

Adolescence in public health - revisiting 25 years of publications

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Abstract *This study aims to develop scientific knowledge on adolescence in publications from 1996 to 2020 in Journal Ciência & Saúde Coletiva (C&SC). This integrative systematic review was based on a bibliographic survey in SciELO's database, with the string word search strategy "Adolesc \$" in title, abstract, and keywords of works published in the C&SC between 1996 and 2020. The abstracts of 432 publications were analyzed by age group, gender, skin color, social stratum, sample, place, methodology, and risk and protective factors. The results show that most of the abstracts brought studies exclusively focused on the adolescent population, with a smaller volume on children or adults. Most of the samples were collected in schools, followed by health services. The topics addressed in the papers are related to adolescents' individual attributes, family attributes, peer relationships; social scope, health conditions and diseases, accidents and violence, and health services. There is a need for special attention to adolescents' health requiring reflections in national academic production, aiming at systemic and complex knowledge focused on adolescent health promotion aspects, following the existing national legislation and laws.*

Key words *Adolescence, Integrative review, Public health*

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Introduction

Much has been written and thought about adolescence and being a teenager in the last 25 years in Collective Health, through the multidisciplinary approach of demography, epidemiology, sociology, anthropology, psychology, and medicine, significantly enriching the understanding of this particular phase of life. One of the great turnabouts of scientific knowledge on the subject in this period was its recognition as a unique opportunity, which carries the gains obtained from early childhood and, in some cases, provides a second chance for the promotion and strengthening of well-being and health, which will affect adult life and the next generation¹.

Traditionally, adolescence is defined as the second decade of life, extending from 10 to 19 years. It is marked by a complex biopsychosocial growth and development process manifested through anatomical, physiological, psychological, and social transformations². From the perspective of the Brazilian legislation, the Statute of Children and Adolescents (ECA) considers an adolescent as any individual aged between 12 and 18 years³. However, it is reductionist to understand this period of life from an exclusively chronological criterion, as it is characterized by being a plural stage, where experiences and contexts, with their particularities, existing and activated resources differ among social groups, generating different concepts and understandings of what it means to be a teenager.

The World Health Organization (WHO) highlights that disparities persist between and within countries and in certain population groups¹ despite advances in adolescents' health in European countries in recent decades. In Brazil, the estimated population of adolescents is 21 million (11% of the total). The country is still one of the highly unequal countries globally, which exposes adolescents to significant vulnerability. Data from the United Nations Children's Fund show that Brazil is the country with the highest absolute number of murdered adolescents worldwide. In 2015, 11,403 homicide victims aged between 10 and 19 years were much more frequent among blacks. The number is higher than the total violent deaths of boys in conflict-affected countries like Syria and Iraq. Also, approximately 30 thousand adolescents are submitted to deprived liberty measures each year⁴. In education, in 2017, 12.8% adolescents aged 15-17 years were school dropouts; 28.2% had a High School two-year age-grade lag, with

emphasis on the North (41.4%) and Northeast (36.2%) regions of the country. Data from the National Institute of Educational Studies and Research/Ministry of Education, in 2017 show that 6.1% dropped out of high school due to poverty, violence, and pregnancy, the main reasons for dropout. The Brazilian teenage pregnancy rate is high for Latin America, with 400 thousand cases/year⁵. The scenario of poverty, sexual and work exploitation, violence (psychological, physical, sexual, and neglect), alcohol and drug use, mental health problems, unprotected sex, and bullying are the harmful factors affecting this phase of life the most⁶.

Brazil has one of the most advanced laws in the world concerning the protection of children and adolescents, although specific adolescent care public policies still need to be improved to reach the specificities of this social group. Historically, public health policies have always been linked to *managing life by age*⁷, and those related to adolescents are linked to the social meanings of this age group. In the 1970s, the first services aimed specifically at this population appear, with a welfare nature and associated with universities. As of the 1980s, committees concerned with adolescent health emerged and led to a particular perspective at this population group and pressure to include it in public policies in order to demystify its conception associated with criminalization and violence⁷. In 1986, the Ministry of Health included primary health care for this population, targeting those at social risk and favoring the issues of sexually transmitted diseases, HIV and AIDS, drug use, traffic accidents, and early pregnancy⁸. This was when the first health policy was explicitly established for adolescents – the Adolescent Health Program (PROSAD) was developed in 1989, as a result of the 42nd World Health Assembly promoted by WHO. PROSAD was a significant advance in public health aimed at this population and proposed comprehensive care, especially in primary care⁹.

The 1990s are a milestone for public policies targeting adolescents, with the enactment of the Statute for Children and Adolescents³, which, together with the legal systems of the 1988 Federal Constitution and the Organic Health Laws, legitimized a new paradigm and understanding of adolescents in society. Adolescents were now social and autonomous subjects and should be included in the decisions of the State^{9,10}. An increase in public policies targeting adolescents and young people was observed in the 1995-2002 period, but still with actions very much focused

on crime from a perspective of crime prevention, trafficking, and violence risks^{9,11}.

The Adolescent Health Program¹² was a milestone for public policies in the country, culminating in the National Policy for Comprehensive Care for Adolescent and Youth Health¹³, which triggered specific orientations and guidelines for adolescents at the national level^{14,15} and became the basis of the reflection on the current adolescent health care. This policy presupposed comprehensive care with priority for preventive activities, without prejudice to care services, and the organization of services for implementing these health practices, highlighting the importance of health promotion and the need to establish intersectoral and interdisciplinary work processes. The focus switched to health promotion and youth leadership, with the following priority issues: healthy growth and development, sexual and reproductive health, and reducing violence and accident-related morbimortality.

The National Youth Policy focusing on young people from 15 to 29 years of age, emphasizing youth as a strategic social segment^{11,16}, was also launched. Other programs were fundamental for improving the health of this population, such as Rede Cegonha, National School Feeding Program (PNAE), expansion of the Family Health Strategy, Mais Médicos Program, Bolsa Família, the School Health Program (articulation of actions by primary care and education teams), VIVA Youth Plan (coping with homicides against black youth), the structuring of the Violence and Accident Surveillance (VIVA), the compulsory notification of domestic violence, and the implementation of child and adolescent safety networks. The National Policy for Comprehensive Health Care for Adolescent Offenders (PNAIS-ARI) is an advance for the care of this specific group of adolescents¹⁷. In a nutshell, this historical path shows the initial (and current) conception of adolescence as the age of risk, significantly associated with social problems and offenses, which justifies the use of control strategies and is gradually transforming into an approach aimed at a more positive perspective of leadership and autonomy^{7,18}. There is still a considerable lack of appreciation of cultural, social, and subjective aspects experienced by adolescents, often not considered in the planning of health actions¹⁹.

The historical course of the main themes, policies, and actions aimed at adolescents in Brazil underlie the central question that moves the paper, which is understanding the development of scientific knowledge on adolescence expressed

in publications from 1996 to 2020 in the *Journal Ciência & Saúde Coletiva (C&SC)*.

Methods

This is an integrative review study whose method consists of a synthesis of the findings presented by the studies on a given theme, allowing an expanded analysis of the production of knowledge of the investigated theme, namely, adolescence, and the identification of existing gaps²⁰.

A bibliographic search was carried out on the SciELO database (March 17, 2020) with the following string word search strategy: “Adolesc \$”; located in title, abstract, and keywords only in papers from *Journal Ciência & Saúde Coletiva* published in the last 25 years (1996-2020). The following exclusion criteria were defined: (1) not investigating, prioritizing, or targeting the adolescent age group. While aimed at adolescence, few papers were excluded because they focused on adults/institutions addressing the age group; (2) the type of material (“press release” and book review); and (3) other reasons. The papers were excluded following the consensus of at least two researchers.

A total of 969 scientific papers were identified, of which 484 were excluded due to duplication. The 485 publications’ abstracts were analyzed from an Excel spreadsheet, underpinning the results presented in Figure 1, where 53 works were excluded due to the adopted criteria. In the end, 432 publications were analyzed from the abstracts according to the following categories: age group (child+adolescent, adolescent, adolescent+adult); type of sample studied (population, school, and health services); study location; type of methodology (cross-sectional, cohort, qualitative, theoretical, bibliographic review, and document analysis); analysis by gender, skin color, and social stratum; risk and protection factor. The text was viewed in full to determine eligibility only in specific cases.

The proportion of the number of papers analyzed here (432) against the Journal’s total number of publications up to March 2020 (5,900) was considered for the analysis of the inclusion of adolescence vis-à-vis other themes addressed in the Journal and the characterization of the selected publications, besides the description of the categories according to the three eight-year temporal blocks: 1996-2003, 2004-2011 and 2012-2019, and 2020 was considered separately since only abstracts published in the first three months of the year were included.

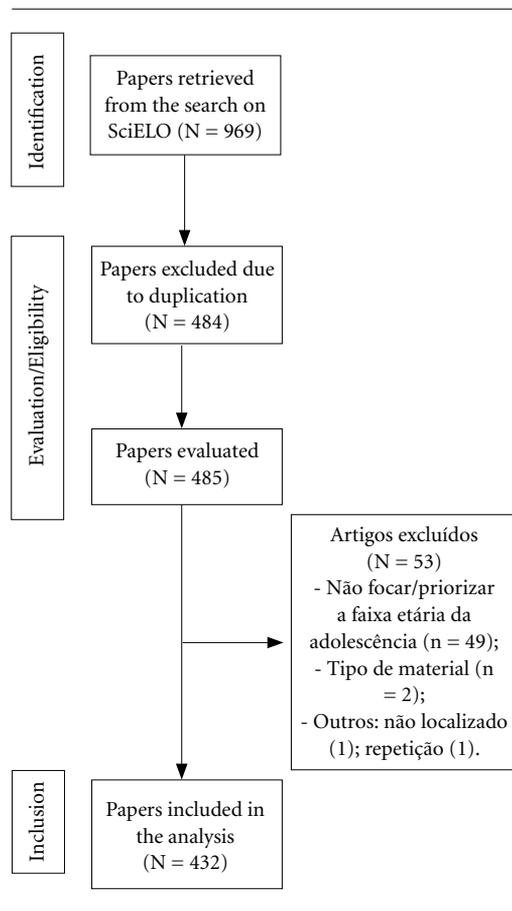


Figure 1. Flowchart of identification and selection of papers on adolescence published in Journal *Ciência & Saúde Coletiva* (1996-2020).

We analyzed the most common themes addressed in the titles of the papers, which were categorized into recurrent and specific (cited more and less than five times over the years, respectively), creating a word cloud, that is, a digital chart for data qualitative analysis that shows the degree of frequency of words in a text. The more the word is used, the more striking is the representation of that word in the chart²¹. A total of 148 words recurring words from titles in Portuguese were included. Articles, pronouns, and conjunctions were excluded. The chart was prepared using the Tableau data visualization program²².

A qualitative analysis of the abstracts' main issues was also carried out, with more than one theme per paper. The risk and protection factors addressed were pointed out. The entire analysis

was carried out according to the three temporal blocks. The results are categorized as follows: (1) adolescents' attributes; (2) family's attributes; (3) peer relationships; (4) social scope; (5) health conditions and diseases; (6) accidents and violence; (7) professional and service activities; and (8) others.

Results

Papers on adolescence in the *Journal Ciência & Saúde Coletiva (C&SC)*

The Journal *C&SC* started to be published in 1996 with one issue per year, gradually increasing until it became monthly in 2011. Of the 432 selected works, 7.3% of the papers published by the Journal during the 25 years targeted the theme. Although the first study focusing on the topic of adolescents was only published in 1999, a growing increase in the number of publications has been observed over the years (Figure 2). The Journal published 367 papers in the first period (1996-2003), including all topics and 18 on adolescents (4.9%); 2,109 papers in the second period (2004-2011), 136 of which were on adolescents (6.2%); 3,312 papers in the third period (2012-2019), of which 271 were on adolescents (8.2%). It appears that, in the last period, the absolute number of papers on the theme is 15 times greater than in the first, and a proportional increase, evidencing the growing interest in the theme. This elevating trend is upheld in 2020 since seven papers on adolescents have been published in the three issues of the Journal in the first three months of the year.

Characterization of publications

Most of the 432 studies analyzed are exclusively for the adolescent population (68%). A smaller proportion brought the theme in a child and adolescent approach (22%), and only a small number also included adults (2%). In the analysis by period, the number of works focusing exclusively on adolescence has increased over the years, from 55% in the first period to 72% in the third. Conversely, those that included children and adolescents decreased from 44% in the first period to 16% in the second, suggesting an increase in the projection of studies focused on adolescence's particularities as a specific field.

Most of the studies were carried out with samples of adolescents in the school environment

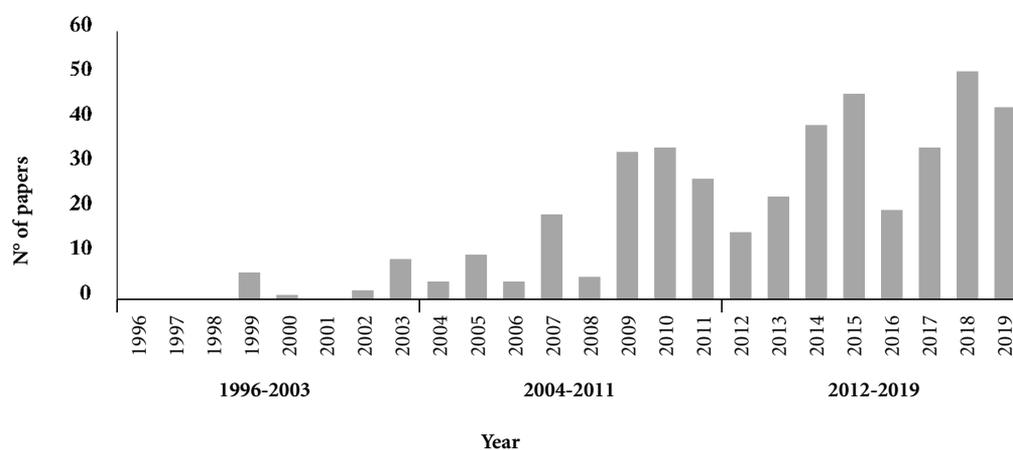


Figure 2. Absolute number of papers aimed at the adolescent population published per year and per period in the *Journal Ciência & Saúde Coletiva*, 1996-2019*.

* The minimum number of publications is equal to zero (1996, 1997, 1998, and 2001) and the maximum number 51 (2018).

(28%), followed by hospital or health services (19%). Jobs targeting the general population (12%) and young offenders (3%) were also mentioned to a lesser extent. An increase in the number of studies with adolescents in schools from the first period (17%) to the third period (29%) was observed. A decrease from the first period (11%) to the third (1%) was noted regarding adolescent offenders. In general, most of the sample is made up of Brazilian adolescents. Among the selected abstracts, 4% are from studies involving international populations. The countries cited were Mexico (the most frequent), Argentina, the United States, Portugal, Cape Verde, Chile, Spain, and Portugal. Among all the studies carried out in Brazil, 7% show data with representativeness from all over the national territory.

As for the methodological design, more than half of the papers on adolescents are quantitative (55.8%), emphasizing epidemiological surveys (39.3%); followed by qualitative studies (17.3%), bibliographic review (10.1%), and to a lesser extent, the eminently descriptive (based on secondary data), theoretical, quantitative-qualitative, scale validation, intervention, and study case methods.

An increased number of quantitative papers was published during the three periods (1996-2003, 2004-2011, and 2012-2019): 17% in the first period, 50% in the second, and 60% in the

third, unlike qualitative studies, with slight variation over the periods, 11%, 24%, and 14%, respectively. The number of studies mentioning the approach of quantitative and qualitative methods on the theme of adolescence has decreased over time by 17%, 3%, and 2%, respectively.

Almost half of the abstracts had analyses by gender, but few were dedicated to studying in-depth the particularities of a single gender. When this specificity occurred, females prevailed. The analysis by the adolescents' skin color is even more incipient (3% of the abstracts show this appreciation). The reference to the LGBTI+ population appeared in less than 1% of adolescents' studies, only after 2004. Concerning social strata, approximately 15% of studies reported this analysis.

Adolescence themes

When analyzing *the titles of publications*, the ten words that appear most often in decreasing order are adolescents, health, Brazil, children, factors, schoolchildren, violence, study, associated, and Brazilians. Among the words with lower repetitions are care, men, indicators, mothers, overweight, reproductive, dental, and disorders (Figure 3). The words that stand out in the 1996-2003 period are health, adolescents, children, and prevention. In the second period (2004-2012),

Chart 1. Main themes addressed in the analyzed publications*.

Categories	Themes
Individual attributes	<p>Recurrent themes: food, nutrition, eating disorders, nutritional care (64); physical activity/sedentary behavior (43); pregnancy (22); sexuality (12); body image (10); resilience (8); religiosity (7); abortion (7); blacks (7); work/work exploitation (7); gender (6); age group (6).</p> <p>Specific themes: self-esteem; adolescent offender; exclusive breastfeeding; aggressiveness; self-concept; autonomy/heteronomy; negative self-perception of health; low schooling; subjective well-being; competence; cesarean; coping; contraception, contraceptive methods; sexual behavior; aggressive/antisocial behavior; delinquency; abandonment; sleep habits; hygiene; homosexuality; sexual initiation; impulsivity; happiness and optimism; family planning; prenatal care; rebellion; body marks; skipping class; dating relationships; life satisfaction; feeling of sadness; sense of coherence; loneliness; condom use; sexual values.</p>
Family attributes	<p>Specific themes: paternal absence; adolescent fatherhood; parent-child communication; composition/structure; parental care (lack of support, low ‘understanding’, parental intrusions on the adolescent’s privacy); crowded houses; family cohesion; conflict; positive behavior of parents; maternal care; paternity; parents’ school; parents’ education; gender, male, perpetrator; intergenerational integration; intergenerational intervention; living with parents; “civil liability” and “parental responsibility”; relationship; maternal work; family supervision.</p>
Relationships with peers	<p>Specific themes: absence of relationship; prosocial behavior; difficulties/rejection; “deviant” pairs; relationship with peers; network of friends.</p>
Social scope	<p>Recurrent themes: socioeconomic standard/income (24); quality of life (18); media (online games, time spent using social media, social network) (13); Policies (social, equity, health promotion, mental health, adolescents) (7).</p> <p>Specific themes: social support; self-perceived health/perceived health; agenda 2030 - Sustainable Development Goals - SDGs; Family Grant; social capital; tutelary council; environmental pollution; social inequality; unemployment; rights (sexual and reproductive, children, to the city); educational level; sexual education; conditions and lifestyles; stressful events/life events; sociodemographic, environmental, and school factors; vulnerable groups; social integration of the safety network; migration; place of residence; air pollution; poverty; social protection; agricultural irrigation hubs; participation in collective activities; social projects; family planning; mental health; sexual and reproductive health; community resident; food and nutrition security; street situation; vulnerability.</p>
Health/disease	<p>Recurrent themes: drug use – cigarettes, alcohol, crack, medication, and other drugs (51); oral health/disease (39); obesity/overweight/eating disorder (32); STD/HIV/AIDS (17); impairments (11); medicalization (11); mental health/mental health problems/psychiatric disorders (10); cardiovascular/metabolic risk (8); suicide/attempt/ideation, suicidal behavior (8); depression/depressive symptoms (7).</p> <p>Specific themes: adherence to treatment; ventilatory assistance; bruxism; cancer; chronic diseases; vitamin A deficiency; diabetes; headache; low back pain; idiopathic scoliosis; protective and risk factors for non-communicable diseases; chronic diseases; spina bifida; scoliosis; imperfect osteogenesis; cystic fibrosis; hyperopia; hyperactivity; insomnia; cerebral palsy; behavioral problems; ophthalmological problem; stress; health care; general, school, food, and adolescent health; Down’s syndrome; cancer treatment; post-traumatic stress disorder; vaccination.</p>
Accidents and violence	<p>Recurrent themes: violence – self-inflicted, interpersonal, dating, at school, family, community, physical, psychological (46); bullying (12); violence/coercion/sexual exploitation (15).</p> <p>Specific themes: abandonment; traffic/transport accident; armed assault – melee weapons and firearms; external causes; violent behavior; exposure to pesticides; ill-treatment; negligence; notification of violence; falls; theft, security; violence and cortisol; human trafficking.</p>
Performance of professionals/health services and other institutions	<p>Specific themes: reception and family reintegration shelters/services; school; health service care/use; public service; institutional performance: CAPSi, ESF; care mode unawareness; network disarticulation; family professional in the community; speech therapy professionals; work-process related problems; psychosocial care network; health and accidents and violence surveillance.</p>
Other themes	<p>Recurrent themes: validation / presentation of psychometric scales (7);</p> <p>Specific themes: urban / rural area; evaluation; health education; prevention; subjectivity and culture; social representations.</p>

* The numbers in parentheses in the recurring themes refer to the number of times found. Specific themes were verified in 6 or fewer documents.

Chart 2. Thematic issues of the *Journal C&SC* on adolescence.

Title	Year	Editorial	Themes of papers
Saúde e Qualidade de vida para a Infância e Adolescência	2007 v.12, n.5	Life quality promotion to childhood and adolescence	Violence; substance use; oral health; teenage mother and child interactions; adolescent offenders; abortion; nutritional pattern; hepatitis B vaccine; vitamin A deficiency; living in shelters; promotion of games in hospitals; dependence on technology for survival and HIV/AIDS.
Violência e saúde mental na infância e adolescência	2009 v.14, n.2	-	Internalizing problems; depression; suicide; post-traumatic stress disorder; psychological distress; violence prevention; social vulnerability; children living on the streets; mental health in primary care; violence and resilience.
Saúde da criança e do adolescente: saberes, prática, avaliação	2011 v.16, n.10	The health of children and adolescents in perspective	Anemia; indigenous youth; nutrition; health education; abandonment; falls; obesity; oral health; growth retardation; quality of life; physical activities; environmental health; health and art promotion; mechanical pulmonary ventilation; speech therapy care; sexual violence and HIV.
Risco e proteção à saúde e bem estar na infância e adolescência	2014 v.19, n.3	Health risks, protection, and well-being in childhood and adolescence	Resilience; family support programs; social competence; PTSD; sexual violence; psychosocial adjustment; dating violence; violence; pregnancy; homophobia; bullying; sexual minority; substance use; HIV/AIDS; depression and violence information system.
Riscos sociais e proteção à saúde de crianças e adolescentes	2015 v.20, n.1	Ciência & Saúde Coletiva celebrates its 20th year, commemorating successes and setting new goals	Violence; psychosocial risks; shelter situation; life satisfaction; violent deaths; family reintegration; social representations; quality of life; physical activity; suicide attempts; oral health; sexuality, and vaccination.
Problemas sociais e de saúde na adolescência	2015 v.20, n.11	Adolescence and public health: the thin line between a protagonist approach and risk for youths	Healthy eating; diet; nutrition; cystic fibrosis; body image; physical activity; oral health; quality of life; bruxism; violence; sexual violence; intimate partner violence; drunkenness; suicidal behavior; drug use; body image; depressive symptoms; headache; paternity; eating disorders; bullying.
Protagonismo de adolescentes e jovens e subsídios para políticas públicas	2018 v.23, n.9	Adolescence and Youth: an international perspective on public policies on health and living conditions	Traffic accidents; agenda 2030; global disease burden; sexually transmitted diseases; rights; health policies; teenager offender; symbolic violence; National School Health Survey (PeNSE); school health program; violence; school violence; anorexia nervosa; community action; affective and sexual life; health education and games; oral health; quilombola; scoliosis; sexual violence; metabolic risks; shelter.
Desafios das políticas públicas de saúde para crianças e adolescentes no Brasil; presente e futuro	2019 v.24, n.2	Children and Adolescents, austerity policies, and the commitments of the 2030 Agenda	Vaccination; body weight; health promotion; drug use prevention; indigenous people and environmental conflict; oral health; mental health; nutrition; food; quilombola; obesity; physical activity; self-esteem; health and school promotion; violence; drunkenness; peer violence.

school's perspective and are not detailed, which addresses the National School Health Survey (PeNSE) (v.15, n.0, S2, 2010) and the National School Food Program: limits and possibilities for healthy eating (v.18, n.4, 2013).

The themes diversify between 2007 and 2019, adapting to public health's multidisciplinary nature, a strong point of the investigated journal. In 2007, the editorial's priority was the vital interaction between the social environment, family, and

individuals, the relevance of physical and emotional integrity, and the action of family and services in children and adolescent care. The theme of quality of life has been present as of this year and will regularly remain in later publications.

The theme of resilience appears in the editorial, although it was still in the initial phase of its incorporation in the Brazilian scenario. In 2009, the editorial focused on the mental health of children and adolescents. It criticizes the poorly structured and disseminated mental health policies for the age group and substandard professional training. The editors require the implementation of a community-based care network and improvements in the mental health care model for the age group. Violence and adverse events that affect mental health are pointed out.

In 2011, priority was given to professionals working with children and adolescents, seeking to articulate different methodological approaches, knowledge, and regions of the country. The development from preterm birth to adolescence was sought, and health education and the evaluation of health care and humanization programs stand out. The interaction between biological and environmental aspects was reinforced. Health and living conditions were analyzed in the 2014 editorial, comparing similar and different cultural contexts inside and outside the country, pointing out the relevance of policies, programs, and projects on protecting and preventing diseases and conditions for impoverished people.

Two issues were launched in 2015. The first (v.20, n.1) highlights the social inequalities and the culture of violence that are a risk for delinquency, assault, deaths, and institutionalization of children and adolescents. Quality of life is the central element. Violence and psychosocial risks, homicides, and suicides are crucial issues. The second issue published this year is the first exclusively aimed at adolescents (v20, n.11), pointing out relevant issues at the physical and emotional level, such as physical development, food, oral health, quality of life, school life, professionalization, social inequality, mental health problems (depression, bullying, and drug abuse), violence, homelessness, work exploitation, sexually transmitted diseases, and unplanned pregnancies. The subject of masculinity is unprecedentedly addressed in the editorial. Prevention and health promotion actions and youth participation and leadership aiming at health self-care are recommended. The editors consider that the “health system must see the removal of adolescence from the figure of social problems’ scapegoat as one of its missions”²³.

In 2018, a volume was entirely aimed at adolescence and youth, addressing macro-structural issues such as social disruption, politics and corruption, freedom of choice as an offense, civil and police violence as a solution to social problems, and meritocracy among unequal as a market salvationist panacea. Adolescents and young people are seen as leaders of social, cultural, political, and economic processes, based on national and international reality. The socio-educational and prison systems, the sustainable development goals (SDGs) in the 2030 Agenda, health policies, and violence are addressed, among other topics. The political situation in the late 2010s is criticized for the lack of public resources for social policies, which are scarce in the name of fiscal adjustments. In this scenario, “the drastic restriction of possible life horizons is the challenge that young people will not be able to overcome without public support”²⁴. The editors demand a more massive public investment in childhood and adolescence.

The 2019 Journal covers children and adolescents from the perspective of public policies and commitments to the SDG’s 2030 Agenda, seen as a historic opportunity to improve children’s and adolescents’ rights and well-being, especially the most disadvantaged, ensuring a healthy world for girls and boys. The vulnerabilities of these stages of development originate from the broader social environment, from households and communities directly impacted by austerity policies and fiscal authority measures. Issues such as high morbidity and mortality due to assault, legal age for criminal responsibility, the statute of disarmament, extreme poverty, hunger, racism must be addressed. Providing quality health and education, promoting peaceful and inclusive societies, are considered agendas of commitments to the present and the future.

Discussion

The results show a significant growth of studies on adolescence in the *C&SC* in the last 25 years, which reflects its robust inclusion and rise in the field of public health, a fifteen-fold increase in recent years compared to the beginning of the Journal’s publication. Interestingly, while an increase in the number of studies explicitly addressing adolescence has been noted, the number of studies, including children and adolescents, inversely declined, which reveals investment focused on adolescence’s specifics, as found in international surveys²⁵.

As a multidisciplinary academic discipline, the study of adolescence emerged from the late 1960s with the journals *Youth and Society* (1969), *Journal of Youth and Adolescence* (1972), *Journal of Adolescence* (1978), *Journal of Adolescent Research* (1986), and *Journal of Research on Adolescence* (1991). Other specialized journals have emerged in the past two decades²⁵. In Brazil, only the *Adolescência & Saúde* journal, created in 2004, is specific to the topic in health, giving relevance to C&SC's role in stimulating knowledge about this phase of life. The analysis of publications in the last 25 years shows the theme's vocation for public health's multidisciplinary focus. Relevant texts for adolescent public health emerge, such as those related to food/nutrition, physical activity, health, illness, and accidents and violence.

The analysis of the trend of publications of themes in the period is aligned with national and international bibliography, prioritizing themes such as food/obesity/physical activity, drug use, and violence, emphasizing risk aspects²⁵. The perspective of Brazilian social inequality is also highlighted through socioeconomic standard/income and quality of life analyses. Noteworthy is the interdisciplinary effort of oral health authors in publishing various texts from the perspective of public health. A low frequency of reflections on adolescent offenders, sexuality, LGBTI+ population, and racial and ethnic issues is observed. A topic that is also rarely addressed is the relationship between globalization and virtual social networks in adolescents' lifestyle, behavior, values, and health.

Despite the negligible representativeness of abstracts on adolescent offenders, this was one of the focuses of C&SC's 2018 editorial. The health of children and adolescents deprived of their liberty was the subject of an editorial in *The Lancet Child and Adolescent Health*²⁶ journal, which highlighted the relevance of the global study on children deprived of their liberty conducted by the United Nations²⁷. Another example of relevant and emerging themes is 'masculinity', which, while found in only three abstracts analyzed, one of them in the 2015 editorial, reinforces the importance of this issue for public health.

Concerning the method, a significant increase in research with quantitative methods and a decline in papers with methodological triangulation is observed. Public health has predominantly followed a positivist approach based on epidemiology. However, the relevance of qualitative studies is highlighted by international journals, which also point to the difficulty in the pub-

lication of these studies in high impact medical and health journals²⁸. Quantitative and qualitative approaches are combined but less commonly published. International authors reinforce that using this type of research strategy is essential to understanding complex phenomena and point to an increase in interest in this approach involving different disciplines²⁹. Qualitative studies have been in place since the onset of the C&SC publication and continue to this today, bringing essential contributions to the field of public health and showing the Journal's commitment to comprehensive approaches. Concerning the combination of qualitative and quantitative approaches, the *Journal C&SC* has a higher volume of papers in the first period, reducing the number of publications in recent years. One may ask whether the number of abstracts reflects the actual amount of research combining different research methods, or whether researchers divide the papers into qualitative and quantitative for publication.

One of the challenges in the field involves developing effective policies that achieve a balance between scientific data and political pragmatism that meets the needs of the population throughout life³⁰. In general, public policies aimed at this population were characterized by vertical professional practices, based on the logic that technical knowledge predominates over the individual's comprehensive understanding. This posture puts the adolescent in a position of inferiority and passivity^{19,31}. While the ECA has recognized the adolescent as a subject of rights, this portion of the population is still hardly visible in public policies, devaluing the leadership of its history^{9,10}. The cultural and social aspects experienced by them and gender issues, which show differences in adolescents' experiences, are often not considered when planning health actions¹⁹. Health actions must involve health services and schools because adolescents have a voice and space to expose their demands, with listening and reception, enabling linkages required by comprehensive care. Therefore, health services provision must extrapolate disease-related issues (whether physical or mental), which would require reflecting on national academic production.

A concern that has been highlighted recently in the C&SC is the reflection on the need to adopt public policies to combat and overcome the country's geographic, social, and ethnic inequalities and celebrate the richness of the diversity of the adolescent phase. On this issue, the Editorial of the *Lancet Magazine*¹ warns that the economic, political, commercial, and environ-

mental aspects, so essential for the health of children and adolescents, have changed dramatically, introducing emergency themes such as climate problems, migration, growing conflicts, policies and agendas that distance themselves from the provision of social safety networks and poverty reduction, continued commercial exploitation of children and young people, which lead to unhealthy diets and exposure to alcohol and tobacco products. Lancet believes that, as of 2020, children and adolescents must receive particular attention to ensure a sustainable and healthy future for everyone¹. This challenge arises not only for *Journal Ciência & Saúde Coletiva*, the target of the analyses in this paper, but the Brazilian soci-

ety that must advance towards systemic, intricate knowledge and that turns to aspects of health promotion of adolescents, following the existing national norms and laws, but still in the implementation phase.

The analyses presented in this chapter were based on the themes collected in the papers' abstracts and titles, which hinders understanding the paper as a whole. Some themes and analyses relevant to public health may have been presented in the paper's body and not in the abstract. These limitations refer to the reduced space for writing the abstract and the information it contains.

Collaborations

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