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## The influence of population aging in Public Health

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#### **ABSTRACT**

Introduction: Population aging is one of the greatest challenges \*Correspondence to Author: in contemporary public health. Thus, one of the consequences of Nélio Veiga this dynamic is a greater demand for health services. The aim of Health Sciences Institute - Univerthe present research consists in explaining the main topics that sidade Católica Portuguesa justify the fact that the increase of population-aging worldwide Estrada da Circunvalação influences public health strategies applied.

Materials and methods: To carry out this review article the E-mail: nelioveiga @ gmail.com search strategies included electronic databases, such as Phone: 00351 966454933 PubMed, Cochrane Library and Science Direct, reference lists of articles, and selected textbooks. Articles and textbooks used in this study were mainly reached by using the following keywords: How to cite this article: "Public health"; "Population-ageing "; "Global Aging"; "Elderly" and "Health". Selection criteria included articles published from 1985 to the present year of 2018. At the end of the search, 11 scientific articles were selected.

**Results and Discussion:** The physical/biological, psychological and social changes associated with the elderly leads to decrease of health, withdrawal from the labor market and several unfavorable situations, which cannot be controlled. In this context, the elderly seek to find support in the family, neighborhood, friends and institutions that will influence their quality of life. Therefore, the path of Public Health has three essential points: first, health promotion and primary prevention, which requires a lot of health education to develop healthy living

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habits and improve understanding of the aging process; secondly, appropriate health treatments, including professionals trained in Geriatrics and Gerontology, aiming at early diagnosis and interdisciplinary administration of diseases, seeking to preserve functional capacity; and finally, the rehabilitation of the functions committed, aiming at functional independence and mental autonomy, in any type of incapacity or limitation.

**Conclusions:** Aging is a challenge to be integrated by Public Health and the vulnerability inherent in the elderly should never be seen in a unique way. Thus, we believe in the importance of different forms of support, not only in terms of assistance, clinical treatment and rehabilitation, but also in the implementation of public policies and disease prevention actions, as well as health promotion of the population of integral form.

Keywords: "Public health", "Population-ageing", "Global Aging", "Elderly" and "Health".

#### Introduction

Population aging is one of the greatest challenges in contemporary public health. (1) This results from the demographic transition of societies, defined as the shift from a high fertility and mortality demographic model to a lower level model, and at the same time a generalized increase in the average life expectancy of the population. (2)

In addition, population aging has ceased to be a concern only of developed countries, where it was initially observed, as it is currently in the developing countries that the most significant demographic changes occur.

In developed countries, large-scale demographic changes cause important social, economic and cultural repercussions. The demographic evolution in the recent past has been characterized by a gradual increase in the weight of the senior age groups and a reduction in the weight of the young population due to the cumulative effect of the decrease in mortality and birth rates over several decades. (2)

In this way, the most significant feature of the demographic profile of the population is the

progressive aging of the societies. In this process, a relative narrowing of the base of the pyramid of ages and a widening of the top are observed. (2)

In parallel with the changes observed in the population pyramid, diseases typical of aging have been gaining more expression in today's society, that is, with aging there is an increase in chronic noncommunicable diseases, which are currently considered the main causes of mortality. (3)

Thus, one of the consequences of this dynamic is a greater demand for health services. Therefore, one of the current challenges is the scarcity of resources for an increasing consumption, since the elderly use more health services, hospital admissions are more frequent and the time of bed occupancy is higher when compared to other age groups. (1) However, recent studies have shown that chronic diseases, as well as their disabilities, are not inevitable consequences of aging.

Prevention is effective at any level, even in the later stages of life. (4) On the other hand, another relevant aspect is the issue of dependence that can affect the elderly, namely

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in the psychological, social and decision-making capacity and control of their lives. (2) Aging, especially with dependence, is a challenge to be incorporated by Public Health, in which two situations are counterposed: the first refers to the conditions necessary for the maintenance of care for the elderly in the community, the family conditions to be responsible for the care of the elderly. (5)

Finally, the following challenges for Public Health, recognized by the World Health Organization: how to maintain independence and active life with aging; how to strengthen health prevention and promotion policies, especially those for the elderly; and how to maintain and / or improve the quality of life with aging. (1)

The aim of the present research consists in explaining the main topics that justify the fact that the increase of population-aging worldwide influences public health strategies applied.

### Materials and methods

To carry out this review article the search strategies included electronic databases, such as PubMed, Cochrane Library and Science Direct, reference lists of articles, and selected textbooks. Articles and textbooks used in this study were mainly reached by using the following keywords: "Public health"; "Population-ageing "; "Global Aging"; "Elderly" and "Health". Selection criteria included articles published from 1985 to the present year of 2018. At the end of the search, 11 scientific articles were selected.

### **Results and Discussion**

In the past, reaching old age was considered a privilege even among the poorest countries. However, it is not only an achievement, but also a great challenge for today.

Three subtypes of men and women can be defined:

1. Very dependent elderly people, aged over 85 years and with dependence that results either from natural aging or arises from disease, including end-stage oncologic disease;

- 2. Elderly dependents, whose dependence results mainly from a chronic illness that requires constant medical treatment;
- 3. Independent elders, who maintain their capabilities but are inactive clinging to the false slogan: "I do nothing because I am retired." (2)

Thus, in developed countries, chronological time plays an essential role in that the age of 60 or 65 is legislated as retirement age and marks the beginning of old age. But in many regions of the developing world, chronological time has little or no importance in the sense of old age. (2,6,7)

However, the old concept has been the subject of a long debate, since the definition of the concept of the elderly entails difficulties of delimitation of the category, confronting two different views. Some authors describe the elderly in a negative way, where the elderly are seen as a fragile human being in a situation of "poverty, social isolation, loneliness, illness and dependence." The positive way considers the elderly as a potential "specific segment of consumption," which makes old age a time of reflection, leisure, and dedication to activities such as "self-improvement." (2)

The physical / biological, psychological and social changes associated with the elderly lead us to the decrease of health, withdrawal from the labor market and several unfavorable situations, which cannot be controlled. In this context, the elderly seek to find support in the family, neighborhood, friends and institutions that will influence their quality of life. (8,9)

Biological changes make the elderly less able to maintain homeostasis when subjected to physiological stress. These changes, especially when associated with advanced an chronological lead to increased age, increased susceptibility to disease, vulnerability, and increased likelihood of death. Such diseases. when associated with hospitalization, favor functional decline and, consequently, the development of disabilities. Decreased functional capacity generally leads

the elderly to limit or totally lose the ability to independently perform their daily activities. (3,9,10)

Social changes are related to the diversity of circumstances faced by the aging population, such as obtaining information, access to the media, schooling, availability of material resources, power to influence political decisions and possibilities to face cultural barriers.

The family plays an important role in providing a wide range of services to meet the needs of its members, so that several studies show that support and family support are a protective factor of mortality risk: for each age group, single men and widowers are more vulnerable to death than married and divorced men. (2)

The importance of the family in the aging of the population is given, for example, by studies on informal caregivers. (2) Families are thus called upon to play a role which is incompatible with their capacities and needs, which are between social protection and health. Increased dementia situations, such as Alzheimer's disease, Parkinson's disease, among others, motor disabilities resulting from cardiovascular pathologies, chronic diseases in general, are too heavy responsibilities for family carers. In addition, the transition from a rural economy to post-industrial economy has made increasingly difficult for the children to have neither the time nor the will to be with their parents. It is therefore necessary to organize free and reimbursed responses aimed at providing urgent and essential support to people who are aging and in a situation of reduced autonomy, as well as to their families. (6,10,11)

Concerning economic activity, the participation of the elderly population in the labor market is an important factor in promoting active aging, reducing poverty that disproportionately affects the unemployed / pensioner elderly and improving the sustainability of pension systems. In addition, the elderly have an invaluable contribution to give society, beyond retirement. As a result, due to population growth and the

growing number of elderly people in Europe, it is even more crucial to create opportunities for the elderly to remain active. Volunteering is thus a means of enabling generations to work together and provide opportunities for the elderly to remain active and contribute to the community by sharing the knowledge and experience they have acquired throughout their lives. (2)

When thinking about the elaboration of a new policy of care for the elderly based on quality of life, it is important to base the concept of functional capacity, that is, the ability to maintain the physical and mental skills necessary for an independent and independent life. This is because in population aging, the most relevant health indicator is no longer the presence or absence of disease, but rather the degree of functional capacity of the individual. Most of the chronic diseases of the elderly have as their main risk factor their own age, but this longevity does not prevent the elderly from conducting their own lives independently and deciding on their interests. This elderly person, who maintains his independence and selfdetermination, should be considered a healthy elderly person, even if he presents one or more chronic diseases. (4)

Thus, one of the main objectives of Public Health should be to keep the elderly person in the community, with his family, in a dignified and comfortable way. It is true that, often, the health conditions of the elderly require hospitalization, however, it is expected that this will not be of long duration, and that the family will be care-oriented in the home context. (10,11)

Therefore, the path of Public Health has three essential points: first, health promotion and primary prevention, which requires a lot of health education to develop healthy living habits and improve understanding of the aging process; secondly, appropriate health treatments, including professionals trained in Geriatrics and Gerontology, aiming at early diagnosis and interdisciplinary administration of

diseases, seeking to preserve functional capacity; and finally, the rehabilitation of the functions committed, aiming at functional independence and mental autonomy, in any type of incapacity or limitation. (4)

#### Conclusions

Aging is a challenge to be integrated by Public Health and the vulnerability inherent in the elderly should never be seen in a unique way. Thus, we believe in the importance of different forms of support, not only in terms of assistance, clinical treatment and rehabilitation, but also in the implementation of public policies and disease prevention actions, as well as health promotion of the population of integral form.

In this way, health and well-being at more advanced ages are modifiable and key actions can be done by investing in health promotion and exercise throughout life. The promotion of activities at any stage of life should be sufficiently generalized to take into account social and psychological elements in the design and realization of possible outcomes of the primary interventions that have been made.

The older generations are becoming more numerous and reaching more advanced ages. Thus, it is necessary to give more attention to our elderly, to know better their difficulties and aspirations to better promote their well-being. In the future we will still be in greater numbers and it is in the present that we build this future.

Therefore, we must not forget that certain acts that can be so simple to implement within a society can lead to an intense change in the daily life of an elderly person, resulting in a more active and energetic life, thus improving their health in general and quality of life.

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