

Population aging in small cities and the promotion of health and well-being: outdoor gyms in Centenário do Sul/PR - Brasil

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Envelhecimento populacional em pequenas cidades e a promoção da saúde e bem-estar: academias ao ar livre em Centenário do Sul/PR

RESUMO

Objetivo - Investigar as políticas públicas voltadas para a promoção de saúde e bem-estar na terceira idade, mais especificamente o exercício físico na pequena cidade de Centenário do Sul, no Paraná

Metodologia - Para tanto, realizou-se uma pesquisa de abordagem qualitativa e do tipo exploratória, com a técnica de observação simples e entrevista estruturada junto a idosos residentes em Centenário do Sul, Paraná.

Originalidade/relevância - O estudo se distingue por focalizar a interface entre envelhecimento populacional, políticas públicas e uso cotidiano de equipamentos urbanos de saúde preventiva em uma pequena cidade, um recorte ainda subexplorado em comparação às análises concentradas em centros metropolitanos. Destaca-se ainda a relevância para formulação de políticas públicas, ao passo que indica como a simples implantação de infraestrutura não garante, por si, adesão nem mudança de hábitos.

Resultados - Verificou-se que as academias ao ar livre não têm sido utilizadas pelos idosos que residem nos bairros onde foram instaladas e que idosos não concebem a prática de exercício físico como uma forma de promoção da saúde, bem como não há ações da gestão municipal que contribuam para a construção uma nova forma de olhar para os exercícios físicos na velhice.

Contribuições teóricas/metodológicas – A pesquisa contribui ao articular a discussão do envelhecimento com a produção/uso do espaço urbano e com a efetividade de políticas públicas em contextos não metropolitanos, destacando dimensões socioterritoriais (localização, acessibilidade, significados atribuídos ao equipamento, rotinas e redes de sociabilidade) que condicionam a política. Metodologicamente, demonstra a potência da combinação entre observação simples e entrevistas estruturadas para captar o descompasso entre oferta institucional (equipamentos) e apropriação social (uso, sentido e práticas).

Contribuições sociais e ambientais - Os achados oferecem subsídios para o aprimoramento de políticas municipais de saúde e bem-estar na velhice, indicando a necessidade de ações integradas (educação em saúde, acompanhamento profissional, grupos regulares, estratégias de engajamento comunitário e participação dos idosos no desenho das iniciativas). Indiretamente, reforçam o papel dos espaços públicos e de áreas abertas na promoção da saúde, na convivência e na valorização do ambiente urbano, favorecendo a apropriação qualificada de equipamentos ao ar livre e a ativação cotidiana de espaços coletivos.

PALAVRAS-CHAVE: Pequena cidade. Envelhecimento da população. Lazer. Políticas públicas.

Population aging in small towns and the promotion of health and well-being: outdoor gyms in Centenário do Sul, Paraná, Brazil

ABSTRACT

Objective – To investigate public policies aimed at promoting health and well-being among older adults, specifically physical exercise, in the small town of Centenário do Sul, Paraná, Brazil.

Methodology – To this end, an exploratory qualitative study was conducted, using simple observation and structured interviews with older adults residing in Centenário do Sul, Paraná, Brazil.

Originality/Relevance – The study stands out for focusing on the interface between population aging, public policies, and the everyday use of preventive health urban facilities in a small town—an empirical setting that remains underexplored compared with analyses concentrated in metropolitan centers. It is also relevant to policy formulation, as it shows that the mere provision of infrastructure does not, in itself, ensure adherence or changes in habits.

Results – The findings indicate that the outdoor gyms have not been used by older adults living in the neighborhoods where they were installed; that older adults do not conceive physical exercise as a means of promoting health; and that there are no municipal management actions that contribute to building a new perspective on physical exercise in old age.

Theoretical/Methodological Contributions – The research contributes by linking the discussion of aging to the production/use of urban space and to the effectiveness of public policies in non-metropolitan contexts, highlighting socio-territorial dimensions (location, accessibility, meanings attributed to the equipment, routines, and sociability networks) that condition policy outcomes. Methodologically, it demonstrates the value of combining simple

observation and structured interviews to capture the mismatch between institutional provision (equipment) and social appropriation (use, meaning, and practices).

Social and Environmental Contributions – The findings provide support for improving municipal policies on health and well-being in later life, indicating the need for integrated actions (health education, professional follow-up, regular groups, community engagement strategies, and the participation of older adults in the design of initiatives). Indirectly, they reinforce the role of public spaces and open areas in promoting health, social interaction, and the appreciation of the urban environment, fostering the qualified appropriation of outdoor facilities and the everyday activation of collective spaces.

KEYWORDS: Small town. Population aging. Leisure. Public policies.

Envejecimiento poblacional en pequeñas ciudades y la promoción de la salud y el bienestar: gimnasios al aire libre en Centenário do Sul, Paraná, Brasil

RESUMEN

Objetivo – Investigar las políticas públicas orientadas a la promoción de la salud y el bienestar en la tercera edad, más específicamente el ejercicio físico, en la pequeña ciudad de Centenário do Sul, Paraná, Brasil.

Metodología – Para ello, se llevó a cabo una investigación cualitativa de carácter exploratorio, utilizando la técnica de observación simple y entrevistas estructuradas con personas mayores residentes en Centenário do Sul, Paraná, Brasil.

Originalidad/Relevancia – El estudio se distingue por centrarse en la interfaz entre envejecimiento poblacional, políticas públicas y uso cotidiano de equipamientos urbanos de salud preventiva en una pequeña ciudad, un recorte aún poco explorado en comparación con los análisis concentrados en centros metropolitanos. Asimismo, destaca su relevancia para la formulación de políticas públicas, en la medida en que evidencia que la mera implantación de infraestructura no garantiza, por sí sola, la adhesión ni cambios de hábitos.

Resultados – Se constató que los gimnasios al aire libre no han sido utilizados por las personas mayores que residen en los barrios donde fueron instalados; que las personas mayores no conciben la práctica de ejercicio físico como una forma de promoción de la salud; y que no existen acciones de la gestión municipal que contribuyan a construir una nueva manera de valorar el ejercicio físico en la vejez.

Contribuciones Teóricas/Metodológicas – La investigación contribuye al articular la discusión sobre el envejecimiento con la producción/uso del espacio urbano y con la efectividad de las políticas públicas en contextos no metropolitanos, destacando dimensiones socioterritoriales (localización, accesibilidad, significados atribuidos al equipamiento, rutinas y redes de sociabilidad) que condicionan la política. Metodológicamente, demuestra la potencia de la combinación entre observación simple y entrevistas estructuradas para captar el desfase entre la oferta institucional (equipamientos) y la apropiación social (uso, sentido y prácticas).

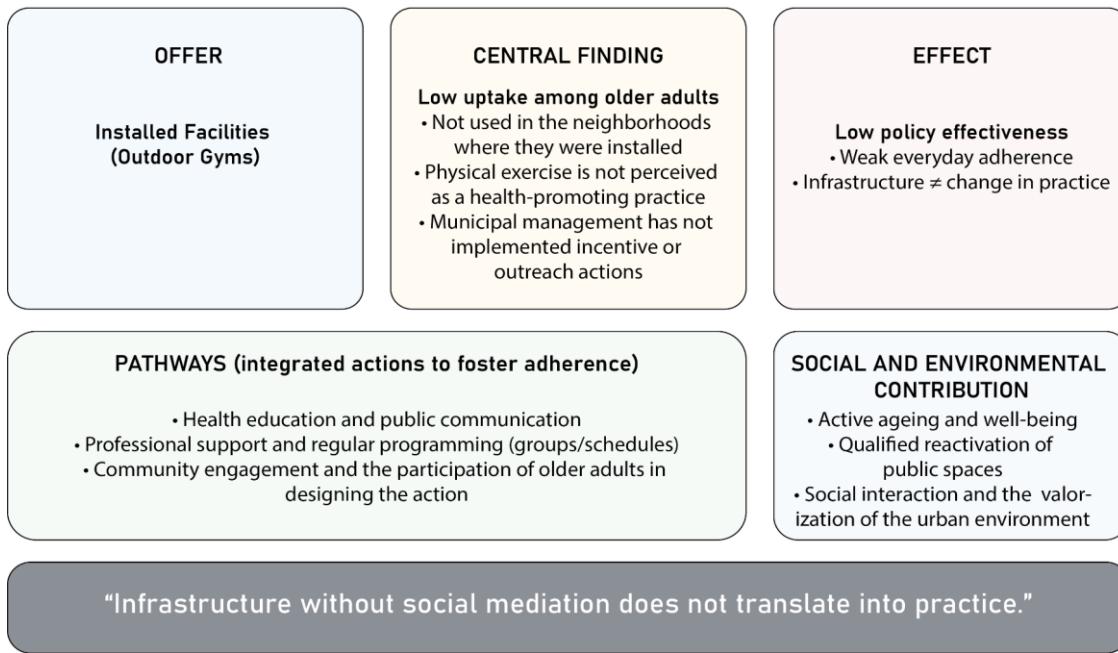
Contribuciones Sociales y Ambientales – Los hallazgos aportan insumos para el perfeccionamiento de las políticas municipales de salud y bienestar en la vejez, señalando la necesidad de acciones integradas (educación en salud, acompañamiento profesional, grupos regulares, estrategias de involucramiento comunitario y participación de las personas mayores en el diseño de las iniciativas). De manera indirecta, refuerzan el papel de los espacios públicos y de las áreas abiertas en la promoción de la salud, la convivencia y la valorización del ambiente urbano, favoreciendo la apropiación cualificada de equipamientos al aire libre y la activación cotidiana de espacios colectivos.

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PALABRAS CLAVE: Pequeña ciudad. Envejecimiento de la población. Ocio. Políticas públicas.

GRAPHICAL ABSTRACT

Outdoor Gyms and Active Ageing: Key Findings



1 INTRODUCTION

In Brazil, according to demographic data, population aging has been a reality in recent decades. This phenomenon has challenged the social and economic structures of societies worldwide, particularly in those located in Latin America. Regarding Brazilian territory, according to the 2022 Demographic Census, the population of elderly residents in the country was 32,113,490 people, representing a 56.0% increase compared to the 2010 census. Of this total population, 17,887,737 (55.7%) were women, and 14,225,753 (44.3%) were men (IBGE, 2022).

Based on the state of Paraná, it is possible to observe rapid growth in the demographic composition of the elderly population. In 2010, the aging index was 49, rising to 89 in the 2022 census. This state is characterized by a predominance of small towns compared to medium and large cities. In this context, Centenário do Sul stands out. With a population of 10,832, according to IBGE (2022), the municipality, located in Northern Paraná and part of the Londrina Metropolitan Area, has a significant number of elderly residents.

This aging pattern is reflected in the data, with approximately 20% of Centenário do Sul's population being elderly, equivalent to 2,182 people in 2022 (IBGE, 2022). According to an analysis by IBGE (2022) based on the aging index calculation, smaller cities have exhibited the highest index. That is, the group of cities with populations of up to 5,000 residents reached an aging index of 107, indicating that in most small towns, population aging is more pronounced than in cities with populations over 500,000 residents, which are considered medium or large cities.

The city selected for this research, although with a population slightly over 10,000 inhabitants, has shown a higher aging index compared to other cities with the same population size, reaching an indicator of 109 elderly people for every 100 children and young people. It is within this context of an aging population in the urban area that the main question arises: What is the effectiveness of outdoor gyms for the elderly in Centenário do Sul in promoting health and well-being for the elderly population? Does the geographical distribution of these gyms facilitate their use and accessibility?

The aim of this study is to investigate public policies focused on promoting health and well-being in old age, specifically physical exercise in the small city of Centenário do Sul, Paraná.

Given the increasing aging of the population, it becomes urgent to discuss and analyze public policies directed at the elderly, especially considering the specificities of urban contexts in small towns. Most research on the subject focuses on large urban centers, neglecting the peculiarities and challenges faced by the elderly in smaller communities. This gap justifies the present research, which seeks to investigate the territorialization of public policies for outdoor gyms for the elderly, with a focus on a small city.

This is a qualitative research study, as discussed by Minayo (2010), focused on the process and not just the final result, allowing the study of human groups in their context, encompassing individual and collective aspects, as well as their interpersonal and institutional relationships. It is also an exploratory research, conducted through a survey of information from secondary sources (bibliographic and documentary) and primary sources, with semi-structured interviews (Gil, 2008) applied to ten elderly residents living in neighborhoods with outdoor gyms in Centenário do Sul.

The final text is organized into two parts. In addition to the introduction, the first section discusses the aging population and the importance of public policies for the elderly. Then, the second section addresses outdoor gyms in the small towns of Centenário do Sul, reflecting on the effectiveness of this public policy in promoting health in old age.

2 AGING OF THE POPULATION AND PUBLIC POLICIES

When it comes to population aging and studies in the field of social sciences, some authors highlight the relationships between space, society, and aging. The author Doreen Massey, in her work *For Space* (2005), emphasizes the importance of understanding space as a dynamic process, shaped by social and political interactions. In the context of population aging, Neil Smith, in *The New Urban Frontier: Gentrification and the Revanchist City* (1996), addresses how urban changes, such as gentrification, impact different demographic groups, including the elderly.

Smith (1996) focused his studies on the city, discussing how the process of gentrification, with the revitalization of degraded urban areas, has contributed to rising housing costs and the displacement of low-income residents, including elderly individuals from historic communities. This can lead to social and economic exclusion of the elderly, who may be forced to move to peripheral areas with less access to public services and resources.

Thus, public policies have the potential to promote the inclusion of the elderly in these urban transformations. Government interventions, such as housing programs for low-income elderly individuals or the establishment of accessible and safe public spaces, can help ensure that the elderly are not abandoned during gentrification processes. In this regard, it is essential to recognize that urban changes may affect different demographic groups unequally, including older adults.

Moreover, it is necessary to consider that population ageing does not unfold homogeneously across Brazilian territory; in other words, the demographic transition is expressed in changes in population size and composition at the regional scale (Luz, ed., 2025). When examined through a space-time lens, the production of Brazilian society reveals socio-spatial differences that also encompass demographic dimensions, resulting in pronounced territorial heterogeneity. As discussed by Santos and Gonçalves (2023) and Quaresma et al. (2023), this territorial heterogeneity includes demographic components that indicate population groups situated at distinct stages of the age-structure transition. Assessing the factors that shape age structure at the regional scale can contribute to producing more precise estimates and more robust hypotheses regarding population growth trends across different regional portions of the national territory (Santos & Gonçalves, 2023). In the Brazilian case, although studies employing multiple projection methods to analyze future demand for health services (among other types of services) remain scarce, the international literature already points to the fact that, despite an inherent component of uncertainty, projections help to envision plausible scenarios for a given area and constitute important tools for planning and for the implementation of actions in the context of urban planning and management (Nowossadeck et al., 2020; Oksuzyan et al., 2020).

Therefore, it is crucial to recognize that urban changes can affect different demographic groups unevenly, including the elderly. When planning urban space, it is essential to consider the elderly population, as they represent a significant and growing part of society. Population aging brings specific needs, from physical accessibility to services and infrastructure tailored to them. Ignoring these needs can result in social exclusion and limitations for the elderly.

Urban planning is identified with the indirect production of primary goods, understood as equipment and services directly provided by public authorities. From this perspective, urban planning policy would primarily involve the coordination of public decisions and actions in time and space, which, using urban issues as a privileged field for intervention, would aim to promote the development of cities (Vitte; Keinert, 2009, p. 22).

Inclusive urban planning that takes into account the demands of this portion of the population is crucial to ensuring cities that are more equitable, accessible, and livable for all citizens, regardless of age. To this end, according to the WHO (2021), it is important to produce comparable data aligned with priorities negotiated with stakeholders and public managers, as well as to structure the issue within intersectoral agendas (health, care, social protection, and the environment). In practice, this entails everything from creating safe and accessible public spaces to developing adequate transportation systems, alongside ensuring the availability of health and leisure facilities adapted to older adults' needs.

Among the various problems related to the lack of urban planning in the Brazilian context, one of the most significant is the failure to consider the elderly population when planning the "city." This is reflected in the issue of accessibility, as its absence constitutes a significant challenge for older adults, as well as for other groups that require cities guided by principles of mobility accessibility to facilities and services. Such accessibility is essential not only for older adults, but also for children, women, and people with disabilities living in urban space (Rocha; Silva; Lomardo, 2023).

This urban inadequacy for elderly people also creates barriers to accessing essential services, such as public transportation and medical facilities, as noted by Santos et al. (2017). In addition, urban safety is an additional concern, especially in poorly lit areas and those with insufficient policing, which increases the risk of falls and other incidents, directly impacting the sense of safety and well-being of elderly people navigating the city.

According to Moreira et al. (2022), the concept of creating inclusive urban environments directly relates to forming a city that welcomes all, regardless of their individual needs, requiring the development of a new conception of what it means to live in society, reducing differences. Freijó and Brito (2015) emphasize that accessibility is an extension of the constitutional right to equality guaranteed in the Citizen Constitution of 1988.

Barreto (2012) states that those responsible for producing the city must consider the elderly, so that the city becomes "elderly-friendly," meaning one that provides conditions for active aging, optimizing opportunities for health, participation, and safety, with the aim of enhancing the quality of life in the aging process of populations. According to the author, the concept of active aging, as defined by the World Health Organization (WHO, 2005), is based on three essential pillars: health, participation, and safety. Additionally, Active Aging is influenced by six main determinants: (1) social and health services; (2) behavioral determinants; (3)

personal determinants; (4) social determinants; (5) economic determinants; (6) physical environment.

According to Veras (2003), the elderly population represents a group with a higher incidence of health problems, requiring more frequent use of healthcare services, resulting in higher costs. Therefore, public policies focused on urban mobility, social assistance, and access to healthcare services should be prioritized by municipal managers to meet the growing needs of this segment of society that is aging.

In addition to accessibility issues, public policies related to leisure for the elderly are a national shortcoming. This is due to low wages, including pensions, and the absence of a culture of leisure spread through leisure education. According to Mori (2010, s/p), "[...] the problem of lack of leisure for older people exists across all social classes, but especially for those economically disadvantaged due to the lack of incorporation of the culture of leisure through Leisure Education."

Given urban challenges such as mobility, it is crucial to recognize the importance of considering the elderly population within public policies. Population aging is a reality that requires a specific and sensitive approach from public managers.

The lack of urban planning and management geared toward the inclusion and accessibility of elderly people in cities can result in social exclusion and significant limitations on their quality of life. In this sense, it is essential to understand how public policies can be effectively implemented to meet the needs of this growing segment of the population, ensuring them dignity, autonomy, and active participation in urban life.

As for public policies for the elderly population in Brazil, the 1988 Federal Constitution represented a significant milestone for the inclusion and protection of the rights of the elderly in Brazil. For the first time in the country's constitutional history, the document explicitly recognized the elderly as rights holders, establishing fundamental principles for their protection and well-being. The Magna Carta ensured, among other rights, protection for health, social security, and social assistance for the elderly, consolidating the state's responsibility to guarantee dignified living conditions for this segment of the population.

In the 1988 constitution, Articles 3 and its subsections I and II define the fundamental objectives of the Republic as building a free, just, and solidary society, ensuring national development, eradicating poverty and marginalization, reducing social and regional inequalities, and promoting the well-being of all, without prejudice of origin, race, sex, color, age, or any other form of discrimination.

With the promulgation of Law 8,742, dated December 7, 1993, the Continuous Cash Benefit (BPC), also known as BPC, became an important pillar of social assistance for the elderly and people with disabilities in Brazil. Managed by the National Institute of Social Security (INSS), the benefit is regulated by the Organic Law of Social Assistance (LOAS).

Since its publication in the Official Gazette of the Union on December 8, 1993, the BPC has been a crucial measure to guarantee the livelihood of elderly people over 65 and people with disabilities in situations of financial vulnerability. Law 8,742 of 1993, in its Article 2, subsection V, establishes that "[...] the guarantee of a monthly benefit equivalent to a minimum wage for a person with a disability and for the elderly who cannot provide for their own maintenance or have it provided by their family" (BRAZIL, 1993).

The National Policy for the Elderly (PNI), established by Law No. 8,842/1994, represented a significant advancement in the realization of constitutional principles aimed at the elderly. Through this legislation, Brazil established guidelines and mechanisms for the fulfillment of social, economic, and cultural rights for the elderly, as well as promoting their participation in society.

The PNI emphasized the need for specific public policies, covering areas such as health, social assistance, housing, transportation, and culture, aiming to ensure a dignified and inclusive old age. According to Gonçalves (2018), concern for the health of the elderly population should not be limited solely to the management/prevention of physical illnesses, but also extend to their mental health, financial stability, ability to perform daily tasks, and social interactions.

In Articles 1 and 2 of the PNI, the goal of guaranteeing social rights for the elderly is highlighted. The policy not only provides assistance but also aims to promote their autonomy, integration, and active participation in the community. This approach not only recognizes the continuous contribution of the elderly to society but also reinforces their intrinsic dignity and the inalienable right to a full life, regardless of age.

Article 1 - The National Policy for the Elderly aims to ensure the social rights of the elderly, creating conditions to promote their autonomy, integration, and effective participation in society. Article 2 - For the purposes of this Law, an elderly person is defined as an individual aged sixty years or older. (BRAZIL, 1993).

Furthermore, by defining the age criterion to qualify as elderly, the legislation establishes a clear baseline for the application of these rights and benefits. By considering a person elderly at the age of sixty, the National Policy for the Elderly (PNI) acknowledges that aging should not be seen as a decline but as a stage of life in which society has the responsibility to provide the necessary support to ensure that elderly people enjoy a dignified and meaningful life. This definition also implies the need for specific policies and programs adapted to the needs and realities of this age group, ensuring that the elderly can live with dignity, safety, and quality of life.

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After the approval of the National Policy for the Elderly (PNI), the National Council for the Elderly was established, as documented by Brazil (1994). According to Gonçalves (2019), this policy outlined strategies and guidelines that decentralize its initiatives, covering states and municipalities, as well as promoting partnerships with governmental and non-governmental organizations. The PNI also reaffirms the right of elderly people to medical assistance in various forms of care provided by the Unified Health System (SUS).

In the educational context for the elderly, the document proposes six essential measures to promote inclusive and enriching learning. Among these measures is the adaptation of curricula, methodologies, and teaching materials for educational programs aimed at this stage of life. It also highlights the importance of including content on aging in the minimum curricula of all levels of formal education. The inclusion of Gerontology and Geriatrics as subjects in higher education courses is also suggested, recognizing the relevance of these topics in academic training (BRAZIL, 1994).

Additionally, Moscon (2019) emphasizes the special need to promote educational programs through the media to disseminate valuable information about the aging process. It

also proposes the development of distance learning programs adapted to the needs of the elderly and supports the creation of universities for the elderly. These measures aim not only to combat prejudice but also to promote a broader and more inclusive view of aging, recognizing the importance of each life stage.

In 2003, the Statute of the Elderly was enacted, Law No. 10,741/2003, representing a significant legal milestone in the protection and promotion of the rights of the elderly. This set of laws reaffirmed and expanded the rights established in the Constitution and the National Policy for the Elderly, establishing additional guarantees, such as priority access to social programs, preferential service in public agencies, and penalties for discrimination and abuse against the elderly. The Statute also provides for the creation of specific public policies, reinforcing the State's commitment to ensuring full citizenship and dignity for elderly Brazilians.

The Statute of the Elderly (Brazil, 2003) reaffirms fundamental rights for elderly individuals, such as comprehensive protection to preserve their physical and mental health, as well as to promote their moral, intellectual, spiritual, and social development in an environment of freedom and dignity. This legislation establishes as a duty of the family, community, society, and public authorities to ensure, with absolute priority, the elderly's access to life, health, food, education, culture, sports, leisure, work, citizenship, freedom, dignity, respect, and family and community coexistence.

Furthermore, the Statute of the Elderly (Brazil, 2003) outlines a series of specific measures to ensure this priority, such as preferential service in public and private agencies, the preferential allocation of public resources, the promotion of alternative forms of participation and intergenerational interaction, the training of health and social assistance professionals, the dissemination of educational information about aging, guaranteed access to health and social assistance services, and priority in the refund of income tax.

The Statute of the Elderly represents a significant advancement by imposing penalties and administrative measures for those who fail to comply with its legal provisions. According to Camarano (2013), in the event of a violation of these provisions, it is the duty of the Public Ministry to intervene to ensure their application. Article 4 stipulates that everyone has the duty to prevent any threat or violation of the rights of the elderly. Those who fail to meet this obligation will be held accountable, regardless of whether they are individuals or legal entities (companies, institutions, government agencies, etc.). Regarding the education of the elderly, Article 21 lists:

The Public Authorities will create opportunities for the elderly to access education, adapting curricula, methodologies, and teaching materials to educational programs intended for them. § 1 – Special courses for the elderly will include content related to communication techniques, computing, and other technological advances, for their integration into modern life. § 2 – The elderly will participate in civic or cultural celebrations, transmitting knowledge and experiences to other generations, aiming at the preservation of memory and cultural identity. (BRAZIL, 2003).

However, Article 22 stipulates the inclusion of content about the aging process, respect, and the appreciation of elderly people in the minimum curricula of formal education at all levels. This measure aims to eliminate prejudice and promote knowledge on this fundamental topic. By emphasizing the importance of education to combat discrimination against the elderly,

the article highlights the role of schools in building a more inclusive society, aware of the rights and dignity of older people.

However, according to Peres (2007), it is not considered that the formal educational system in capitalist society is inherently exclusionary, focusing primarily on preparing children and young people for the labor market, neglecting the elderly and older adults, who are no longer seen as a relevant part of the productive process.

An important avenue for addressing the reality outlined by the author lies in the concept of the educating city (*cidade educadora*), which, among its principles, advocates the creation of urban spaces that “[...] encourage lifelong learning, active citizenship, and respect for the environment. This model argues that education is not restricted to classrooms, but also takes place in squares, parks, libraries, museums, and other public spaces, fostering interaction among different generations and cultures” (Santos & Benini, 2024). Such spaces—like outdoor gyms—as policy outcomes, carry the potential to promote social inclusion and civic participation among older adults and other social groups.

Based on this brief theoretical discussion, it is possible to recognize the importance of designing public policies aimed at promoting health and well-being that can address older adults across their diverse territorial contexts—particularly those in small towns, which have shown significant ageing levels over the past decade.

3 LEISURE AND HEALTH PROMOTION THROUGH OUTDOOR GYMS IN CENTENÁRIO DO SUL/PR

The phenomenon of population aging has been primarily driven by the reduction in fertility rates, which has been progressively occurring in Brazil since the late 1960s, as well as improvements in life expectancy across all age groups, including among the elderly (IBGE, 2022).

Between 1980 and 2022, the country witnessed a significant increase in the proportion of elderly people in the total population, rising from 6.1% to 15.8%. This growth represented a 46.6% increase compared to the 2010 Demographic Census, when elderly people represented 10.8% of the population. At the same time, there was a sharp decline in the proportion of children aged 0 to 14, from 38.2% in 1980 to 19.8% in 2022, highlighting a substantial shift in the country's age structure, according to IBGE data from 2022.

In 2022, the states with the lowest percentages of elderly people aged 60 or older were Roraima (7.9%), Amapá (8.4%), and Amazonas (9.1%). On the other hand, Rio Grande do Sul, Rio de Janeiro, and Minas Gerais stand out for having the highest proportions of elderly population, with percentages of 20.2%, 18.8%, and 17.8%, respectively. In relation to the state of Paraná, IBGE data from 2022 show that 16.5% of the population is aged 60 or older.

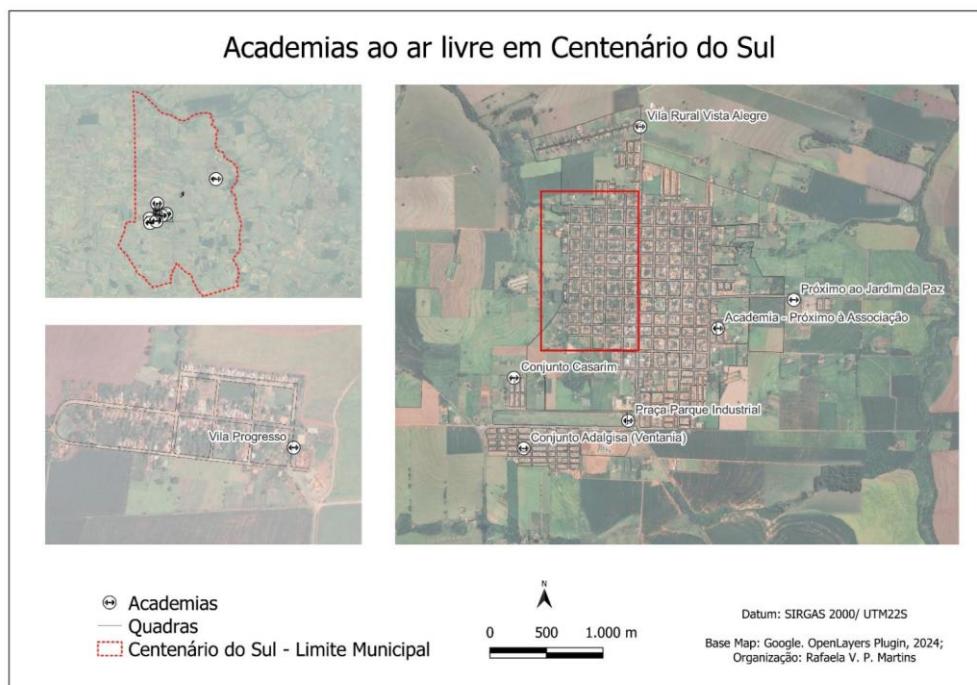
Small cities in Paraná have exhibited a higher aging rate compared to medium and large cities. The municipality of Centenário do Sul-PR, which has a total population of 10,832 inhabitants according to the 2022 census, is one of these cases. Considering only the elderly population, the municipality has 2,182 people over 60 years old, representing approximately 20% of the population. Regarding the aging index, for every 100 children and young people aged 0 to 14 years, there are 109 elderly people in the municipality.

The city of Centenário do Sul, like other small cities, has offered few public facilities for leisure and health promotion to the general population, particularly to the elderly population.

Among the actions aimed at attending to the elderly, attention is drawn to the public policy of outdoor gyms.

In the municipality of Centenário do Sul, there are seven outdoor gyms: in the Conjunto Adalgisa (Ventania), Conjunto Casarim, Praça do Parque Industrial, Bairro Guilherme Pizzolato (Associação), Jardim da Paz (Caveirinha), Vila Rural Vista Alegre, and the district of Vila Progresso. Previously, there was a gym in the central square near the main church, but it was removed to make space for a fountain (Figure 1).

Figure 1 – Location of outdoor gyms in Centenário do Sul, 2024



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Source: Field Surveys, 2024.

Figure 1 shows that in the urban area, there are four outdoor gyms, all located in the eastern, southern, and southwestern portions of the urban grid. In the western and northwestern portions, outlined by a red rectangle, as reported by the interviewees, public policies in the neighborhoods within this delineated area have historically been neglected. The absence of outdoor gyms in this area may indicate a disparity in access to public spaces intended for health promotion and well-being for the elderly, especially those with movement limitations.

Furthermore, the northern portion of this red-delineated area is characterized by a steep slope and has been labeled pejoratively as "barroca" for decades. This designation comes from the fact that it was one of the last areas to receive pavement. Before paving, during rainy periods, it became a real mud pit (barroca). Only in recent decades has this part of the city started receiving asphalt, but the stigma associated with the lack of public policies for the area still persists.

In the other portions of the city with outdoor gyms, they are in good condition and easily accessible. However, during visits made to these areas at different times, it was observed that there were no residents using the facilities, and they were empty of exercise practitioners.

When people were present, they were mostly mothers with children playing or walking lightly around.

The majority of elderly interviewees living near these urban facilities stated that they did not use the gym due to health issues. Among the 10 interviewees, only one woman said she regularly used the gym, and two men said they preferred activities such as soccer, cycling, and walking. The others (six) mentioned different health problems such as knee/joint pain, bronchitis, high blood pressure, early-stage Alzheimer's, back pain, post-surgery issues, and heart problems. One individual stated that they preferred conventional gyms, as they believed these were more effective, with professional guidance for exercises (Table 1).

Table 1 – Responses of elderly people regarding the use of outdoor gyms in Centenário do Sul/PR-Brasil

Interviewed subjects*	Do you use the outdoor gym?	Reasons for not using outdoor gyms
Edinalva (65 years)	No	Health problem. (knees/joints).
Edivaldo (60 years)	No	Shows a preference for recreational physical activities, such as group soccer and individual cycling.
Sebastiana (78 years)	No	Health issue (respiratory/bronchitis).
Rita (65 years)	Yes	
Benedito (66 years)	No	Prefers cycling and walking.
Virginia (91 years)	No	Health problem: High blood pressure and early-stage Alzheimer's.
Maria (60 years)	No	Health problem: Had spine surgery.
Josmar (60 years)	No	Prefers traditional gym because it is more effective.
Ana (82 years)	No	Health problems (spine).
Sandro (60 years)	No	Health problems (cardiac).

*Real age and sex, only the name is fictitious.

Source: Field surveys, 2024. Organized by the authors, 2024.

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The data collected in Centenário do Sul indicate that health emerges, according to the elderly interviewees, as the main obstacle to frequenting these spaces. Around 70% of the elderly participants in the research reported health problems as a reason for not using the outdoor gyms. This finding highlights the importance of health conditions as a determining factor in physical activity practices among this population. This situation emphasizes the need for personalized and adapted approaches that consider the health limitations of the elderly in order to promote their inclusion in safe and practical physical activities.

At the same time, it reveals the need to promote the understanding of prevention through physical activity, as discussed by Moscon (2019), who suggests educational programs using communication media to spread valuable information about the aging process. In other words, it is necessary to build the collective idea that physical activity is important at any stage of life as an ally in promoting health and well-being.

Another aspect revealed by the interviews concerns the need for recreational physical activities that are collective and low-cost to perform, such as games, cycling, and walking, as well as the preference for conventional gyms due to the constant presence of an instructor. Attention should also be drawn to the fact that this public policy of outdoor gyms has been adopted and implemented in several municipalities without the presence of physical education professionals to conduct these collective activities and stimulate, as well as monitor exercises on the equipment in these urban spaces. Therefore, there is a need to advance in creating

conditions to promote the autonomy, integration, and effective participation of the elderly, as outlined in Article 2 of the National Policy for the Elderly (BRASIL, 1993).

Although outdoor gyms are seen as an accessible alternative to encourage exercise among the elderly, there is a fundamental issue concerning their real effectiveness and adherence. Many of these spaces, especially in small towns like Centenário do Sul, are underutilized by the elderly population. This population was not consulted about the installation of these facilities and has neither been guided nor participated in actions that contribute to building the idea that physical exercise is essential for promoting health. Moreover, the elderly population, being a 'group with a higher incidence of health problems and thus requiring greater use of healthcare services' (Veras, 2003), should be the one practicing physical exercises to improve their conditions and experience active aging, as recommended by the World Health Organization (WHO, 2005).

In reality, these urban facilities have been implemented in the urban space of Centenário do Sul through the actions of regional and local politicians, who have seen this type of public policy as a way to secure votes, as they are visible, fixed, and easily funded and installed.

4 FINAL CONSIDERATIONS

The analysis of the data on the use of outdoor gyms for the elderly in Centenário do Sul reveals a complex scenario that reflects not only the health conditions of the population but also the perceptions built around physical exercise and health. Although outdoor gyms may initially be characterized as an attractive and easily accessible proposal, the reality shows that their effectiveness is compromised by factors such as: the lack of professional supervision, the absence of media-based actions to reinforce the idea of health promotion linked to physical exercise, and, primarily, the lack of democratic management that seeks to listen to the demands of the elderly population in a small town, regarding the challenges faced in old age and what they need in terms of public policies in their territory. Thus, it is evident that the construction of infrastructure does not guarantee elderly people's adherence to physical activities.

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The predominance of health problems as an obstacle to physical exercise among the elderly highlights the urgency of policies that consider the limitations of this population. Such policies should also aim to integrate different exercise modalities with the presence of a physical education professional, promoting both physical health and social interaction, which is essential for the well-being of the elderly.

Socialization in old age, as addressed in the research, is a crucial aspect that goes beyond the physical benefits of exercise. Social interaction helps combat loneliness and isolation—issues that become even more relevant in this stage of life. Therefore, promoting environments that encourage interaction between the elderly and across generations is fundamental to creating a more cohesive and healthy community, which is often neglected in outdoor gyms that, by nature, may limit such interaction.

The criticism of the structure of outdoor gyms, considered "weak" by some participants, emphasizes the need for a more focused approach on the quality and appropriateness of the facilities. This reality leads us to question the effectiveness of public

investments in spaces that, ultimately, may not meet the elderly population's demand due to being part of a vertical municipal management, without popular participation.

Finally, the analysis proposed in this article points to the urgent need to rethink how public policies for the elderly have been territorialized in Centenário do Sul. The construction of infrastructure should be accompanied by planning that considers the genuine adherence of the elderly, aiming to promote inclusion and well-being in a comprehensive way. The challenge is to create an environment that not only provides spaces for exercise but also respects the uniqueness and desires of the elderly population, ensuring that health and quality of life are prioritized in all initiatives. Thus, contributing to health and well-being, which is the goal of SDG 3 of the UN's 2030 Agenda – SDGs, which aims to ensure access to quality healthcare and promote well-being for all, at all ages.

Referências

BARRETO, K. M. L. **Envelhecimento, mobilidade urbana e saúde**: um estudo da população idosa (tese). Recife: Fundação Oswaldo Cruz; 2012.

BRASIL. Lei n.º 10.741, de 1º de outubro de 2003. **Dispõe sobre o Estatuto do Idoso e dá outras providências**: Estatuto do Idoso. Diário Oficial da União, Brasília, DF. Recuperado em 30 abril, 2024, de: http://www.planalto.gov.br/ccivil_03/leis/2003/l10.741.htm.

BRASIL. Lei n.º 8.842, de 04 de janeiro de 1994. **Política Nacional do Idoso**. Brasília, DF: Diário Oficial da União, 05 janeiro 1994. Recuperado em 30 abril, 2024, de: http://www.planalto.gov.br/ccivil_03/leis/l8842.htm.

BRASIL. **Presidência da República. Constituição da República Federativa do Brasil de 1988**. Brasília, DF: Senado, 1988. Recuperado em 30 abril 2024, de: http://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm.

CAMARANO, A. **Estatuto do Idoso**: Avanços com Contradições. Disponível em: <https://repositorio.ipea.gov.br/bitstream/11058/1279/1/TD_1840.pdf>. Rio de janeiro 2013.

FEIJÓ, A.; GOMES DE BRITO, V. Planejamento urbano e acessibilidade: o direito a uma cidade inclusiva? **REVISTA DO CEDS** Periódico do Centro de Estudos em Desenvolvimento Sustentável da UNDB N. 2 - Volume 1-março/julho 2015, semestral.

GIL, A. C. **Métodos e técnicas de pesquisa social**. 6. ed. São Paulo: Atlas, 2008

GONÇALVES, G. C. DA S.; MOURA, G. G. Planejamento urbano e acessibilidade para o idoso na cidade de Ituiutaba, MG - algumas reflexões interdisciplinares. **Revista Kairós-Gerontologia**, v. 21, n. 4, p. 457–480, 2018.

IBGE – **INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA**. Censo demográfico 2022 Disponível em: <<https://censo2022.ibge.gov.br/>>.

LUZ, L. (Coord.). **Estudo estratégico sobre as perspectivas demográficas para o Brasil no horizonte 2050**. Brasília: Ministério do Planejamento e Orçamento, 2025. 228 p. Disponível em: https://www.gov.br/planejamento/pt-br/assuntos/planejamento/estrategia-2050-conteudo/Arquivos/eb2050-estudo-perspectivas-demograficas.pdf?utm_source=chatgpt.com. Acesso em: 30 dez. 2025.

MASSEY, D. **For Space**. Londres: Sage, 2005. (ed. brasileira: « Pelo Espaço » Rio de Janeiro: Bertrand Brasil, 2008).

MINAYO, M. C. de S. **O desafio do conhecimento: pesquisa qualitativa em saúde**. 12 ed. São Paulo: Hucitec, 2010.

MOREIRA, C. Direito à Cidade: Inter-relações dos espaços públicos com a promoção do bem viver das pessoas. **Revista arquitetura cidade e contemporaneidade**, n 23, v.6. P. 23-31. 2022.

MORI, G.; FERREIRA DA SILVA, L. Lazer na terceira idade: desenvolvimento humano e qualidade de vida. **Motriz. Revista de Educação Física**. Rio Claro, v.16 n.4p.950-957, out./dez 2010.

MOSCON, N. et al. A Intersetorialidade Nas Políticas Públicas De Atendimento Ao Idoso Em Municípios Do Oeste De Santa Catarina. IX Seminário Internacional sobre o Desenvolvimento Regional. **Anais [...]**. Santa Cruz do Sul, RS, 2019.

NOWOSSADECK, E.; PRÜTZ, F.; TETI, A. Population change and the burden of hospitalization in Germany 2000-2040: decomposition analysis and projection. *PLoS One*, v. 15, n. 12, e0243322, 11 dez. 2020. DOI: <https://doi.org/10.1371/journal.pone.0243322>. Acesso em 30 dez. 2025.

OKSUZYAN, A. et al. Preparing for the future: the changing demographic composition of hospital patients in Denmark between 2013 and 2050. *PLoS One*, v. 15, n. 9, e0238912, 30 set. 2020. DOI: <https://doi.org/10.1371/journal.pone.0238912>. Acesso em 30 dez. 2025.

PERES, M. A. de C. *Velhice, trabalho e cidadania*: as políticas da terceira idade e a resistência dos trabalhadores idosos à exclusão social. 2007. P. 372. Tese (Doutorado em Educação) - Faculdade de Educação, Universidade de São Paulo, São Paulo, 2007.

QUARESMA, G.; SANTOS, R. O.; WONG, L. L. R.; CARVALHO, J. A. M. Fertility Transition in Brazilian Municipalities: An Exploratory Analysis of Cross-sectional Data in 1991, 2000 and 2010. *Revista Latinoamericana de Población*, v. 17, p. e202219-e202219, 2023. Disponível em: https://www.researchgate.net/publication/370480977_Fertility_Transition_in_Brazilian_Municipalities_An_Exploratory_Analysis_of_Cross-sectional_Data_in_1991_2000_and_2010. Acesso em: 30 dez. 2025.

ROCHA, E. A. da; SILVA, F. G.; LOMARDO, L. L. B. Habitação, alimentação e desigualdade urbana: estudo sobre a segregação de classe e gênero nas cidades. *Periódico Eletrônico Fórum Ambiental da Alta Paulista*, [S. I.], v. 19, n. 6, 2023. DOI: 10.17271/1980082719620234749. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/article/view/4749. Acesso em: 30 dez. 2025.

SANTOS, M. D. dos et al. Falta de acessibilidade no transporte público e inadequação de calçadas: efeitos na participação social de pessoas idosas com limitações funcionais. *Revista Brasileira de Geriatria e Gerontologia*, v. 20, n. 2, p. 161–174, abr. 2017.

SANTOS, R. M. dos; BENINI, S. M. Cidades Educadoras: Uma proposta para desenvolver sociedades sustentáveis. *Periódico Eletrônico Fórum Ambiental da Alta Paulista*, [S. I.], v. 20, n. 3, 2024.

DOI: 10.17271/1980082720320245338. Disponível em: https://publicacoes.amigosdanatureza.org.br/index.php/forum_ambiental/pt_BR/article/view/5338. Acesso em: 30 dez. 2025.

SANTOS, R. O.; GONÇALVES, G. Regionalização da transição da fecundidade no Brasil em 1991, 2000 e 2010. *Revista de Geografia-PPGEO-UFJF*, v. 13, n. 1, 2023. Disponível em: <https://periodicos.ufjf.br/index.php/geografia/article/view/39497>. Acesso em 30 dez. 2025.

SMITH, N. *The new urban frontier: gentrification and the revanchist city* Londres, Routledge, 1996.

VERAS, R. P. *País jovem com cabelos brancos*: a saúde do idoso no Brasil. Rio de Janeiro: Relume Dumará: UERJ, 1994. P. 224.

VITTE, C. de C. S., KEINERT, T. M. M. (Orgs.). *Qualidade de vida, planejamento e gestão urbana*: discussões teórico-metodológicas. Rio de Janeiro, RJ: Bertrand Brasil, 2009, 312 p.

WHO. World Health Organization. *Decade of healthy ageing*: baseline report: summary. World Health Organization. Geneva: World Health Organization, 2021. Disponível em: <https://iris.who.int/server/api/core/bitstreams/7f2af8f0-3413-47b6-a309-eaca584beb76/content>. Acesso em: 30 de dez. 2025.

DECLARAÇÕES

CONTRIBUIÇÃO DE CADA AUTOR

Ao descrever a participação de cada autor no manuscrito, utilize os seguintes critérios:

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DECLARAÇÃO DE CONFLITOS DE INTERESSE

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Nós, Welliton Fernando dos Santos e Léia Aparecida Veiga, declaramos que o manuscrito intitulado "ENVELHECIMENTO POPULACIONAL EM PEQUENAS CIDADES E A PROMOÇÃO DA SAÚDE E BEM-ESTAR: ACADEMIAS AO AR LIVRE EM CENTENÁRIO DO SUL/PR":

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