### Aging in Brazil: the building of a healthcare model

Renato Peixoto Veras <sup>1</sup> Martha Oliveira <sup>1</sup>

> **Abstract** The article discusses the development of a health care model for the elderly, seeking to add to the discussion about the aging of the population in the context of a new epidemiological and demographic scenario. Considering that the aging process in Brazil is relatively recent, more relevant social movements have been described in the construction of health policies directed towards the elderly. After an initial description of the main milestones, we present the model of care considered most appropriate for the best care of the elderly. Based on a critical analysis of health care models for the elderly, the article proposes an approach to care for this age group, focusing on health promotion and prevention, in order to avoid overloading the health system. Integrated care models aim to solve the problem of fragmented and poorly coordinated care in current health systems. The more the healthcare professional knows the history of his patient, the better the results; this is how contemporary and resolutive models of care should work, and it is these that are recommended by the most important national and international health agencies. This article is particularly concerned with a care model that is of higher quality, and is more resolutive and cost-effective.

> **Key words** Health policies for the elderly, Human aging, Elderly, Prevention of diseases, Care line

<sup>&</sup>lt;sup>1</sup> Universidade Aberta da Terceira Idade, Instituto de Medicina Social, Universidade do Estado do Rio de Janeiro. R. São Francisco Xavier 524/10°, Maracanã. 22261-001 Rio de Janeiro RJ Brasil. unativeras@gmail.com

#### Introduction

One of the greatest achievements of mankind was the extension of life expectancy, which was accompanied by a substantial improvement in the health parameters of populations, even though these achievements are far from being equitably distributed in different countries and in different socioeconomic contexts. Reaching old age, which was once the privilege of a few, today is standard in even the poorest countries. This major achievement of the twentieth century has, however, become today's greatest challenge.

The aging of the whole population is not enough. Living longer is important provided you can add quality to the additional years of life. This phenomenon of extending the life span initially occurred in developed countries, but more recently it is in developing countries that the aging of the population has occurred more markedly. In Brazil, the number of elderly people  $(\geq 60 \text{ years old})$  increased from 3 million in 1960 to 7 million in 1975, and from 14 million in 2002 (an increase in 500% in 40 years) and it is expected to reach 32 million by 2020. In countries such as Belgium, for example, it took a hundred years for the elderly population to double in size. One of the results of this dynamics is the growing demand for health services1.

Incidentally, this is one of the current challenges: scarcity and/or resource constraints to an increasing demand. The elderly consume more health services, hospital admissions are more frequent and the period of bed occupancy is higher when compared to other age groups. This is due to the pattern of chronic and multiple diseases of the elderly, requiring constant monitoring, permanent care, continuous medication and periodic tests<sup>2</sup>.

## International milestones in policies for the elderly

Demographic and epidemiological factors were not the only challenges for Public Health. There are others, as recognized by the World Health Organization:

- a) How to maintain independence and active life with aging?
- b) How to strengthen policies for prevention and health promotion, especially those for the elderly?
- c) How to maintain and/or improve the quality of life with aging?

We need to find the means to: incorporate older people into our society, change already entrenched concepts and use new technologies, innovation and wisdom in order to achieve fair and democratic equity in the distribution of services and facilities for the population group that mostly grows in our country<sup>3</sup>.

These issues were on the world agenda many years ago. The United Nations, through its General Assembly, convened the first World Assembly on Aging in 1982, which produced the Vienna International Plan of Action on Aging. This document represents the basis of the segment's public policies at the international level and presents the guidelines and general principles that have become a reference for the creation of laws and policies in several countries, highlighting the aging of the population as a dominant theme in the 21st century. The Plan presents recommendations across seven areas: health and nutrition; elderly consumer protection; housing and environment; social well-being; social security; work and education and family4.

In 1991, the United Nations General Assembly approved the United Nations Principles for the Elderly, through Resolution number 46/91, which was of fundamental relevance to the consolidation of policies for this age group. The principles guide us to respond to the challenges of the aging process with new concepts on independence, participation, care, self-realization and dignity.

In the following year, the International Conference on Aging held a meeting to follow up on the Plan of Action, adopting the Proclamation of Aging. Following the recommendation of the Conference, the UN General Assembly declared 1999 the International Year of the Elderly. An immediate reflection in the 1990s arising out of these international assemblies and meetings was noted, through the changing image of the elderly, which was no longer seen as vulnerable and dependent, and now had an active and healthy profile.

The action in favor of aging continued in 2002, when the Second UN World Assembly on Aging was held in Madrid. With a view to developing an international policy for aging in the 21st century, the Assembly adopted a Political Declaration and the International Plan of Action on Aging in Madrid. The Plan of Action called for changes in attitudes, policies and practices at all levels to meet the enormous potential of aging in the 21st century. Its specific recommendations give priority to older people, improving their

health and well-being, ensuring empowerment and supportive environments: "A society for all ages has goals to give the elderly the opportunity to continue contributing to society. In order to work in this direction itis necessary to remove everything that represents exclusion and discrimination against them"<sup>5</sup>.

# Legal milestones in policies towards the elderly in Brazil

The conception that prevailed in Brazil at the beginning of the 20th century was the segregation of the elderly, leading to the practice of hospitalization in nursing homes, which proliferated during this period, in a logic that hides social, political and economic issues.

In the 1960s, a pioneering study in the Social Service of Commerce (SESC) began that was aimed at the elderly, in a scenario where welfare was predominant. The first reflection in Brazil, regarding the radical changes of the vision of aging impacting the legislation, was in the Federal Constitution promulgated in 1988, in which the constituent movements consolidated the concept of "popular participation".

The Constitution reversed the welfare policy of the 1980s, acquiring "a connotation of citizenship rights", while furthermore this decade represented an important period for the organization of the elderly and the scientific community, with the organization "of several seminars and congresses, thereby sensitizing governments and society to the issue of old age". The guarantee of the rights of the elderly in the Federal Constitution is expressed in several articles, dealing with the irreducibility of retirement and pension wages, the guarantee of protection for children, gratuity in collective transportation and the benefit of a minimum wage for elderly people without living conditions. The influence of the guidelines and international guidelines in the Federal Constitution are evident<sup>6,7</sup>.

The Elderly National Act, Law No. 8842, enacted in 1994, was derived as an advanced design law for its time, but could not be applied in its entirety. This law also prioritized family life over the elders' home, and defined as an elderly person any individual over the age of 60 (in European countries, for example, the elderly are those aged 65 and above). This policy has also been influenced by national and international discussions on the issue of aging, highlighting not only the elderly as a subject of rights, but also advocating a different approach to their physical, social, eco-

nomic and political needs. This Act was the result of discussions and consultations throughout the country, with broad participation of the elderly, gerontologists and civil society in general.

The National Policy on Health for the Elderly (PNSI, Política Nacional de Saúde do Idoso), created Ordinance No. 1395/1999, by the Ministry of Health (MH), aimed at promoting healthy aging, disease prevention, health recovery, preservation/ improvement/rehabilitation of the functional capacity of the elderly with the purpose of assuring their permanence in the environment and society in which they live, independently performing their activities8. In this policy the guiding directives of all the actions in the health sector are defined, as well as the responsibilities to reach the proposal. In addition, it guides the continuous evaluation process that must accompany its development, considering possible adjustments determined by the practice.

Several guidelines were defined in the context of PNSI, which are still very current. There is an emphasis on the promotion of healthy aging aimed at the development of actions that guide the improvement of their functional abilities, through the early adoption of healthy habits of life, the elimination of harmful behaviors to health, as well as guidance for the elderly and their relatives regarding the environmental conditions that can lead to falls. It also mentions the importance of maintaining functional capacity with a view to preventing functional losses, reinforcing actions aimed at the early detection of non-communicable diseases, introducing new measures such as anticipating sensorial damage, using protocols for fall risk situations, change of mood and cognitive losses, prevention of dental losses and other impacts on the oral cavity, prevention of nutritional deficiencies, evaluation of functional capacities and losses in the home environment and prevention of social isolation.

It should be noted that this Health Policy was carried out in conjunction with the Ministry of Education and higher education institutions (IES, Instituições de Ensino Superior]), as a way to make it possible to establish the Geriatrics and Gerontology Collaborating Centers and to train human resources in the health of the elderly, according to the set-up guidelines.

The PNSI was approved through the screening of the Pan American Health Organization in April 1999, where a three-day seminar was held for a wide-ranging discussion of numerous technicians specialized in the aging sector. After corrections from this meeting, the text was submit-

ted to and approved by the Ministry of Health at the Regular Meeting of the Tripartite Interagency Committee in September 1999, attended by state and municipal secretaries of health, as well as the Ministry of Health. On November 11, 1999, it was submitted to the highest level of the Ministry of Health at the 92<sup>nd</sup> Regular Meeting, when the document was unanimously approved, a rare fact for the National Health Council of the Ministry of Health. The PNSI was approved by the Minister of Health, Dr. Jose Serra, through Ordinance No. 1395, on December 9, 1999, and published in the Federal Official Gazette on December 13, 1999.

The critique to this proposal, by some segments, revolved around the academic nature of the document, the hermetic form in which it was written and the distance between the document propositions and the reality of Brazilian municipalities that are still at the early stages of discussing human aging. In any case, the document had great repercussions, it was very quoted, and a book was published on Health Policy for the Elderly<sup>9</sup>.

In parallel to this, the movements of retirees and pensioners and the National Forum of the Elderly have mobilized for a long period, since 1997, aiming at the approval of the Statute of the Elderly, but demanding to bar unwanted articles and proposing amendments. Despite the mobilization, the correlation of forces of the movement did not allow the Statute to become law. Only on October 1, 2003, the Statute was approved, considered to be one of the results of the II Assembly of Madrid.

The Statute represents an important step in Brazilian Laws in its adaptation to the guidelines of the Madrid Plan, fulfilling the principle regarding the construction of an environment that is conducive and favorable to people of all ages. The Statute of the Elderly has 118 articles that consolidate the rights conferred by the various federal, state and city laws regarding health, education, culture, sports and leisure, professionalization and work, social security, social assistance, housing, transportation, surveillance of care entities and classification of crimes against the elderly<sup>10</sup>.

The movement of retirees in Brazil stands out in the struggle for the adjustment of values in pensions, which rapidly begins to lose purchasing power, coinciding with the implementation of the neoliberal model. The first major mobilization that gave visibility to the cause of the elderly, retirees and pensioners took place on the occasion of the 1988 Constituent Assembly.

Elders from all over Brazil demonstrated their political strength in the galleries of the Congress and at the center of government in Brasilia. The so-called "147% movement" (the difference in the readjustment of those who earned above a minimum wage) was emblematic in the organization of the retirees, being considered its peak. It was guided by the media in a constant and positive way, which contributed to multiplying the adhesions to the movement and giving visibility to the issues of aging. The movement was victorious, culminating with the judicial victory, which made possible an expansion of the process of empowerment of retirees. But this strategy contained in itself its own contradiction, since it also provided an emptying of the movement after the accomplishment of the financial conquests.

Health has always been an important subject. In 2006, the National Policy on the Health of the Elderly (PNSPI) was created by the Decree No 2528/GM, dated October 19, 2006<sup>11</sup>. This new health policy for the elderly was a, perhaps necessary, response to the previous policy of the Ministry in 1999 because it kept all the innovative items of its predecessor, but was concerned with the implementation of the actions and indicating the institutional responsibilities in order to reach the proposal. In addition, it guided the continuous evaluation process that should follow its development, considering possible adjustments determined by the practice.

The PNSPI, like the PNSI, had the objective of allowing healthy aging, which means preserving its functional capacity, its autonomy and maintaining the level of quality of life, in accordance with the principles and guidelines of the Unified Health System (SUS – Sistema Único de Saúde), which direct individual and collective measures at all levels of health care.

#### The current moment

The particularities of the elderly are well-known: more chronic diseases and frailties, more costs, less social and financial resources. Aging, even without chronic diseases, involves some functional loss. With so many adverse situations, the care of the elderly should be structured differently from that which is performed for the younger adult.

The current provision of health services means a loss of focus of care for the elderly, with multiple specialist consultations, non-shared information, numerous drugs, clinical exams and images, among other procedures. It overloads the system, has a strong financial impact at all levels and does not generate significant health or quality of life benefits<sup>12</sup>.

One of the problems of the most recent healthcare models is the exclusive focus on disease. Even when a program with a logic of anticipation of the diseases is offered, the proposals are geared primarily to the reduction of a certain diseases, forgetting that for chronic diseases the objective should not be cure, but the search for stabilization of the clinical scenario and constant monitoring, in order to prevent or reduce functional decline<sup>13</sup>.

Studies show that care must be organized in an integrated way, and care must be coordinated along the care path, in a logic network from the entry into the system to end-of-life care<sup>14</sup>. Adequate models of healthcare for the elderly, therefore, are those which present a proposal for a line of care, focusing on education, health promotion, prevention of preventable diseases, postponement of illnesses, early care and rehabilitation<sup>15</sup>.

The model should be based on the early identification of the risks of users' health deteriorating. Once the risk is identified, the priority is early rehabilitation in order to reduce the impact of chronic conditions on functionality - we seek to intervene before the event occurs. The idea is to monitor health, not disease; the intention is to postpone the illness, so that the elderly can enjoy more quality lifetime. Thus, the best strategy for proper care of the elderly is to use the logic of permanent monitoring of their health, to have it always under observation, varying only the levels, intensity and scenario of the intervention<sup>16</sup>.

### The proposed model

In order to put into practice everything we have struggled before in health, a redesign of the elderly care model in Brazil is urgently needed<sup>17</sup>. Based on national and international studies, we have proposed a model of care focused on the elderly and their needs and characteristics<sup>15</sup>.

The model is structured in five levels, as shown in Figure 1. We must consider, however, that levels 1 to 3 are the light layers, that is, of lower costs and composed basically of care by well-trained health professionals, and the use of epidemiological screening tools and health monitoring technologies. Efforts must be made to keep patients at these mild levels, in order to preserve their quality of life and their social participation.

Layers 4 and 5, the heavy ones, are expensive. Within these levels wehave the hospital and long-stay units. The effort should try to rehabilitate the patient and alleviate his or her situation, although this is not always possible. Remaining with the elderly is therefore sought in the first three levels of care, with a view to preserving their quality of life and reduction of costs.

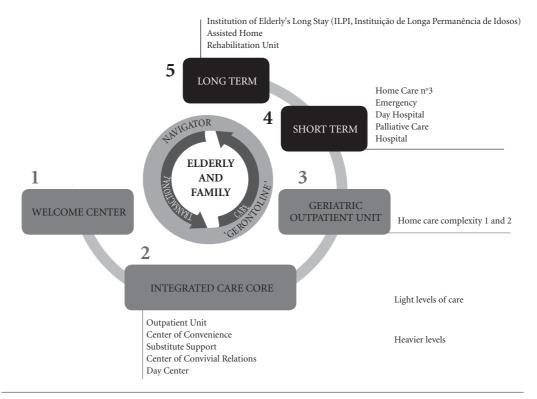
The goal is to concentrate more than 90% of the elderly in these layers<sup>18</sup>. We know that it is not always possible to keep everyone in the light layers, but it is important to emphasize that, if we say that we want the elderly to be in the initial layers of the model, it is not to prevent their progression in the heaviest ones. The use of the hospital, for example, should be an exception, if possible for the shortest time, and for this we have organized the strategy of integral care and intense monitoring.

The models of care for this age group need to be person-centered, considering their special needs. The care must be managed from the time of entry into the system to the end of life, with constant follow-up, since the elderly have specificities stemming from chronic diseases, organic and social fragilities<sup>19</sup>.

The graphic chart above of the model assists in the understanding of important aspects of the proposed model. The entry through Level 1 (hosting) guarantees a conscious access, of the attention offered. The gateway is, therefore, a crucial moment to establish empathy and trust, fundamental elements for the user's loyalty to the project.

Level 2 is the place to integrate the various actions of education, promotion and prevention of health with professionals through the family health teams for the elderly with low risk, center of convivial relations and convenience, rehabilitation services, services to support the care and self-care, family support. This is the place where the senior is introduced to his/her follow-up manager.

At Level 3 (Geriatric Outpatient Clinic), we highlight the importance of the multidisciplinary team consisting of a physician, nurse and social worker, who perform the multidimensional geriatric evaluation that will allow specific interventions when necessary. This evaluation considers aspects such as medical, care, social support, environmental, cognitive, affective, religious and economic beliefs that constitute the therapeutic plan, collectively constructed and discussed with the health team and the follow-up manager. At this level it is also the place where the organization of home care and rehabilitation is located.



Legend:

Level 1 - Welcome center

Level 2 - Clinical Outpatient Unit, Day Center, among other layers of Care

Level 3 - Geriatric outpatient unit: Home care complexity 1 and 2

Level 4 - Short Term: Home Care # 3, Emergency, Hospital, Day Hospital and Palliative Care

Level 5 - Long Term: Rehabilitation Unit, Assisted Home and Institution of Elderly's Long Stay (ILPI, Instituição de Longa Permanência de Idosos)

We should consider levels 1 to 3, in gray, as the light instances, that is, with lower costs and consisting primarily of well-trained healthcare professionals. The effort should be made in order to keep the patients within such light levels in order to preserve the elderly's quality of life and their participation in social life.

The layers in black, the heavy ones, impose high costs and this is where the hospitals are included, as well as other units of short and long stay. We should apply an effort to try to rehabilitate the elderly and bring them to the light levels, although this is not always possible.

Thus, all the efforts should be made to keep the elderly within the 3 first levels of care aiming to maintain their quality of life and reduce costs.

Figure 1. Modelo brasileiro de cuidado integrado ao idoso.

Another important differential of the model is the proposition of registering the patient's "care pathways" through a broad and quality information system, which records not only the clinical evolution of the elderly person, but also their participation in individual or collective preventive actions, as well as the support of the monitoring manager (navigator) and the phone calls made via 'GerontoLine' – the name we gave to the qualified and resolutive call center with trained and qualified personnel. We have adopt-

ed this name for the service because we want the telephone contact between patients and professionals to be carried out, and that there is a total sharing of information with the staff and a more comprehensive assessment of the individual.

An important clarification concerns the patient's physician. The centrality of this model is given by the managing physician or assistant physician, professional leader of the process. If he/she needs an opinion or feels that he/she needs the intervention of a doctor who is an expert in

a given area, he/she will refer his/her patient to a specialist. The conduct of the case, however, is the responsibility of the generalpractitioner. After consultation with the specialist, everything will be recorded in the patient's unique medical record and the patient will return to his or her doctor<sup>20</sup>.

In international projects, the general practitioner or family doctor accounts for 85% to 90% of his patients, without the need of a specialized doctor. In addition, the attending physician can use health professionals with specific training (in Nutrition, Physical Therapy, Psychology or Speech Therapy). Therefore, the elderly population will have a much larger range of professionals at their disposal, but it is the assistant physician who indicates and directs.

We should also emphasize that in Brazil there is an excess of consultations carried out by specialists. This is because the current healthcare model prioritizes the fragmentation of care, as evidenced by looking at the English model, the National Health Service (NHS), which has as its central organizational figure general practitioners (GPs), with high capacity which establishes the patient's loyalty to the professional.

The American model, in turn, chooses referral to numerous medical specialists. We are talking about two rich countries, with long traditions in medicine, that use different models and also provide quite different results<sup>21</sup>.

#### Conclusion

In summary, a model of healthcare for the elderly which intends to be efficient must apply all levels of care, that is, have a well-designed flow of education actions, health promotion, prevention of diseases, postponement of illness, care as early as possible and rehabilitation of injuries. This line of care begins in the reception, in the hosting and in the monitoring of the elderly and only ends in the final moments of life, in the palliative care unit.

Thus, in order to put into practice all the actions necessary for aging in a healthy way that ensures quality-of-life, it is necessary to rethink and redesign care for the elderly, with a focus on the individual and his/her particularities. This will bring benefits not only to the elderly but also to the quality and sustainability of the Brazilian health system.

#### Collaborations

RP Veras participated in article design, research design, study orientation, data analysis, essay writing and article revision. M Oliveira participated in the collection, analysis and discussion of the data, the bibliographic review and participated in the writing of the article.

#### References

- 1. Closs E, Schwnake CHA. A evolução do índice de envelhecimento no Brasil, nas suas regiões e unidades federativas no período de 1970 a 2010. Rev. bras. geriatr. gerontol 2012; 15(3):443-458.
- Veras RP, Oliveira MR. Linha de cuidado para o idoso: detalhando o modelo. Rev. bras. geriatr. gerontol 2016; 19(6):887-905.
- 3. Lima-Costa MF, Veras RP. Saúde Pública e envelhecimento. Cad Saude Publica 2003; 19(3):700-701.
- 4. Organização das Nações Unidas. Plano de Ação Internacional de Viena sobre o Envelhecimento. Assembleia Mundial sobre o Envelhecimento, Viena 1982.
- Organização das Nações Unidas. Plan de Acción Internacional de Madrid sobre el Envejecimiento, 2002. Comisaria del Comitê Organizador Español de la II Assemblea Mundial sobre el Envejecimiento, 8-12 abril 2002, Madri.
- 6. Caldas C Envelhecimento com dependência: responsabilidades e demandas da família. Cad Saude Publica 2003; 19(3):773-781.
- 7. Rolim LB, Cruz RSBLC, Sampaio KJAJ. Participação popular e o controle social como diretriz do SUS: uma revisão narrativa. Saúde em Debate 2013; 37(96):139-147.
- Silvestre JA, Costa Neto MM. Abordagem do idoso em programas de saúde da família. Cad Saude Publica 2003; 19(3):839-847.
- 9. Gordilho A, Sérgio J, Silvestre J, Ramos LR, Freire MPA, Espindola N, Maia R, Veras R, Karsch U. Desafios a serem enfrentados no terceiro milênio pelo setor saúde na atenção integral ao idoso. Rio de Janeiro: UnATI/UERJ; 2000
- 10. Brasil. Ministério da Saúde (MS). Estatuto do Idoso. 3ª ed. Brasília: MS: 2013.
- 11. Brasil. Ministério da Saúde (MS). Envelhecimento e saúde da pessoa idosa. Brasília: MS; 2006.
- 12. Veras RP, Caldas CP, Cordeiro HA. Modelos de atenção à saúde do idoso: repensando o sentido da prevenção. Physis 2013; 23(4):1189-1213.
- 13. Veras RP, Caldas CP, Cordeiro HA, Motta LB, Lima KC. Desenvolvimento de uma linha de cuidados para o idoso: hierarquização da atenção baseada na capacidade funcional. Revista Brasileira de Geriatria e Gerontologia 2013; 16(2):385-392.

- 14. Mendes EV. As redes de atenção à saúde. Brasília: Organização Pan-Americana da Saúde; 2011.
- 15. Oliveira MR, Silveira DP, Neves R, Veras R, Estrella K, Assalim VM, Araujo DV, Gomes GHG, Lima KC. Idoso na saúde suplementar: uma urgência para a saúde da sociedade e para a sustentabilidade do setor. Rio de Janeiro: Agência Nacional de Saúde Suplementar; 2016.
- 16. Veras RP, Caldas CP, Motta LB, Lima KC, Siqueira RC, Rodrigues RTSV, Santos LMAM, Guerra ACLC. Integração e continuidade do cuidado em modelos de rede de atenção à saúde para idosos frágeis. Rev Saude Publica 2014; 48(2):357-365.
- 17. Moraes EM. Atenção à saúde do idoso: aspectos conceituais. Brasília: Organização Pan-Americana da Saúde; 2012.
- 18. Oliveira MR, Veras RP, Cordeiro HA, Pasinato MT. A mudança de modelo assistencial de cuidado ao idoso na Saúde Suplementar: identificação de seus pontos-chave e obstáculos para implementação. Physis 2016; 26(4):1383-1394.
- 19. Veras RP, Estevam Amorim A. Modelo de Atenção à saúde do idoso a ênfase sobre o primeiro nível de atenção. In: Lozer AC, Godoy CVC, Coelho KSC, Leles FAG, organizadores. Conhecimento técnico-científico para qualificação da saúde suplementar. Brasília: Opas; 2015. p. 73-84.
- 20. Veras RP, Oliveira MR. Care pathway for the elderly: detailing the model. Revista Brasileira de Geriatria e Gerontologia, 2016; 19(6):887-905.
- 21. Veras RP. Experiências e tendências internacionais de modelos de cuidado para com o idoso. Cien Saude Colet 2012; 17(1):231-238.

Article submitted 05/01/2018 Approved 30/01/2018 Final version submitted 27/02/2018