala,¹⁷ Honduras,¹³ Paraguay,¹⁵ and Venezuela.^{20,21} In the 3-year period 2021–2023, infant mortality averaged 4.0 deaths per 1 000 live births across OECD countries.²¹ Japan and Finland had average infant mortality rates of fewer than 2 deaths per 1 000 live births in 2021–2023, while Chile (6.1) had a lower rate than OECD members such as Mexico (11.9), and Colombia (16.8).

Women's employment and the fertility transition

The relationship between women's participation in the workforce and fertility is complex. Women's increased participation in education and employment represents one of the major social transformations associated with the demographic transition. At the same time, combining employment with parenthood may be difficult when childcare is expensive or unavailable, housing costs are high, employment is insecure, or workplace conditions are incompatible with family responsibilities.

Consequently, policies designed to address very low fertility should not seek to reduce women's participation in education or employment. Instead, they should aim to reduce the economic and social costs associated with parenthood.

International comparisons suggest that family-oriented public policies, including childcare and measures facilitating the reconciliation of work and family life, may influence fertility behavior.²²⁻²⁴ However, the magnitude and durability of these effects vary between countries, and policy interventions should therefore be evaluated using robust longitudinal evidence.

The objective of family policy should consequently be to create conditions under which women and couples can freely decide whether and when to have children. Such policies should respect reproductive autonomy while addressing the structural barriers that may prevent individuals from having the number of children they desire.

A new challenge for reproductive health policy

Chile's demographic history provides an important lesson for reproductive health policy. During the second half of the 20th century, the country successfully addressed major maternal and child health problems while expanding access to reproductive healthcare and family planning.

The challenge today is different. Chile must preserve the achievements of reproductive autonomy and maternal and child health while responding to an unprecedented level of very-low fertility.

This does not mean returning to a model of pronatalist pressure or questioning women's reproductive autonomy. Rather, it requires policies that make parenthood compatible with contemporary social and economic life.

Such policies may include accessible and affordable childcare, parental leave, greater flexibility in employment, support for families with young children, measures addressing housing affordability, and policies that reduce the economic penalties associated with parenthood. These interventions should be designed around the preferences and rights of women and families rather than around demographic targets alone.

From a public health perspective, distinction is essential. The goal should not be to increase fertility at any cost, but to reduce the discrepancy between reproductive intentions and reproductive outcomes when individuals or couples wish to have children.

Conclusion

Chile's demographic transition represents one of the most remarkable transformations in the country's modern public-health history. The decline in infant and maternal mortality and the expansion of reproductive-health services constitute major achievements.

The family-planning policy introduced in the 1960s played an important role in this transformation, particularly by addressing unsafe

abortion, high parity, and the need for greater reproductive autonomy. Nevertheless, the subsequent decline in fertility resulted from the interaction of multiple social, economic, health, and demographic factors.

Chile now faces a new demographic reality. With a total fertility rate of 0.99 children per woman in 2025, the country has entered a period of very low fertility and accelerated population ageing.

The appropriate response should not be to reverse the achievements of reproductive health or women's autonomy. Instead, Chile should develop comprehensive family policies that enable women and couples who wish to have children to reconcile parenthood with education, employment, housing, and economic security.

The history of Chile's demographic transition demonstrates that public health policies can profoundly influence reproductive behavior and population health. The challenge for the coming decades is to ensure that the freedom to decide whether and when to have children is accompanied by the social conditions necessary to make those decisions genuinely achievable.

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Conflicts of interest

The authors declare no potential conflicts of interest.

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