



## Aging and Health Policies in Chile: New Agendas for Research

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To cite this article: Daniela Thumala, Brian K. Kennedy, Esteban Calvo, Christian Gonzalez-Billault, Pedro Zitko, Patricia Lillo, Roque Villagra, Agustín Ibáñez, Rodrigo Assar, Maricarmen Andrade & Andrea Slachevsky (2017) Aging and Health Policies in Chile: New Agendas for Research, *Health Systems & Reform*, 3:4, 253-260, DOI: [10.1080/23288604.2017.1353844](https://doi.org/10.1080/23288604.2017.1353844)

To link to this article: <https://doi.org/10.1080/23288604.2017.1353844>



Published online: 16 Oct 2017.



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## Commentary

# Aging and Health Policies in Chile: New Agendas for Research

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**Abstract**—Population aging is among the most important global transformations. Compared to European and North American countries, Chile is among the countries with the fastest growth of life expectancy at birth during recent decades. The aging of Chile's population is related to the improvement of living conditions, but also entails risks that tend to be associated with a rapid economic growth accompanied by large income inequalities and a chronic deficit of basic social benefits. The rapid demographic transition towards an aged population has unfolded in a context of poor

Keywords: health policy, public health, Chile, ageism, healthy aging, dementia, social determinants of health, geroscience

Received 26 September 2016; revised 21 June 2017; accepted 6 July 2017.

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development of public policies to tackle the opportunities and needs associated with an aging society. This article provides a brief overview of current Chilean public policy on aging, with a focus on healthy aging as defined by World Health Organization. The discussion addresses core challenges to successfully achieve healthy aging in Chile.

Population aging is among the most important global transformations. Today, 12% of the world population is aged 60 years and older and by the middle of this century they will reach 21.5%. The increase in the population aged 80 years and older, also referred to as the *oldest old* or the *very elderly*, will be even more pronounced, going from 1.7% of the population to 4.5% within the same period.<sup>1</sup> Population aging emerged during the industrialization and subsequent modernization of European countries and has taken different rhythms and intensities all over the planet.<sup>1</sup> Compared to European and North American countries, Chile, with an estimated population of 18 million inhabitants,<sup>2</sup> is experiencing this unprecedented demographic change at a significantly faster rate. Chile is among the countries with the fastest growth of life expectancy.<sup>3</sup> Over the past 50 years, the average life expectancy at birth in Chile increased by 4.2 years per decade, reaching 79 years,<sup>4</sup> which is slightly above the United States.<sup>5</sup> If these trends continue, Chileans older than 60 years will increase from the current 15.7% of the population to 32.9% by 2050, while people older than 80 years will reach 10.3%.<sup>1</sup>

The aging of Chile's population is related to the improvement of living conditions, but also entails risks that tend to be associated with a rapid economic growth accompanied by large income inequalities and a chronic deficit of basic social benefits. The rapid demographic transition toward an aged population has unfolded in a context of relative scarcity and poor development of public policies to tackle the opportunities and needs associated with an aging society.<sup>6</sup>

Public policies need to recognize that heterogeneity is wider in older age than in the early stages of life, and that personal preparation and the possibilities that the environment offers can make a difference. Some older adults are completely dependent while others, of the same age, maintain good levels of physical and mental health. In this heterogeneous context, Chile needs to develop innovative public policies to promote healthy aging, address the economic and health care challenges associated with the growing prevalence of chronic diseases, and strengthen the social welfare system.<sup>7</sup> This article provides a brief overview of current Chilean public policy on aging, with a focus on

healthy aging as defined by World Health Organization (WHO).<sup>8</sup> We begin by discussing the WHO's framework for healthy aging, next critically describe Chile's situation, and finally identify core challenges to successfully achieve healthy aging in Chile.

## WHO'S PROPOSALS FOR HEALTHY AGING

The recent WHO Report on Aging and Health defines *healthy aging* as the process of promoting and preserving the functional ability that allows people to retain their well-being in old age.<sup>8</sup> This ability, which preserves an individual's independence, requires maintenance of mental and physical capacities, as well as their inter-relationships, in a variety of social settings.

This view takes into account the complexity and systemic nature of older adults' health. Specifically, the health conditions of senior citizens include multiple social determinants that are intrinsically related. Influencing these social determinants requires policies that as noted by Margaret Chan,<sup>8</sup> shift our health systems from a mainly curative to an integral care model, focusing on older people's needs. Implementing this change requires dismantling the predominantly negative stereotypes about old age, recognizing the heterogeneity that characterizes the older population, and encouraging the generation of environments that promote functionality and reduce social inequities.<sup>8</sup>

## AGING IN CHILE: SOME FACTS

### Aging and Health in Chile

Three out of four people older than 60 years reported having at least one noncommunicable chronic disease (35.7% reported one chronic disease; 22% reported two, and 0.4% more than 6 diseases). The most prevalent diseases are hypertension (62.1%), diabetes (21.8%), depression (18.0%), and osteoporosis (17.2%). However, 75.9% of older adults are independent and half report being in excellent to good health. Self-reported health status is relatively stable over the course of aging, without significant differences between people older and younger than 80 years.<sup>9</sup> Dementia is the principal cause of dependency (36%), followed by limb paralysis/weakness (11.9%), and stroke (8.7%).<sup>10</sup> Thus, dementias emerge as one of the most important determinants of disability in older people in Chile. According to The National Survey of Dependency in the Elderly,<sup>9</sup> the gross prevalence of dementia in people aged 60 years and older was estimated at 7.0% (women 7.7%, men 5.9%). Another survey, by the

National Survey of Health,<sup>11</sup> reported a prevalence of 10.4% in people aged 60 years and older (10.1% for men and 10.6% for women). This is equivalent to what is reported in other international studies.<sup>12</sup> From 1990 to 2010, the number of years lost due to disability as a result of dementia has increased by over 200%.<sup>13</sup> In the same period of time, the number of deaths attributed to dementia has increased by 526%, making it the most rapidly growing cause of death in the last two decades.<sup>14</sup> As suggested by international evidence showing that many differences in the functional abilities of older adults might result from the cumulative effect on health of social inequities throughout their lives,<sup>15</sup> dementia, disability in general and mortality are higher among low socioeconomic status individuals.<sup>9,16</sup>

The care of patients with dementia is primarily provided by family members in Chile.<sup>17</sup> In 2013, the CUIDEME study surveyed 292 family caregivers who lived in Santiago, the capital city of Chile, and documented negative consequences that arise when caregivers are not provided adequate support. The study showed that 80% of family caregivers were women (spouses and daughters), of whom 63% experienced severe burden and 47% reported related psychiatric symptoms.<sup>17</sup> The average monthly cost per patient was USD \$943. Direct medical costs accounted for 21%, direct social costs for 5%, and indirect costs for the remaining 74%. The mean monthly cost was inversely related to socioeconomic status. The monthly cost was USD \$690 and USD \$1023 for high and low for high socioeconomic status families, respectively.<sup>18</sup> The high percentage of informal care in the total cost of dementia partly stems from the absence of a comprehensive national long-term care program and is consistent with an outdated health system that has failed to provide the complex and multidisciplinary actions that people with chronic diseases require.<sup>7</sup> The need for reform is particularly evident if we consider that WHO estimates a 77% increase in the cases of dementia by 2030 for Chile, Argentina, and Uruguay.<sup>19</sup>

### Aging and Social Conditions

Population aging in Chile is a marker of success that has been accompanied by a decrease in poverty rates and rapid economic growth. However, Chile has not been able to distribute its resources in a way that provides adequate protection and social integration.<sup>20</sup> Chile is the Organisation for Economic Co-operation and Development member with the biggest income inequality between the rich and the poor, with a gross national income (GNI) index of 0.52 in 2013.<sup>21</sup> Among older adults, 18% are under the poverty line and 4% under the

extreme poverty line, while in the general population the numbers are 14.4% and 4.5% respectively.<sup>22</sup>

In addition to the demographic transition, the composition of Chilean families has changed in the last half century. The number of people per household dropped from 5.4 in 1960 to 3.6 in 2002.<sup>2</sup> The proportion of older people who live alone is increasing significantly, which reduces access to caregiving and favors isolation. Women, who traditionally have taken the role of caregivers, are currently combining this role with work and other responsibilities, which places them under high levels of stress.<sup>23</sup>

In Chile, as in many other countries, social views on aging and older age are composed of stereotypes associated with biological decline, the loss of cognitive abilities, and the severe difficulties of older people to adapt to the pace of modern daily life. Currently, almost three out of four Chileans (72.9%) think that senior adults cannot manage by themselves.<sup>24</sup> Clearly *gerontophobic* expressions are found even among the younger, well-educated population.<sup>25</sup> However, this perception is not consistent with the current situation of older adults, given that most of them are independent.<sup>9</sup>

Misconceptions of the reality of seniors are associated with high levels of discrimination and exclusion, including abuse, which affects 30% of older adults in Chile.<sup>26</sup> Discrimination against and exclusion of older adults is not harmless. *Ageism*<sup>27</sup> or repeated exposure to stressors associated to the negative stereotypes of old age—for example, discriminatory attitudes towards older people in social- and health-care—can increase the risk of cardiovascular stress, obesity, chronic diseases, and mortality, along with other adverse effects.<sup>28,29</sup> Ageism can be preserved and amplified as a self-fulfilling prophecy when the stereotyped visions and discrimination that they embody facilitate behaviors that confirm them, such as a lack of preparation for a healthy old age. For example, 67.8% of Chileans declare that they have not prepared at all or adequately for old age.<sup>24</sup>

### PUBLIC POLICY: THE ROAD SO FAR

In this section, we provide a concise overview of current policies that directly or indirectly benefit older adults in Chile.

#### The Welfare System

Since 1981, a system of pensions based on individual capitalization was established in Chile. In order to address limitations in coverage and benefits of this system, a complementary Law on Social Security Reform was enacted in

2008, leading to the creation of a Solidarity Pension System to benefit people who, for different reasons, lack access to the private social security system or, when affiliated, do not have enough funds to receive a sufficient pension.<sup>30</sup> This reform has allowed poor and low-income groups to get a solidarity pension, while also at least partially restoring protection to people in the private system who did not qualify for a minimum pension (among other achievements). However, pensions benefits are still considered to be insufficient for the population.<sup>31</sup> Indeed, the average old-age pension is roughly USD \$290 monthly (191,000 Chilean pesos), an amount that corresponds to only 30% of the monthly cost per patient with dementia.<sup>32</sup>

### Health Policies

Chile has a two-tier health system, including a public and private component.<sup>7</sup> The baseline tier is composed of public health insurance called FONASA (Fondo Nacional de Salud, or National Health Trust in English), covering about 69% of the population. The other tier is a system of exclusive Private Health Insurance, issued by entities called ISAPRES (Instituciones de Salud Previsional, or Health Security Institutions in English) covering 17% of the population. The remaining population segments include people affiliated with other public agencies (such as Military Health Services) or those without coverage.<sup>33</sup> Private insurance has resulted in enormous variation among health security plans based on actuarial pricing, leading most older people (86.1%) to join FONASA, 69.8% of whom are middle-to-low income.<sup>22</sup>

The Ministry of Health is responsible for the design of health policies and programs, as well as for providing public health and health services at primary, secondary, and tertiary levels. Most primary health care is provided through the municipal system. The ISAPRES provide outpatient and inpatient services through their own clinics and hospitals or by contracting with public or private facilities. Even though health coverage has improved, the low investment in public health, together with its bad management, has deteriorated the quality of the services. Indeed, out-of-pocket expenses constitute 33% of total health spending.<sup>34</sup>

The segmentation in health coverage, among other factors, has contributed to a perception of inequity and exclusion among Chileans.<sup>29</sup> In 2000, as a way to reduce this inequity, Chile created the Explicit Guarantee System (GES, its acronym in Spanish). The objective of GES was to improve public health care, ensuring that a group of pathologies would be suitably treated. Specifically,

GES legally defined enforceable rights to explicit health care benefits for prioritized health conditions, which incrementally covered 56 conditions, representing 75% of the disease burden between 2005 and 2009. At present, 80 health conditions are covered, including some that mainly affect older adults (e.g., stroke, Parkinson's disease, osteoarthritis, hearing impairment, cataracts, diabetes, hypertension, cancers with a high prevalence in older adults, such as prostate, breast and colon cancer, palliative care for cancer, and orthotics needs for canes, wheelchairs, and other devices).<sup>35</sup> Nevertheless, GES does not include high-incidence diseases in old age, such as cognitive impairment and dementia. Only recently, an intersectoral working committee has been formed with the participation of experts in neurology, geriatrics, mental health, public policy and the civil society in order to propose a National Plan for Dementia.<sup>36</sup> The plan was the subject of a public consultation and is currently awaiting implementation. This health policy was designed following recommendations from the WHO, the Pan American Health Organization, and nongovernmental organizations such as Alzheimer's Disease International.<sup>19</sup>

Since 1995, the Ministry of Health has also implemented a systematic evaluation of people older than 60 years attending Primary Care Centers in order to identify people at risk of dependency. This Functional Assessment of the Elderly is known as EFAM (for its acronym in Spanish). EFAM is composed of a cognitive evaluation, which is a reduced version of the Mini-Mental State Examination by Folstein, and a measurement of functional activities with the Pfeffer Functional Activities Questionnaire.<sup>37,38</sup> Older adults are classified in three groups: independent or autonomous without risk, independent at risk, and at risk of dependence. According to the results, subjects are referred either to medical evaluation or to different facilities for the promotion of physical and cognitive functioning.<sup>39</sup>

Together with the GES reform, EFAM was included in 1998 under an Annual Preventive Medical Evaluation of the Elderly (EMPAM, its acronym in Spanish). The aim of EMPAM is "the interdisciplinary and multidimensional diagnostic process intended to quantify the abilities and medical, psychological, functional, and social issues of older people, through a clinical, mental, social, and functional assessment, in order to generate an exhaustive plan of care for the treatment and the long-term monitoring of the patient."<sup>39</sup> Besides EFAM, EMPAM includes both a medical component (an anthropometric assessment, evaluation of risk of falls, and screening for depression with the Geriatric Depression Scale) and a social component (evaluation of social support and risk

of abuse). EMPAM classifies older adults into one of four groups according to their level of functioning. Depending on the results, older adults will follow a plan of action tailored to their level of dependence and other risk factors, such as referral to a medical evaluation or a social worker when abuse is suspected.<sup>27</sup>

Recently, the Ministry of Health implemented the program *Más Adultos Mayores Autovalentes* (More Self-sufficient Senior Citizens), which is intended to preserve functioning through a preventive and community-based approach to functional stimulation.<sup>40</sup> This program targets older adults who have been classified at risk of dependence and is expected to continue developing under an Integral Attention Model for older adults in the public health provider network.

### Social Policies

In Chile, a rights-based approach has gained traction in public and social policies on aging. The underlying aim is to provide guarantees for the integral well-being of a diverse population of older adults, who are conceptualized as subjects of law. One of the first steps was the creation, in 1995, of a National Senior Citizen Service (SENAMA, for its acronym in Spanish), whose mission statement is “to promote active aging and the development of social services for older people, of any social status, by strengthening their participation and appreciation in society, promoting their self-care and autonomy, encouraging the recognition and exercise of their rights, employing inter-sector coordination, and by designing, deploying, and assessing policies, plans, and programs.” Under this institutional framework, a variety of aging policies have been implemented to promote the well-being and quality of life of older adults, considering the diversity of their needs. Some of these policies have been implemented under the broader umbrella of the Social Protection System, which is intended to encourage equality in the exercise of individuals’ rights, in order to ensure both their health and economic security throughout the life course.<sup>41</sup> A number of care programs (long-term care, day care centers, and home care) have been implemented with the aim to develop social support units and friendly environments that encourage and make it possible to preserve functionality at increasingly advanced ages. A recent initiative, *Chile Cuideme* (Chile, Take Care of Me), seeks to support family caregivers who are providing care for prostrated older adults at home, with respite care at home and psycho-education for family caregivers.

### DISCUSSION

Population aging in Chile has been associated with the improvement of living conditions, but also with risks that accompany rapid changes and chronic deficits of basic social benefits in a context of high levels of inequality and relative poverty. In this context, it is necessary to respond to the challenges posed by the extra years added to Chileans’ life by ensuring that they will meet minimum levels of well-being. Chile (as countries like Argentina, Costa Rica, and Mexico) has been influenced by the 2002 Madrid Plan and WHO’s recommendations for aging, making substantial progress to enact public policies based on a rights-based approach and a life course perspective.<sup>39,42,43</sup>

The comparison of aging public policies in Chile with those of upper-middle income countries that have already faced the aging of their populations—such as Japan, Korea, Sweden, or Singapore—allows identifying specific strengths, limitations, and challenges. Numerous upper-middle income countries have defined integrated or holistic public policies for older adults. The first step in some countries, such as Singapore, was to settle commissions where multiple sectors diagnosed the challenges associated with an aging society and then designed aging policies that acknowledged the opportunity of longevity-based societies.<sup>44</sup> These policies also identified the societal contributions of older adults, as well as rejecting negative stereotypes of frail and dependent older adults that place heavy demands on society.<sup>45</sup> Another key factor of these policies was the goal of enabling older adults to live independently, with high quality of life, and providing them with high quality of care and social services.<sup>46</sup> These policies also frequently recognized the need to reform welfare systems to provide universal care alternatives for older adults with varying income. For example, Japan enacted long-term care insurance, offering social care to those aged 65 years and older on the basis of needs, allowing older people to access a wide range of institutional and community-based services.<sup>47</sup>

Using these policies as a reference point, it appears that one of the main weaknesses of public policy in Chile is that a more coordinated response is needed to support the implementation of an integrated and holistic aging policy that considers the diversity of older adults. In fact, public policies in Chile largely focus on vulnerable groups and operate with insufficient coordination between health and social services. As an example, the EMPAM coverage is *de facto* limited to roughly 40% of the older population using primary care, and there is little evidence that EMPAM is followed by the recommended interventions, such as referrals when a

cognitive disorder such as dementia is suspected.<sup>10</sup> There is also a shortage of policies for people with different degrees of dependence or at risk of dependence. The care demands of people with moderate or severe dependence and who do not have a family support network exceeds the capacity of the SENAMA care programs. This partly explains why charitable institutions continue to play a fundamental role funding long-term care establishments.

Most efforts have so far been directed to the identification of people at risk or those who are dependent, without an equivalent effort to foster action to reduce the risk of dependence or the number of people in need of caregiving. Another important problem concerning current public policies on aging is the lack of program and impact evaluation. Even if good quantitative information exists on the number of people with access to specific public services, there is limited data on its impact and effectiveness. For example, there are very good administrative records on the results of the EMPAM, but its diagnostic utility to identify people with dementia has not been well established.

Considering the multiple opportunities and challenges posed by a rapidly aging society, Chile has taken significant steps forward, but still has a long way to go to successfully achieve healthy aging. Comparisons with public policies in other countries suggest that it is crucial to design comprehensive policies for aging, taking into account the diversity that characterizes older adults, distinguishing their needs, and acknowledging their contributions. Public policies in Chile should improve at promoting a vision of old age that considers its heterogeneity, diminishes ageism, and promotes the social integration of older people. This includes promoting participation and contributions of older adults to society, as well as strengthening their autonomy and providing differential care according to their different needs.

The examples of public policies in upper-middle income countries offer a framework that could inspire the design of public policies for aging in Chile. However, the complexity of addressing the challenges of promoting and preserving health in old age precludes universal prescriptions. As Chan points out, health systems are specific to their contexts.<sup>48</sup> The way in which each country formulates and executes its health policies is related to its own economic, cultural, and social structure. This situation emphasizes the need for research at the local level. Health policies require information, hence the importance of expanding our knowledge about aging in the Chilean population.

Beyond the weaknesses of current aging policies, the need to address the challenges and opportunities posed by population aging has led Chile to prioritize aging in the research

agenda. With the support of the Fund for Research Centers in Priority Areas (FONDAP) of the National Commission for Scientific and Technological Research (CONICYT) of the Ministry of Education, a new excellence research center has been created to study “Geroscience, Brain Health, and Metabolism.” This center includes the collection of longitudinal data aimed at finding biological, psychological, and social risk factors associated with healthy or pathological aging trajectories in the Chilean population. The project combines a strong research component of intrinsic factors of aging with clinical studies and applications in older adults. That is, the project seeks to generate new knowledge on aging in Chile that can be used in the design and implementation of future public health policies and health care strategies.

In sum, Chile must meet the challenges of the increasingly aged population and is attempting to define an effective path forward. Although substantial progress has been made in the identification of older adults at risk, there is ample room for improvement in the implementation of actions to meet their needs. A major challenge moving forward will be to evaluate current strategies in the light of new evidence, realizing that multiple iterations of a policy will be needed to maximize the effectiveness of any program. By recognizing and prioritizing the challenges and opportunities associated with an aging population, however, Chile has already taken an important step in the process of achieving healthy aging.




## DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST



No potential conflicts of interest were disclosed.

## FUNDING

This work was supported by FONDAP Program Grant 15150012 and Conicyt/ Associative Research Program / Basal Funds Grant for Centers of Excellence FB 0003; Conicyt / Fondecyt Regular /1160940 & 1170010/ Fondecyt Initiation 11150355, and Columbia University President’s Global Innovation Fund. AI was partially supported by grants from CONICET, CONICYT/FONDECYT Regular/1130920, FONCyT-PICT/ 2012-0412 & 2012-1309 and INECO Foundation.

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