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ORIGINAL ARTICLE

Adolescent health in Brazil: Demographic transition, regional inequalities, and implications for the public policy agenda

Saúde do adolescente no Brasil: transição demográfica, desigualdades regionais e implicações para a agenda pública

Salud del adolescente en Brasil: transición demográfica, desigualdades regionales e implicaciones para la agenda pública

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DOI: 10.1590/2358-2898202615111732I

ABSTRACT Although adolescents play a strategic role in national development and Brazil has established normative and programmatic frameworks for comprehensive adolescent care, Brazil has yet to make adolescent health a core organizing priority in public health policy, even as major changes reshape the population age structure. This study aimed to describe and analyze changes in the age structure of the Brazilian population, with particular emphasis on adolescents, from 1980 to 2022. We conducted a descriptive quantitative study using data from the Brazilian Institute of Geography and Statistics (IBGE) Demographic Censuses of 1980, 1991, 2000, 2010, and 2022. We calculated the proportion of adolescents, the adolescent-to-child ratio, and the youth dependency ratio for Brazil and its Federative Units. The proportion of adolescents in the total population fell markedly, from 23.4% in 1980 to 13.8% in 2022, while both youth and child dependency ratios declined. The adolescent-to-child ratio increased and exceeded 1 in several states, reflecting the demographic transition. Substantial regional differences persist, and the North and Northeast account for higher proportions of adolescents. These demographic changes underscore the need for public policies that specifically address adolescents, particularly amid regional inequalities.
KEYWORDS Adolescent. Adolescent health. Demography. Health policy. Unified Health System.

RESUMO *Apesar de seu papel estratégico no desenvolvimento nacional e da existência de marcos normativos e programáticos voltados à sua atenção integral, adolescentes ainda não se consolidaram como prioridade estruturante na organização das políticas públicas de saúde no Brasil, em meio a mudanças relevantes na estrutura etária da população. Nesse sentido, o estudo teve como objetivo descrever e analisar a evolução da estrutura etária da população brasileira, com ênfase no grupo de adolescentes, entre 1980 e 2022. Trata-se de um estudo descritivo, de abordagem quantitativa, fundamentado em dados dos Censos Demográficos do IBGE referentes aos anos de 1980, 1991, 2000, 2010 e 2022. Calcularam-se indicadores como proporção de adolescentes, razão adolescente/criança e razão de dependência jovem, para o Brasil e suas Unidades Federativas. Observou-se queda significativa na proporção de adolescentes na população total, de 23,4% em 1980 para 13,8% em 2022, acompanhada por declínio das razões de dependência de jovens e de crianças. Houve aumento da razão adolescente/criança, que ultrapassou 1 em vários estados, refletindo a transição demográfica. Persistem diferenças regionais expressivas, com o Norte e o Nordeste concentrando as maiores proporções de adolescentes. As mudanças demográficas evidenciam a necessidade de políticas públicas direcionadas aos adolescentes, especialmente diante das desigualdades regionais.*
PALAVRAS-CHAVE *Adolescente. Saúde do adolescente. Demografia. Política de saúde. Sistema Único de Saúde.*

RESUMEN *Aunque los adolescentes desempeñan un papel estratégico en el desarrollo nacional y existen marcos normativos para su atención integral, aún no se consolidan como prioridad estructurante de las políticas de salud pública en Brasil, pese a los cambios en la estructura etaria. El estudio describió y analizó la evolución de la población brasileña, con énfasis en los adolescentes, entre 1980 y 2022. Se realizó un estudio descriptivo y cuantitativo basado en los Censos Demográficos del Instituto Brasileño de Geografía y Estadística (IBGE) de 1980, 1991, 2000, 2010 y 2022. Para Brasil y sus Unidades Federativas, se calcularon la proporción de adolescentes, la razón adolescente/niño y la razón de dependencia juvenil. La proporción de adolescentes disminuyó del 23,4% en 1980 al 13,8% en 2022, al igual que las razones de dependencia juvenil e infantil. En cambio, la razón adolescente/niño aumentó y superó 1 en varios estados, lo que refleja la transición demográfica. Persistieron diferencias regionales importantes, con mayores proporciones de adolescentes en el Norte y en el Nordeste. Estos cambios demográficos evidencian la necesidad de políticas públicas específicas para adolescentes, territorialmente sensibles y orientadas a reducir las desigualdades regionales y a fortalecer la atención integral en salud.*
PALABRAS CLAVE *Adolescente. Salud del adolescente. Demografía. Política de salud. Sistema Único de Salud.*

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Introduction

Adolescence is a strategic stage in the life course, marked by intense biopsychosocial transformations and the consolidation of habits, exposures, and risk patterns that influence present and future health[1]. At the normative level, the Federal Constitution of 1988 and the Statute of the Child and Adolescent recognize children and adolescents as subjects of rights and recipients of full protection[2]. The affirmation of this centrality, however, does not imply disregarding the normative and programmatic efforts that Brazil has already undertaken. At the federal level, the National Guidelines for Comprehensive Health Care for Adolescents and Young People in Health Promotion, Protection and Recovery sought to guide managers, professionals and services towards a comprehensive, intersectoral and interfederative approach, incorporating axes such as youth participation, gender equity, sexual and reproductive rights, culture of peace, ethics, citizenship and racial and ethnic equality. Similarly, the National Policy for Comprehensive Health Care for Adolescents in Conflict with the Law (PNAISARI)[3] marked a relevant milestone in recognizing adolescents' specific needs, aligning with socio-educational measures, and expanding their access to health actions and services. These milestones indicate that adolescence was not absent from the normative formulation of the Brazilian Unified Health System (SUS).

The central problem, however, is the limited capacity of these initiatives to become a structuring priority for care networks, planning instruments, financing, professional training, regular indicator production, and interfederative coordination. Despite this legal framework and the existence of specific guidelines and policies, the population aged 10 to 19 years remains in an unstable position in the agenda of priorities of Brazilian public health. This instability does not result from the absolute absence of initiatives, but from the limits of their institutionalization: low inducing force on the daily organization of services, fragile intersectoral and interfederative articulation, little translation into SUS planning and monitoring instruments, and persistence of fragmented or subordinated programmatic responses to partial agendas, such as childhood, sexual and reproductive health, violence, or school health.

This institutional fragility produces relevant health and social consequences. The absence of a robust public agenda for adolescents compromises disease prevention, hinders timely responses to complex problems, and reduces the health system's capacity to act on vulnerabilities that accumulate throughout the life course[4]. Conversely, institutionalizing specific policies for this stage can increase protection, well-being, and equity, while reducing future human and social costs[5].

The need to put adolescence back on the public agenda becomes even more evident in the face of the Brazilian demographic transition. In recent decades, the country has experienced a significant reduction in fertility, progressive population aging, and a relative retraction of younger age groups. In this context, the adolescent contingent decreased in proportional terms, but began to occupy a different position in the national age structure. As Guimarães, Moreira and Costa[6] point out, since the 2000s, the number of adolescents aged 10 to 19 years has surpassed that of children aged 0 to 9 years, reflecting a structural change with relevant implications for public policy formulation and the reorganization of SUS priorities.

In line with this perspective, the 2030 Agenda for Sustainable Development recognizes adolescents as central actors in advancing goals related to health, education, equality, and reducing inequalities[7]. However, in Brazil, the institutional response to this age group still does not fully follow the magnitude of the ongoing demographic transformations or the diversity of needs that characterize adolescence. Understanding the evolution of the age structure of the adolescent population,

from national and subnational perspectives, is therefore a necessary analytical step to qualify the debate on priorities, monitoring, and the organization of public responses. In this sense, the present study aimed to describe and analyze the evolution of the Brazilian adolescent population between the census years of 1980 and 2022, highlighting trends, differences between the Federative Units (FUs), and implications for health policy.

Methodological aspects

This is an ecological, descriptive, quantitative study based on aggregated census data, aimed at analyzing the evolution of the age structure of the Brazilian population, with emphasis on adolescents, in Brazil and across the FUs, between 1980 and 2022.

The data were obtained from the Demographic Censuses carried out by the Brazilian Institute of Geography and Statistics (IBGE) in 1980, 1991, 2000, 2010 and 2022. We used age-group totals for Brazil and the 27 FUs, extracted from public databases provided by the IBGE.

The population analyzed comprised residents registered in Brazil and in the 27 FUs in the selected census years. Adolescents were defined as ages 10 to 19 years, in line with the World Health Organization definition. The following demographic indicators were calculated for Brazil and for each FU: proportion of adolescents, defined as the ratio between the population aged 10 to 19 years and the total population; youth dependency ratio, calculated by the ratio between the population aged 0 to 14 years and the population aged 15 to 64 years; and adolescent/child ratio, corresponding to the ratio between the population aged 10 to 19 years and the population aged 0 to 9 years.

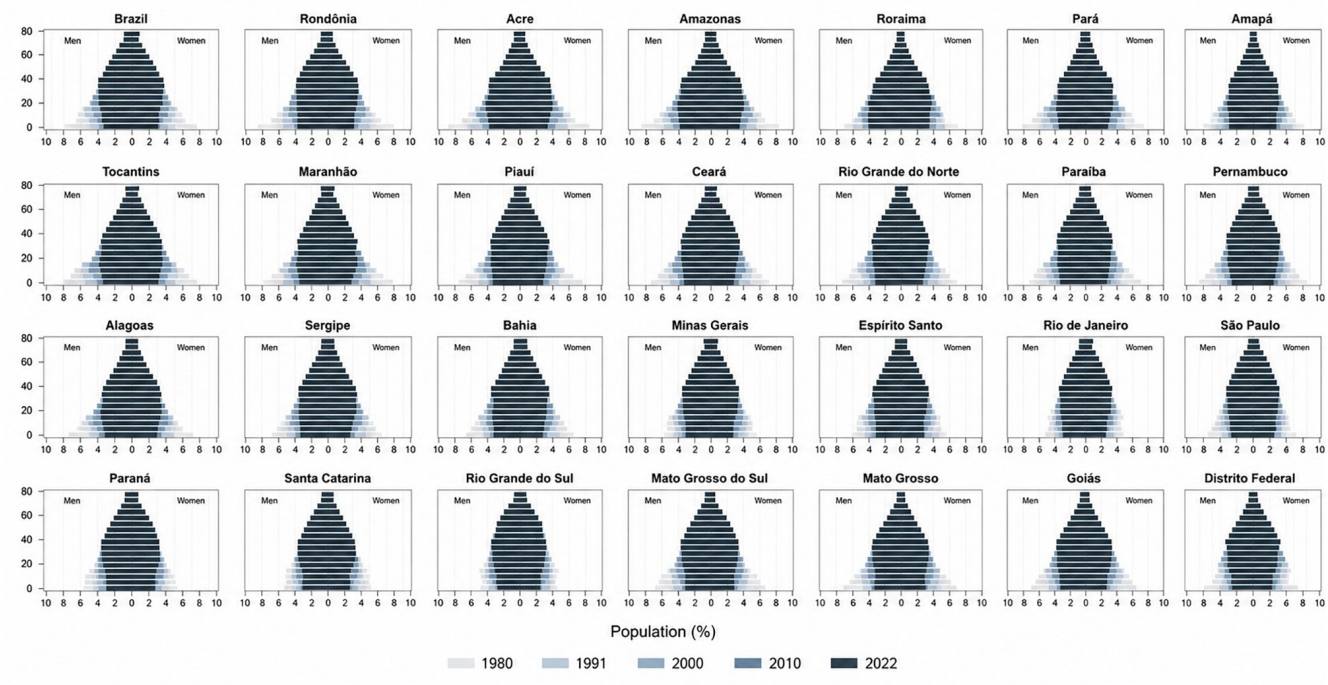
The data were organized in electronic spreadsheets and analyzed descriptively using the Statistical Package for the Social Sciences (SPSS) software, version 29. For each census year, we calculated demographic proportions and ratios for Brazil and the FUs, compared indicators over time, and analyzed their territorial distribution. We presented the results in tables, graphs, and age pyramids to highlight changes in the population's age structure and the regional differences observed over the period. The analysis especially emphasized the evolution of the proportion of adolescents, the adolescent/child ratio, and the youth dependency ratio, because these indicators can reflect different stages of demographic transition in the country.

Because it used only secondary, aggregated, publicly accessible data without individual identification, the Research Ethics Committee did not review the study under National Health Council (CNS) Resolution No. 510/2016[8].

Results

The analysis of the age structure of the Brazilian population between 1980 and 2022 shows profound changes in the country's demographic profile (*graph 1*). Across all FUs, the base of the age pyramids progressively narrows, with a reduction in the relative weight of younger groups and a proportional expansion of adult and older people groups. This process occurred across the national territory, though at different paces, earlier and more intensely in the South and Southeast regions, where the demographic transition is more advanced. In these areas, the base of the pyramid has narrowed since the 2000s, while the relative share of older age groups has expanded. In contrast, states in the North and parts of the Northeast maintained relatively young age structures for longer, although the aging trend is also clearly present in these contexts.

Graph 1. Age pyramids of the Brazilian population according to Census year, Brazil, 1980, 1991, 2000, 2010 and 2022



Source: Prepared by the authors, based on data from the IBGE Demographic Censuses of 1980, 1991, 2000, 2010 and 2022.

The evolution of demographic indicators summarizes this transformation (*table 1*). In Brazil, the proportion of adolescents aged 10 to 19 years in the total population fell from 23.4% in 1980 to 21.8% in 1991, 20.8% in 2000, 17.9% in 2010 and 13.8% in 2022. Over the same period, the youth dependency ratio fell from 66.2 to 57.5, 45.9, 35.1, and 28.5, respectively. In contrast, the adolescent/child ratio increased from 89.2 in 1980 to 94.5 in 1991, 107.1 in 2000, 118.7 in 2010, and 106.0 in 2022. Taken together, these indicators show that although the relative participation of adolescents has also decreased, the retraction of the child population has been even more intense, changing adolescence's position in the Brazilian age structure.

Table 1. Selected demographic indicators for the adolescent population by census year, Brazil, 1980, 1991, 2000, 2010, and 2022

	Adolescents' proportion					YDR[a]					Adolescent/child ratio				
State	**1980**	**1991**	**2000**	**2010**	**2022**	**1980**	**1991**	**2000**	**2010**	**2022**	**1980**	**1991**	**2000**	**2010**	**2022**
Acre	24.8	25.6	24.2	22.5	18.6	95.0	83.6	67.4	54.4	39.8	72.9	85.6	90.9	103.2	106.0
Alagoas	24.8	24.8	23.4	20.9	16.2	87.8	72.8	58.6	45.0	33.3	79.4	91.6	100.3	113.6	108.7
Amapá	25.0	25.6	24.4	22.8	18.1	102.3	87.3	68.0	52.3	40.0	70.5	81.7	90.1	106.9	100.1
Amazonas	24.4	25.8	23.9	22.0	18.4	93.9	81.8	67.5	52.8	40.9	71.4	87.4	88.5	101.3	100.6
Bahia	24.6	24.9	23.6	19.0	14.7	84.8	71.5	51.5	38.2	29.3	80.3	95.7	114.3	118.3	112.2
Ceará	25.8	23.3	22.7	20.0	14.4	80.1	69.0	55.6	38.9	29.6	89.3	88.8	103.8	126.3	107.0
Distrito Federal	23.1	22.4	20.3	17.1	13.9	62.5	53.2	41.6	33.2	26.3	87.0	99.9	106.0	112.8	111.3

Table 1. Selected demographic indicators for the adolescent population by census year, Brazil, 1980, 1991, 2000, 2010, and 2022

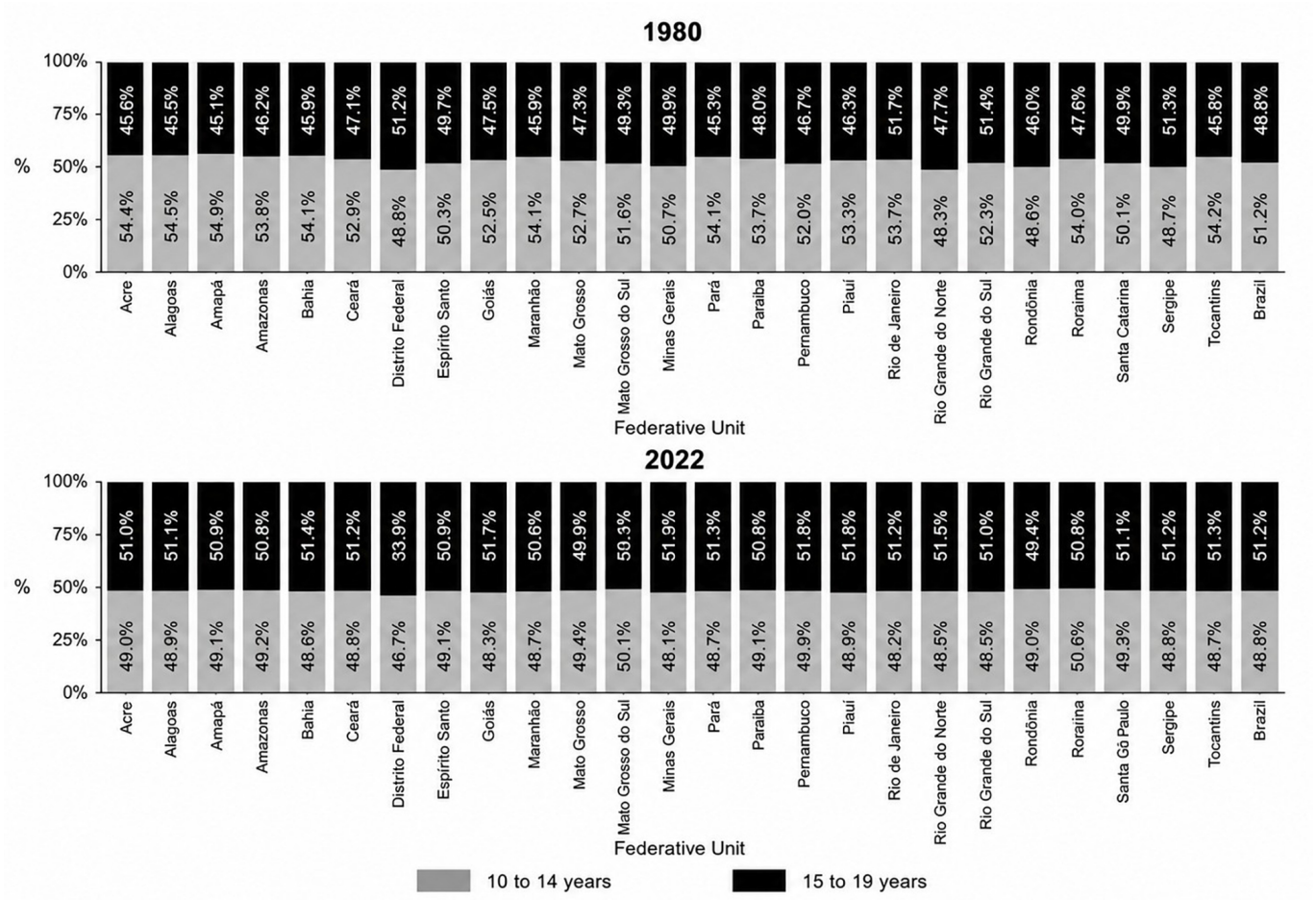
	Adolescents' proportion					YDR[a]					Adolescent/child ratio				
State	**1980**	**1991**	**2000**	**2010**	**2022**	**1980**	**1991**	**2000**	**2010**	**2022**	**1980**	**1991**	**2000**	**2010**	**2022**
Espírito Santo	24.4	22.0	20.9	17.2	13.1	67.5	57.4	43.6	33.1	27.9	92.3	95.2	113.0	118.6	101.6
Goiás	24.9	22.8	20.3	17.7	14.0	74.6	55.6	44.4	34.4	28.8	87.4	100.9	104.9	116.8	103.0
Maranhão	24.3	24.8	25.6	21.4	17.6	89.0	85.3	64.5	49.1	36.1	75.5	82.3	105.2	107.5	112.2
Mato Grosso	24.5	23.5	21.8	18.6	14.6	79.4	63.3	49.3	37.1	32.6	81.0	92.6	104.3	113.7	94.8
Mato Grosso do Sul	24.8	22.2	20.9	18.3	14.4	72.3	59.1	47.6	36.5	32.2	88.7	92.7	103.8	115.1	97.6
Minas Gerais	24.3	21.7	20.4	17.4	12.8	65.7	55.4	43.4	32.3	25.9	94.5	97.4	110.7	125.9	107.5
Pará	24.3	24.9	24.1	21.4	17.4	88.4	78.4	63.0	48.4	35.9	75.0	86.0	96.5	106.9	108.8
Paraíba	25.2	24.0	22.6	18.6	14.6	82.5	68.2	51.3	38.3	30.5	86.5	95.4	112.3	115.9	107.4
Paraná	25.0	21.6	19.7	17.6	13.1	68.9	53.4	43.8	32.9	27.6	94.6	97.7	104.2	124.0	102.8
Pernambuco	24.7	23.8	22.0	18.7	14.8	78.0	63.9	49.6	38.3	30.4	85.9	97.2	109.0	115.9	108.4
Piauí	25.9	25.3	24.4	19.6	15.2	89.5	75.3	55.3	40.4	30.4	82.4	92.6	114.9	117.5	112.2
Rio de Janeiro	20.8	18.9	17.5	16.1	12.3	48.8	43.2	37.3	30.3	25.7	97.8	102.4	104.2	123.7	104.5
Rio Grande do Norte	25.7	22.8	22.4	18.7	14.3	77.5	65.8	51.0	36.7	28.5	91.7	90.5	110.3	120.2	111.3
Rio Grande do Sul	22.3	18.7	18.4	16.2	11.9	51.6	46.9	39.0	29.8	25.6	103.6	92.9	107.8	127.2	101.9
Rondônia	24.6	24.3	23.1	20.0	15.1	87.0	70.5	55.4	39.8	31.5	75.6	88.8	101.1	116.7	103.6
Roraima	23.3	21.8	23.6	22.0	18.1	82.7	66.3	65.4	52.2	44.5	72.7	79.8	88.9	102.6	89.9
Santa Catarina	25.2	20.6	19.8	17.0	12.4	64.0	52.9	42.4	30.6	26.4	100.3	92.5	108.0	126.2	98.7
São Paulo	20.8	19.6	19.0	16.1	12.6	52.4	47.8	38.9	30.4	25.6	91.3	96.1	110.4	119.7	106.6
Sergipe	25.3	24.3	22.9	19.8	15.3	87.3	69.9	54.3	40.2	30.5	82.3	92.7	104.5	117.9	110.7
Tocantins[b]	-	25.1	23.6	20.5	16.2	-	76.5	58.4	44.0	34.1	-	90.0	101.7	111.7	105.4
Brazil	**23.4**	**21.8**	**20.8**	**17.9**	**13.8**	**66.2**	**57.5**	**45.9**	**35.1**	**28.5**	**89.2**	**94.5**	**107.1**	**118.7**	**106.0**

Source: Authors' calculations using data from the IBGE Demographic Censuses of 1980, 1991, 2000, 2010, and 2022.

a YDR – Youth Dependency Ratio; b Tocantins has no data before 1988.

The internal composition of the adolescent group itself also changed over the period (*graph 2*). The proportions of the 10 to 14-year and 15 to 19-year age groups declined relative to the total population, following the general retraction of the base of the age pyramid. At the start of the series, about 13% of the Brazilian population was in the 10 to 14 age group and about 12% in the 15 to 19 age group; by 2022, these percentages had fallen to about 7% and 8%, respectively. This shift indicates not only a relative decrease in adolescence in the population as a whole, but also internal aging within the adolescent group, with older adolescents accounting for a larger share than younger ones.

Graph 2. Age composition of the adolescent group. Brazil and FU, 1980 and 2022



Source: prepared by the authors, based on data from the IBGE Demographic Censuses of 1980, 1991, 2000, 2010 and 2022.

The comparison across the FUs confirms marked territorial heterogeneity. In 2022, the highest proportions of adolescents were observed in Acre (18.6%), Amazonas (18.4%), Amapá (18.1%), and Roraima (18.1%), while the lowest values occurred in Rio Grande do Sul (11.9%), Rio de Janeiro (12.3%), Santa Catarina (12.4%), São Paulo (12.6%), Minas Gerais (12.8%), Paraná (13.1%), and Espírito Santo (13.1%). These contrasts indicate different stages of demographic transition among the FUs, with relatively younger profiles in the North and parts of the Northeast and older structures in the South and Southeast (*table 1*).

The youth dependency ratio also declined consistently across all FUs, reinforcing the trend of a smaller share of young people relative to the working-age population. In 2022, the highest values of this indicator were recorded in Roraima (44.5), Amazonas (40.9), Amapá (40.0), and Acre (39.8), while the lowest occurred in Rio Grande do Sul (25.6), São Paulo (25.6), Rio de Janeiro (25.7), Minas Gerais (25.9), and the Federal District (26.3). These results suggest that young age structures persist longer in the North and, to a lesser extent, in the Northeast, in contrast to the older profile of units located mainly in the South and Southeast (*table 1*).

The adolescent/child ratio, by contrast, showed a partially distinct and particularly informative pattern. In 2022, the highest values were observed in Bahia (112.2), Maranhão (112.2), Piauí (112.2), the Federal District (111.3), Rio Grande do Norte (111.3), Sergipe (110.7), Pará (108.8), Alagoas (108.7) and Pernambuco (108.4)). In contrast, the lowest values were observed in Roraima (89.9), Mato Grosso (94.8), Mato Grosso do Sul (97.6), Santa Catarina (98.7), Amapá (100.1), Amazonas (100.6), Rio Grande do Sul (101.9) and Paraná (102.8). This shows that the higher proportion of adolescents in the total population and the higher adolescent/child ratio are not identical dimensions of the demographic process: while the first indicator expresses the relative weight of adolescence in the total population, the second more directly captures the degree of childhood retraction in relation to the adolescent contingent (*table 1*).

The temporal analysis of the adolescent/child ratio also shows that the adolescent contingent did not surpass the child contingent homogeneously or linearly across all FUs. In several units, this indicator exceeded 100 in 2000 or 2010, such as Bahia, Ceará, the Federal District, Espírito Santo, Goiás, Maranhão, Minas Gerais, Paraná, Pernambuco, and Rio Grande do Sul. In 2022, however, some states remained closer to 100 or below, such as Roraima, Mato Grosso, Mato Grosso do Sul, and Santa Catarina, suggesting different regional trajectories of childhood reduction and reconfiguration of the age base.

Discussion

In summary, the results show that the Brazilian demographic transition, between 1980 and 2022, was marked by a sustained reduction in the proportion of adolescents, a sharp drop in the youth dependency ratio, and an increase in the adolescent/child ratio, along with important territorial heterogeneity. Although adolescence has lost relative weight in the total population, childhood has retracted even more rapidly, producing a new configuration of the Brazilian age base and repositioning the adolescent group within the country's population dynamics.

This demographic repositioning also needs to be interpreted in light of how adolescence was historically conceived. The socio-historical perspective proposed by Bock[9] rejects reading adolescence as a natural, universal, and homogeneous stage of development, understanding it as a social construction produced under specific historical, cultural, and institutional conditions. Similarly, Ozella and Aguiar[10] show that adolescence should not be reduced to an abstract transition between childhood and adult life, as it encompasses diverse experiences shaped by social class, gender, ethnicity, territory, and institutional insertion. This reading is particularly important for public health: when adolescence is treated only as an intermediate phase, it tends to be absorbed by policies aimed at childhood or by responses oriented to adult life; when recognized as a historically and socially situated category, it becomes possible to formulate policies that are more sensitive to inequalities and to the needs of this group.

These findings allow us to affirm that adolescence has come to occupy a distinct place in the Brazilian age structure. The central point is not only the relative reduction of the adolescent contingent, but that the retraction of childhood occurred even more intensely, changing the composition of young groups and producing a less infantilized population base than in previous decades. This displacement is especially relevant because it challenges the permanence of a historical logic in which public responses to the initial cycles of life were strongly oriented toward child health. Damasceno et al.[11] showed that the Brazilian primary health care system has historically been organized with a strong orientation toward child health, which helps explain why adolescence has largely been treated as residual, fragmented, or subordinated to

partial agendas. In the same vein, Silva and Engstrom[12] showed that comprehensive adolescent health care in Primary Health Care (PHC) remains heterogeneous and discontinuous across Brazil. Thus, the contemporary discussion of adolescence in Brazil cannot be restricted to a numerical decrease in this group; it must recognize that the reorganization of the country's age base redefines health, institutional, and programmatic priorities.

In this sense, the study suggests that the Brazilian demographic transition has produced a mismatch between population structure and institutional response. Over the last decades, the country has consolidated key care frameworks for children and formulated guidelines and policies for adolescents and young people. However, these frameworks have not eliminated adolescence's relatively unstable position in the architecture of the SUS. The main limit seems to reside less in the absence of normative formulation and more in the low institutionalization of these initiatives as the ordering axis of care networks[11,12].

Four articulated factors can help explain this low institutionalization. The first is conceptual: adolescence is still often represented as a stage of passage, not as a population group with its own status in policy formulation. The second is organizational: actions aimed at adolescents tend to be distributed among specific programs, school services, sexual and reproductive health, mental health, violence, or socio-educational measures, without constituting a sufficiently integrated line of care. The third is federative: implementation depends on an agreement between the Union, states, and municipalities, but it does not always translate into goals, responsibilities, financing, and systematic monitoring. The fourth is assistance: PHC, although a privileged gateway, still struggles to provide welcoming, confidential, longitudinal, and responsive access to youth demands.

The results add an empirical basis for the argument that this institutional fragility has become even more problematic in the face of demographic change. Adolescence is no longer just a numerically expressive group within the young population. It has come to occupy a specific position in the Brazilian age base, in a context in which childhood has been retracted even more intensely. Therefore, the discussion on adolescent health cannot be limited to creating normative documents; it requires the ability to translate guidelines into planning, financing, indicators, territorial care, and coordination of SUS networks.

This institutional invisibility also shows up in the fragility of information and monitoring systems. Newby et al.[13], in a scoping review of adolescent health indicators, identified relevant gaps in the availability, comparability, and standardization of information, especially on topics such as mental health, violence, sexuality, and reproductive health. Guthold et al.[14] proposed priority areas for measuring adolescent health, articulating health problems, behaviors, and social determinants. More recently, Shinde et al.[15] developed an indicator framework for population contexts, especially useful in low- and middle-income countries. At the same time, Ferguson et al.[16] emphasized that indicator selection needs to be strategic, parsimonious, and operationally viable. In Brazil, the scarcity of specific metrics for adolescents within the scope of PHC and other SUS strategies makes it difficult to monitor fundamental dimensions such as mental health, risk behaviors, violence, access to services, and social vulnerabilities.

The heterogeneity observed among the FUs reinforces this interpretation. The results show that the North and part of the Northeast still concentrate higher proportions of adolescents and higher youth dependency ratios. Meanwhile, the South and Southeast have older age structures and lower values of these indicators. The adolescent/child ratio, by contrast, shows a more mixed pattern, indicating that the contraction of childhood and the relative replacement of adolescence are not evenly distributed across the territory. In analytical terms, this means Brazil does not

have a single demographic adolescence, but rather different regional configurations of adolescence within the population transition. In this context, adopting a strategic monitoring system oriented toward implementing SUS policies could not only recognize the specific demands of this age group, but also make explicit territorial disparities relevant to formulating equitable policies sensitive to inequalities[13-16].

This reading gains even more relevance when one considers that contemporary adolescence in Brazil is part of an epidemiological and social profile marked by complex, persistent problems and, in many cases, aggravated by inequalities. Barbiani et al.[17], in a scoping review, showed that adolescent health care in Brazil is organized around multiple and often fragmented demands. Marques et al.[18] showed the resurgence of violence against women, children, and adolescents in crisis contexts, including during the COVID-19 pandemic. Sousa et al.[19] identified factors associated with polyconsumption of alcohol, tobacco, and illicit drugs among Brazilian schoolchildren. In the field of sexual and reproductive health, Cabral and Brandão[20] highlighted the tensions surrounding adolescent pregnancy, sexual initiation, and gender relations. Tremblay et al.[21] add that previous experience of sexually transmitted infections can influence subsequent preventive behaviors, which indicates the complexity of risk and protection trajectories at this stage of life. Taken together, these studies show that adolescence cannot be treated only as a biologically delimited age group, but as a stage deeply crossed by markers of gender, territory, race, education and material conditions of existence[17-21].

This complexity also manifests in other health problems and needs that go beyond the strictly biomedical field. Hua et al.[22] draw attention to the centrality of suicide and suicide risk in contemporary adolescence, while Jebeile et al.[23] highlight childhood obesity as a growing, multifactorial problem strongly related to social and behavioral contexts. At the regional level, Morais et al.[24] analyzed adolescent health indicators in Mercosur countries and reinforced the need for comparable instruments that are sensitive to inequalities. Taken together, this evidence suggests that adolescence concentrates specific vulnerabilities and demands policies that articulate prevention, care, health promotion, and qualified monitoring.

Fragmented policies, based only on specific actions or isolated thematic agendas, tend to be insufficient to respond to the complexity of the adolescent universe. Caliari and Ricardi[25], when analyzing the demands of young Brazilians addressed to the SUS General Ombudsman's Office, showed that this group expresses broad and heterogeneous needs, which cannot be reduced to a single health problem. From a broader perspective, Gagne[26] argues that the transitions experienced in adolescence require more integrated and less sectoral approaches. For this reason, a national adolescent health policy should not be understood as a mere normative expansion, but as an effort to reorganize the public response to needs that are simultaneously health, social, and relational.

From a programmatic perspective, some priorities are imposed. Raeside[27] emphasizes that promoting adolescent health, including in digital environments, requires new forms of engagement and care. Molcho et al.[28] show that violence among adolescents remains a central and persistent theme in different international contexts. Liang et al.[29] consistently summarize the importance of sexual and reproductive health as a structuring axis of the adolescent agenda. In the Brazilian context, Mancilha and Covic[30] highlight the need for specific care for adolescents in situations of vulnerability to drug use, while Tabrizi et al.[31] point to key factors associated with health-promoting behaviors among adolescents. Thus, expanding access to psychosocial care services, strengthening support networks in schools and communities, preventing violence, promoting sexual

and reproductive health, and encouraging healthy lifestyles are complementary fronts of an effective, comprehensive agenda.

Recent international literature also shows important advances in adolescent health since 2010, with greater political visibility and the expansion of evidence-based interventions. Beckwith, Chandra-Mouli and Blum[32], however, argue that important challenges persist in converting this recognition into health systems effectively adapted to youth needs. In the Brazilian case, Vinagre and Barros[33] showed that adolescents value dimensions such as confidentiality, qualified listening, respect for autonomy and acceptance in health services. This point is decisive: it is not enough to identify epidemiological priorities; it is necessary to transform how services are organized, overcoming adult-centric, verticalized models that are not responsive to young people's lived experience.

In this sense, youth participation should move from an abstract principle to an operative component of policy. Shinde et al.[15] and Ferguson et al.[16] already indicate that defining indicators and priorities in adolescent health needs to incorporate criteria of social relevance, applicability, and responsiveness. Beckwith et al.[32] emphasize that recent advances in the global adolescent health agenda depend on greater institutional capacity to listen to young people themselves. On another analytical scale, Richter et al.[34] demonstrate that welfare regimes significantly shape adolescent health and health inequalities, reinforcing the need for socially sensitive and territorially responsive policies. The construction, monitoring, and evaluation of actions aimed at adolescents therefore need to incorporate instances of qualified listening and youth protagonism, respecting the plurality of Brazilian youth.

Thus, this study's findings suggest that a national agenda for adolescent health should articulate three dimensions. The first is demographic: adolescence currently occupies a distinct position in the Brazilian age structure. The second is epidemiological: this group has specific needs that policies designed for children or adults cannot adequately address. The third is institutional: the absence of robust monitoring systems, welcoming services, and interfederative coordination favors the reproduction of inequities and the persistence of fragmented responses.

Taken together, the results indicate that adolescence currently occupies a strategic position in the Brazilian demographic transition and that this position has not yet been adequately reflected in public health policy design. More than an intermediate group between childhood and adult life, adolescents are a segment whose demographic, epidemiological and social relevance requires explicit recognition in the planning, monitoring and organization of SUS responses. Putting adolescent health back at the center of the public agenda means, therefore, aligning policy with the concrete transformations of the Brazilian population and facing, with greater precision and equity, the inequalities that mark the course of life in the country.

Final considerations

The Brazilian demographic transition has changed the place of adolescence in the country's population structure, but this change has not yet been matched by an institutional response. Although adolescents have lost relative weight in the total population, childhood has retracted even more rapidly, and the heterogeneity between states shows that Brazil lives with different demographic configurations and different care needs. Persisting in treating adolescence as a peripheral issue, diluted between policies aimed at childhood or adult life, no longer corresponds to the reality of the country.

The results of this study reinforce that adolescent health must no longer occupy a secondary position on the public agenda. This does not mean ignoring guidelines, policies,

and initiatives already formulated within the scope of the SUS, but rather recognizing that its normative existence has not yet been sufficient to consolidate adolescence as a structuring priority in the organization of care. The challenge is to transform these milestones into effective institutional capacity: planning, financing, monitoring, lines of care, professional training, qualified listening and territorially sensitive responses to the inequalities that mark this stage of life.

This study, based on aggregated census data, does not capture the full complexity of the adolescent condition, nor does it allow deeper analysis of intraterritorial, racial, gender, or socioeconomic inequalities. Even so, its main contribution is to make visible a fact the public agenda can no longer ignore: adolescence today occupies a strategic position in Brazilian demographic dynamics, and this centrality needs to be converted into a political priority.

The challenge, therefore, is not only to describe a population change. It is to decide what to do with it. Putting adolescent health back at the center of the public agenda means aligning the SUS with the real transformations of Brazilian society and interrupting the reproduction of inequalities that accumulate throughout life. Postponing this movement is not technical neutrality; it is a political choice.

Authorship contributions

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Received on 03/06/2026
Approved on 06/29/2026
Conflict of interest: Non-existent
Data availability: Survey data is available in data repository (https://seriesestatisticas.ibge.gov.br/lista_tema.aspx?op=0&no=10)
Financial support: Non-existent

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