

**Population aging: current reality and challenges***Envejecimiento de la población: realidad actual y desafíos**Envelhecimento populacional: realidade atual e desafios***Aline dos Santos Silva<sup>1</sup>**

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**Submission:** 05-20-2021**Approval:** 06-28-2021**Abstract**

The aim was to reflect on active aging and the influence of internal and external factors that contribute and even influence the aging process and how Brazil is preparing to face the new reality in relation to significant age group changes and, therefore, change in the general scope. This is a reflective study, with a search in electronic databases that point to population aging. It was evident that there is a great concern in what is discerned about the aging process, without making the necessary decisions so that the health of the individual in the aging process is taken care of as a whole and not partially.

**Descriptors:** Aging; Healthy Aging; Social Security; Population Dynamics; Cellular Senescence.

**Resumen**

El objetivo fue reflexionar sobre el envejecimiento activo y la influencia de factores internos y externos que contribuyen e incluso influyen en el proceso de envejecimiento y cómo Brasil se está preparando para enfrentar la nueva realidad en relación a cambios significativos de grupo etario y, por lo tanto, cambio en el ámbito general. Se trata de un estudio reflexivo, con búsqueda en bases de datos electrónicas que apuntan al envejecimiento de la población. Se evidenció que existe una gran preocupación en lo que se discierne sobre el proceso de envejecimiento, sin tomar las decisiones necesarias para que la salud del individuo en el proceso de envejecimiento sea atendida en su totalidad y no parcialmente.

**Descriptoros:** Envejecimiento; Envejecimiento Saludable; Seguridad Social; Dinámica Poblacional; Senescencia Celular.

**Resumo**

Objetivou-se refletir sobre o envelhecimento ativo e a influência de fatores internos e externos que contribuem e até influenciam no processo de envelhecimento e como o Brasil, está se preparando para enfrentar a nova realidade em relação a mudanças significativas de faixa etária e sendo assim, mudança no âmbito geral. Trata-se de estudo de reflexão, com busca nas bases de dados eletrônicas que apontam para o envelhecimento populacional. Evidenciou-se que há uma grande preocupação no que discerne sobre o processo de envelhecer, sem a tomada de decisões necessárias para que a saúde do indivíduo em processo de envelhecimento seja cuidado como um todo e não parcialmente.

**Descriptoros:** Envelhecimento; Envelhecimento Saudável; Previdência Social; Dinâmica Populacional; Senescência Celular.

## Introduction

Until the mid-1970s, Brazil lived its own scenario regarding family structure. Families were large, predominantly rural, with high infant mortality rates, but high birth rates. After 1970, there was a reformulation of this family profile, the family gained the status of an urban family, with a decreasing number of children<sup>1</sup>.

When we see a reduction in infant mortality rates, we notice a change in the family structure, followed by a drop in the birth rate, which led to a significant change in the age structure of the population, changing the conformity of families and the current demography. Making contemporary society different from the society of yore<sup>2,3</sup>.

What we had before was a predominantly young population, different from what we see today. Today we have a population with an increasingly significant contingent of people aged 60 years and over<sup>1</sup>.

Statistical projections for 2050 indicate that Brazil will be the sixth largest elderly population in the world, with more than 32 million people, representing 16% of the Brazilian population<sup>4</sup>.

According to the World Health Organization, population aging is directly related to the country's development, as it understands that in developing countries, the elderly is the person aged 60 years, and over 65 for developed countries<sup>5</sup>.

Thanks mainly to advances in modern medicine, which are leading to a significant improvement in health conditions and a reduction in early mortality, the elderly population in the world has considerably increased in recent decades, because of policies and incentives in health and a large technological process. At the same time, the need to guarantee the elderly, not only a greater estimate of life, but all of this must be accompanied by happiness, quality of life and personal satisfaction<sup>6</sup>.

What will determine the situation of future seniors will be the actions taken now to improve the quality of life of many of them. Without adequate State intervention, through the implementation and implementation of fundamental public policies, most of these elderly people will certainly not be able to have a quality of life considered satisfactory<sup>7</sup>.

As socioeconomic and cultural changes have been altering the standard of living, reducing morbidity rates in recent decades, and increasing life expectancy, there is also an important concern with the quality of life in old age<sup>8</sup>.

According to the authors, the quality of life will be good or excellent, depending on the minimum conditions that individuals must develop their potential, living, feeling, or loving, working, producing goods and services, or simply existing<sup>9</sup>.

One of the tools that has helped to improve the quality of life are the coexistence groups that are encouraged throughout the country. Research shows that seniors seek these groups initially for physical and mental improvement through physical exercise. Coupled with this, needs increase and leisure activities, travel and other activities that promote recreational and occupational activities gain space<sup>6</sup>.

The perception of a good quality of life is directly linked to self-esteem and well-being, and these factors are associated with good physical and mental health, healthy habits, leisure, spirituality and especially the maintenance of the individual's functional capacity<sup>6</sup>.

These coexistence groups lead individuals to acquire greater autonomy, improve their self-esteem, quality of life, sense of humor and help to promote social inclusion. This is one of the keys that lead to the continuity of the elderly in programs and in the positive changes that occur in their lives<sup>6</sup>.

## Discussion

### Population aging in Brazil

We are living through many different stages of the demographic transition around the world, which brings us to the main demographic phenomenon of the 20th century, known as population aging. This phenomenon has led to a reorganization of the health system, as this population requires care that is a challenge due to the chronic diseases they present, in addition to the fact that they incorporate dysfunctions in the last years of their lives<sup>10</sup>.

According to the Brazilian Institute of Geography and Statistics (IBGE), the elderly population segment is increasing rapidly in the Brazilian population, with the perspective of reaching 41.5 million by the year 2030, this implies a growth with a rate of 4% Yearly<sup>11</sup>.

There was a worldwide growth in the year of 1998 of approximately 8 million people over the age of 60 years, accounting for a total of 579 million people, and projections show us that in the year 2050, the elderly will reach a total of 190 million of people, and this amount is equivalent to the child population from zero to 14 years of age<sup>12</sup>.

Among developed countries, Japan, and Germany, in recent years, have created reforms in their health system aiming to respond to the changes that have occurred both due to the decline of communicable diseases and the increase in the aging process of the population<sup>13</sup>.

We noticed that neighborhoods in the city of Rio de Janeiro in 2010 with better socioeconomic indicators were at a higher level of population aging, with a different pattern of mortality of elderly people from chronic diseases in relation to less socioeconomically advanced and less aged neighborhoods, which indicates the need for specific public health policies for neighborhoods with different demographic scenarios<sup>13</sup>.

Therefore, aging is no longer a process exclusive to developed countries and has become common in developing countries as well, such as Brazil for example<sup>12</sup>.

In the Brazilian population, in recent decades and in all regions of the country, aging is related to the significant drop in the fertility rate and the increase in life expectancy, and parallel to this, we see a decrease in infant mortality and an improvement in waiting by birth<sup>12</sup>.

Increased longevity (especially among women) is another important issue that has been noted with great relevance, a reflection of the decline in mortality in older age groups. We can say that this phenomenon portrays, among many things, the improvements in the living conditions of



Silva AS, Fassarella BPA, Faria BS, Nababout TGME, Nababout HGME, Avila JC 1960s, the increase in longevity of Brazilians, which was observed in 2010, an increase of 25 years, reaching 73.4 years. In addition to reducing the fertility rate<sup>19</sup>.

Currently in cities in the Midwest of the state of São Paulo, 16% is the percentage of the population over 60 years old, which means 2 percentage points above the elderly population of the state of São Paulo, which accounts for 14%<sup>19</sup>.

When we analyze the demographic behavior of the state of São Paulo, we see a forecast for mid-2020 where we would have a higher percentage of individuals aged over 60 years than children and adolescents under 15 years. According to projections, this number will be 3 times higher in the year 2050 when compared to the year 2010<sup>19</sup>.

What we see in Brazil today is that there is a growing acceleration of population aging. If we consider that France took a century for the population aged 65 and over to increase from 7% to 14% of the total, it was estimated that in 2011, Brazil would have double this amount<sup>20</sup>.

Between 1940 and 2010 there was an increase in the number of people aged 60 and over, from 4% to 11%. According to the 2013 IBGE population projection, the 20% level should be reached in 2033.

It is also expected that this age group, which consisted of 20.6 million people in 2010, will be made up of 57 million in 2040. In 2016, one in ten Brazilians was 60 years of age or older. In 2060, the elderly will be one in three Brazilians<sup>22</sup>.

In 2012, the Brazilian elderly population was 22 million individuals, surpassing United Nations projections and the elderly population of many European countries<sup>19</sup>.

Therefore, knowing that aging is not a homogeneous process, each human being is unique and that is why it ages differently and therefore, we conclude that these data reveal not only achievement, but also the repercussions that these demographic changes have on different policies public, claiming investments in promoting autonomy for the constitution of a healthy life of this social group and the resolution of their needs<sup>19</sup>.

Together with the population change projections, the Ministry of Health (MS) approved in 2006, through Ordinance No. 2528/2006, the National Health Policy for the Elderly (PNSPI)<sup>19</sup>.

Active aging, added to the probable predominance of non-infectious chronic diseases, requires, above all, changes in the organization of work, based on the generic and specialized development of health management technologies. A health care model based on the expanded clinic is equally necessary<sup>19</sup>.

In traumatic situations, for example, that imply significant changes in family dynamics, we see that many families see the need to change the care scenario, bringing the figure of the caregiver, often informal<sup>23</sup>.

To have a more active and participative elderly population, it is necessary to develop a therapeutic project based on the needs of each individual and, for this, there needs to be a meshing of services, managers, professionals, including caregivers<sup>19</sup>.

the elderly population, although the pace of this decline is unknown in Brazil<sup>12,14</sup>.

According to data collected by the Health, Well-being, and Aging Project (SABE), carried out in the city of São Paulo, in the period from 1999 to 2000, women who reach 60 years of age have a longevity expectation of approximately 22 years, on the other hand, women who reach 75 years of age have another 12 years in their longevity. On the other hand, men who reach 60 years of age have a life expectancy of more than 16 years and, when they turn 75, it is nine years. This trend produces new themes for research, such as aspects of survival without and with disabilities<sup>12</sup>.

Due these facts, it is understood that population aging is an extremely complex phenomenon, caused by several factors that produce the most diverse trends and consequences. Therefore, this phenomenon is leading to multidisciplinary research and studies for better understanding and understanding<sup>12</sup>.

Therefore, understanding the differentials of the population aging process and what they bring to the urban space can help in the creation of public policies aimed at the long-term care of chronic non-communicable diseases, as well as the distribution and management of resources for promotion of quality of life, aiming at cost reduction<sup>13</sup>.

### Pension X Aging

With the aging process, the social security system has been put in check due to growing expenses, difficulties in finding financing that does not burden any group or generation, and society's strong reaction to reform proposals are some of the common elements. At the origin of this picture is the population aging process, resulting from epidemiological and demographic transitions<sup>15</sup>.

It is an account that will not close later. It is a long-term process and has not started now and more generally, this will lead to greater pressure on spending, resulting in a serious fiscal crisis, leaving the pension system with its sustainability threatened. What is expected of us to be able to take a closer look at the fiscal future, in order not to<sup>16,17</sup>.

Because of this, several countries carry out reforms that increase sustainability, because of aging. This both in countries that are in more phases of demographic transition, and in systems that still show weakness in design<sup>15,18</sup>.

There is a challenge in terms of economics, social security and urban infrastructure and services for the current Brazilian society with the growth of the elderly population. With this, we emphasize the health sector that faces the country organized to meet the demands of the young population, however at the same time it is faced with the need to remodel the structure and organization with the high number of non-communicable chronic diseases that come with aging. This is already a reality in other countries such as Canada, because of much concern about the harm that aging can cause, due to the lack of sustainability of health systems<sup>19</sup>.

Recent data on Brazilian mortality bring us a life expectancy of 75.8 years. In 2010, the IBGE pointed to the rapid process of population aging. Following, since the mid-



When we have a social security system organized in the form of pay-as-you-go systems, they are based on intergenerational solidarity, which is compulsory (through the government) due to significant externalities and market imperfections<sup>15</sup>.

Bearing in mind that aging leads to an increase in expenses with payments of benefits, with no counterpart in contributions, or even a reduction in these. Cohorts in working ages contribute to the resources used to pay social security benefits for the elderly<sup>15</sup>.

Given all that has been exposed, we need to bring population aging into the discussion, as this topic impacts all spheres of society. Due to population aging and the drop-in birth rates, there is a perspective that, in the future, there will be a smaller number of people of working age for each elderly person in future years<sup>15</sup>.

In 2010, 10 people aged 15 to 64 years to support each elderly person aged 65 and over and, in 2060, there will be 2.2 people of working age for each elderly person, according to the projection of the United Nations (UN)<sup>22</sup>.

One of the proposals so that there is no collapse in the social security system is to keep the worker in activity for as long as possible, but for that, it is necessary to have an occupational health policy to minimize exits from the labor market due to retirement due to disability, training in technological and policy changes to reduce prejudice<sup>24</sup>.

Projections made for the year 2040 indicate that approximately 57% of the Brazilian population of working age will be made up of people over 45 years old<sup>24</sup>.

With population aging we have health problems that challenge health systems and the resistance of social security<sup>13,25</sup>.

In other words, the population is living longer, reaching active aging, but this population will have some health policy that guarantees the integrality of health itself, or will be at the mercy<sup>13,25</sup>?

Aging is not necessarily synonymous with getting sick, unless there is an associated disease, aging is associated with a good level of health<sup>13</sup>.

If we have strategies for the current challenges about aging, progressively those of tomorrow, then we can invest in long-term health prevention actions, resulting in more health and quality of life for the elderly. In addition, advances in the field of health and technology have allowed the population with access to adequate public or private services, a better quality of life at this stage<sup>13,25</sup>.

## Conclusion

It was evident that there is great concern in what is discerned about the aging process, without making the necessary decisions so that the health of the individual in the aging process is taken care of as a whole and not partially. Since the guidelines of the World Health Organization (WHO) state that health is a state of complete physical, mental, and social well-being and not just the absence of disease.

Therefore, we understand that the creation of policies and methods that favor the aging process must be broadly enriched, since we are talking about society in general, and not just a portion. With regard to global aging, these measures that provide health, in its purest meaning, need to be taken into account, so that the future is one of joy and not of regret.

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