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Original Article

Informal caregivers in Chile: the equity dimension of an invisible burden

Pablo Villalobos Dintrans *

Programa Centro de Salud Pública, Facultad de Ciencias Médicas, Universidad de Santiago, Avenida Libertador Bernardo O'Higgins 3363, Estación Central, Santiago, Chile

*Corresponding author. Programa Centro de Salud Pública, Facultad de Ciencias Médicas, Universidad de Santiago, Avenida Libertador Bernardo O'Higgins 3363, Estación Central, Santiago, Chile. E-mail: pvillalobos.d@gmail.com

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Abstract

Population aging is driving a process of increase in long-term care needs in Chile and many countries around the world. In this context, this article asks about the consequences of this increase in informal caregivers, emphasizing the inequity issues arising from these changes. Using the CASEN 2017 survey, caregivers are identified and matched to people with long-term care needs. Results show that most caregivers are women, and a large fraction of them are also elderly; this is similar to what has been found previously in developed countries. Caregivers have fewer opportunities than non-caregivers, which translates into lower income-generating ability and higher poverty. The nature of these tasks creates a vicious cycle in which people get trapped with increasing needs and fewer resources to meet them. Important differences arise between caregivers and the rest of the population. Even more concerning is that these disparities are avoidable to some extent, adding an equity dimension to the problem. This emphasizes the need for the generation of policies that will support caregivers and meet their needs.

Keywords: Caregiver, Chile, inequity, long-term care, dependency, human capital

Introduction

Chile is experiencing important changes in the structure of its population. In particular, population aging is identified as a significant challenge in the coming years (Thumala *et al.*, 2017; Villalobos Dintrans, 2018a). One of the consequences of this process will be the increase in the number of people needing long-term care (LTC) in the country, with a consequent increase in caregivers. This is a particularly pressing issue, considering that this rise in demand for LTC will occur in the next years and the lack of a developed LTC system in the country. These elements will combine to increase the burden on caregivers in Chile, the majority of whom are informal. Considering that the public debate regarding LTC has been scarce, issues faced by caregivers go nearly unnoticed, contributing to their invisibility in public policies (Adelman *et al.*, 2014).

In this context, learning about this group is increasingly important. To give caregivers visibility and foster the design of public policies targeted to them, it is vital to identify how many people are providing these services and understand what it means to be a caregiver in Chile. The increasing number of caregivers and the importance of meeting their health needs are not the only rationale for focusing on them in public policy; caregiving also has an important equity component that needs to be addressed. Consequently, this article has multiple aims: first, to provide an estimation of the number of caregivers in Chile, to measure the magnitude of the issue; second, to characterize caregivers in Chile, in order to understand who they are and what problems they face; third, to highlight the inequities arising from the way LTC needs are met in the country today, emphasizing that some of these disparities can be addressed by designing and implementing public policies for caregivers and their dependents. Finally, this study seeks to increase awareness of the situation of informal caregivers in other countries, particularly low- and middle-income countries, and highlight the need to implement policies addressing the issues that arise from the increase in LTC needs in these countries (World Health Organization, 2016), including the adaptation of health systems and the implementation of LTC systems.

The article follows other studies that have tried to describe the profile of informal caregivers in Chile, focusing on the burden they bear (Albala *et al.*, 2007; Jofré and Sanhueza, 2010; Espinoza and Jofré, 2012; Flores *et al.*, 2012; Benavides *et al.*, 2013; Rosson *et al.*,

Key Messages

- Population aging in Chile and other countries is driving the increase in long-term care needs and the number of informal caregivers.
- Caregiver's profile in Chile is similar to what is found in other countries, with most of them being women and elders taking care of elders.
- In the absence of policies to support caregivers and provision of long-term care services, caregivers have more needs and less resources to meet them; the nature of caregiving tasks reinforces these inequities generating a vicious circle.
- This negative trend and the equity dimension of the problem call for sustainable solutions, highlighting the need of investing in long-term care policies.

2013; Slachevsky *et al.*, 2013; Aravena *et al.*, 2017). However, these studies have been designed to answer specific questions, based on small samples of well-defined types of caregivers. In contrast, this article seeks to offer a national panorama of the caregivers in the country. Recent attempts to describe caregivers at the national level follow the same strategy proposed here, using national surveys and performing statistical descriptions (Centro UC Estudios de Vejez y Envejecimiento, 2015; Palacios, 2017). This study updates some of these results based on national survey data, contributing to future debate on this topic and adding the equity lens as an important factor to be considered when discussing the extent of the problem and its potential solutions.

Materials and methods

The aim of the study is to identify and describe caregivers in Chile, as well as the effects caregiving has on these individuals and their families. Another objective of this paper is to make visible the burden caregivers bear and analyse it from an equity perspective.

The analysis was performed using the latest version of the National Socioeconomic Characterization Survey, CASEN 2017. The Ministry of Social Development (MIDESO) has carried out the survey periodically since 1990, and its goal is to provide information on the socio-economic conditions of Chilean families and the impact of social policies in the country. The survey includes a sample of almost 70 000 households for the 16 administrative regions in the country (Ministerio de Desarrollo Social, 2018a).

Although its primary goal is not to identify health conditions, since 2015, the survey has included questions to classify people according to different levels of care dependency in its health section (Villalobos Dintrans, 2019). This new feature of CASEN allows identification of dependents and caregivers. While other sources of information exist to identify dependents and caregivers, the use of CASEN is interesting for the following reasons.

i. It has national representativeness at the regional level, while other surveys constrain sampling to a specific population.
ii. Because its focus is not identifying dependency, CASEN collects information from people in a large age range, while dependency-focused studies usually restrict sampling exclusively to the elderly.
iii. The survey includes information on a wide range of variables, permitting the characterization of the population of interest (in this case, informal caregivers).
iv. Unlike other surveys, CASEN is released every 2 or 3 years, which increases the replicability of results. For example, the First National Study on Dependency in the Elderly Population (Servicio Nacional del Adulto Mayor, 2010) was carried out in 2009 by the National Elderly Office (SENAMA) and to date, it has not been updated.

The identification of dependents and their caregivers was performed as follows. First, dependents were classified into three groups following the methodology proposed by SENAMA (Servicio Nacional del Adulto Mayor, 2010) and MIDESO (Ministerio de Desarrollo Social, 2017), as shown in Table 1.

Additionally, the survey has questions to identify caregivers; it asks people whether they have someone (either at home or externally) who provides help in performing activities of daily living (ADL). Using this definition, the survey identified 672 174 caregivers for a population of 14 380 364 people of 15 years and older. Roughly 65% of these caregivers are women. Almost 60% of these can be identified as informal caregivers (those the dependent identified as providing care exclusively at the dependent's home) (Table 2).

This provides a general picture of caregivers in Chile but, unfortunately, individual information is not available for all these caregivers. In order to provide a more detailed characterization of caregivers in the country, a different question was used. The survey also asks to declare who, within the household, provides care, identifying caregivers in the sample. Using these definition, 521 584 caregivers are identified within the sample. Again, this question identifies caregivers at home, i.e. who live in the same household than the dependent, and, consequently, are defined as informal caregivers. This is the classification used to identify caregivers in the study. The article presents different statistics to characterize these caregivers and compare them to the rest of the survey population.

Table 1 Definition and classification of care dependents

Classification	Description
No dependency	Declares no difficulty in performing basic activities of daily living (BADL) and instrumental activities of daily living (IADL)
Mild dependency	1. Inability to perform one IADL, or 2. Permanent need for help in performing one BADL (except bathing), or 3. Permanent need for help in performing one IADL
Moderate dependency	1. Inability to bathe (BADL), or 2. Permanent need for help in performing two or more BADL, or 3. Permanent need for help in performing three or more IADL, or 4. Inability to perform one IADL and constant need for help in performing one BADL
Severe dependency	1. Inability to perform one BADL (except bathing), or 2. Inability to perform two IADL

Source: Ministerio de Desarrollo Social (2017).

Table 2 Distribution of caregivers by type of dependent and caregiver

	Home	External (paid)	External (unpaid)	Home + external paid	Home + external unpaid	Total
No dependency	70 642	4372	23 741	1628	19 320	119 703
Mild	87 728	3554	25 036	2503	28 572	147 393
Moderate	128 323	9512	23 968	9813	46 981	218 597
Severe	108 896	6939	11 506	16 138	43 002	186 481
Total	395 589	24 377	84 251	30 082	137 875	672 174

Source: Author's elaboration.

Table 3 Distribution of caregivers by sex and age group

	Total		Male		Female		
Age group	*N*	%	*N*	%	*N*	%	% female
15–19	14 377	2.76	6454	3.88	7923	2.23	55.11
20–24	25 335	4.86	9284	5.58	16 051	4.52	63.36
25–29	22 997	4.41	7019	4.22	15 978	4.50	69.48
30–34	21 034	4.03	6553	3.94	14 481	4.08	68.85
35–39	22 377	4.29	6570	3.95	15 807	4.45	70.64
40–44	36 903	7.08	10 682	6.42	26 221	7.38	71.05
45–49	37 472	7.18	10 631	6.39	26 841	7.56	71.63
50–54	72 695	13.94	21 659	13.02	51 036	14.37	70.21
55–59	62 447	11.97	18 452	11.09	43 995	12.39	70.45
60–64	63 986	12.27	17 736	10.66	46 250	13.02	72.28
65–69	51 705	9.91	15 276	9.18	36 429	10.26	70.46
70–74	40 983	7.86	14 594	8.77	26 389	7.43	64.39
75–79	26 923	5.16	11 244	6.76	15 679	4.41	58.24
80–84	12 782	2.45	4824	2.90	7958	2.24	62.26
85–89	7667	1.47	4657	2.80	3010	0.85	39.26
90–94	1316	0.25	453	0.27	863	0.24	65.58
95+	585	0.11	304	0.18	281	0.08	48.03
Total	521 584	100.00	166 392	100.00	355 192	100.00	68.10

Source: Author's elaboration.

All statistics include caregivers older than 14 years. Two-sample mean *t*-tests were used for the statistical comparisons between groups.

Results

Informal caregivers in Chile: profile

This section presents several variables to understand who these caregivers are and their main characteristics.

First, Table 3 shows the distribution of informal caregivers by sex. Out of the total, 68.1% of the caregivers are women, highlighting a gender bias that has been already identified in the literature (Vaquiro and Stiepovich, 2010; Colombo *et al.*, 2011). The average age of caregivers is 53.50 years (median: 55 years), though this is slightly higher for men. The table also shows another important feature of this population: informal caregivers provide services to elderly people with dependency (62% of the dependents are 65 years or older), but these caregivers are majority elderly too; 73% of the caregivers fall into this category. Among male caregivers, 69% are elderly, and this increases to 75% in female caregivers. This result emphasizes another dimension of the unequal burden of care: informal caregivers are mostly female and elderly, with women caregivers being older than male caregivers, on average.

In terms of kinship in the dyad-dependent caregiver, Table 4 shows that 34% of the caregivers take care of their parents, and 27% provides care to his/her spouse. Since the survey only directly identifies the link between the head of the household and other members of the household, the relationship between the caregiver and the dependent is obtained by triangulation, which explains the 10.66% of caregivers classified as 'Non-identifiable'.

Table 4 Kinship distribution of the dyad by sex

Dependent's relationship to caregiver	Male caregiver (%)	Female caregiver (%)	Total (%)
Son/daughter	33.13	34.44	34.02
Spouse	36.61	21.89	26.59
Other family member	18.89	32.21	27.96
No family relationship	0.71	2.56	1.97
Non-identifiable	10.66	8.91	9.47
Total	100.00	100.00	100.00

Source: Author's elaboration.

The table also exhibits differences by sex, showing that male caregivers most frequently end up caring for their spouses. On the other hand, more female caregivers than male are labelled as an 'other family member'; when looking at this number in detail, data show that women are proportionally more likely to take care of their children (parental caregiver), their grandparents, and their siblings.

Caregivers' burden: hidden inequities

Having established a basic description of who caregivers are in Chile, this section presents several statistics to understand the burden the caregiving tasks entail. Table 5 shows, from a household perspective, the dissimilar burden faced by caregivers. Two caveats are required to interpret this table. First, it compares households with and without caregivers; the results are practically identical when calculating the same statistics for households with and without a dependent, highlighting the need for considering the dyad as a valid unit of analysis. Second, numbers represent the share of people in the sample; results hold when using the percentage of households instead.

Households without caregivers have a per capita income more than US$150 higher than those with caregivers, with this difference being statistically significant.

Despite this important disparity, both types of groups have a similar fraction of people under the poverty line (as defined by income only). However, when using a broader definition of poverty—multidimensional poverty—differences appear again. Multidimensional poverty is an index registered in the survey that considers five dimensions: education, health, job and social security, housing and environment, and networks and social cohesion (Ministerio de Desarrollo Social, 2018b). When taking these factors into account, households with caregivers exhibit a clear disadvantage: the fraction of households considered 'poor' using this definition is larger in households with caregivers by ten percentage points.

Finally, caregiver households also exhibit significant differences in terms of their social security coverage, reflecting worse social protection for these households with greater needs.

Table 5 Impact of the presence of a caregiver/dependent in a household

% people	Household with caregiver (A)	Household without caregiver (B)	Difference (A − B)
Per capita monthly income (US$ 2017)	432.41	586.52	−154.11***
Income poverty	8.46%	8.61%	−0.15%
Multidimensional poverty	29.61%	19.49%	10.12%***
Lack of social security	33.40%	34.56%	−1.16%***

Note: Exchange rate 2017 = 649.33 CLP$/US$.
Source: Author's elaboration. ***$P < 0.01$, **$P < 0.05$, *$P < 0.1$.

What can explain these differences between households? Table 6 presents a series of indicators referring to schooling, health and labour and social participation that can help in answering this question.

First, from a human capital approach, people's education is key to understanding their performance in the labour markets and, ultimately, their household income and poverty levels (Becker, 1964; Mincer, 1974; Willis, 1986). The table shows that caregivers start with an important drawback in terms of their education: they have fewer years of schooling and also have, on average, lower levels of educational attainment.

A second factor that explains the lower income of households with caregivers is labour participation; this has a direct and indirect impact (through work experience). When consulted about their participation in paid, work-related activities, caregivers exhibit significantly lower participation rates than the rest of the population. These findings considers the whole population over 14 years old, including those older than 64 years. Since the caregiver population is on average older than the rest of the population, this result could be biased due to a larger portion of retired people among caregivers. When constraining the sample to people between 15 and 65 years old, the difference between both groups decreases, but the main conclusion holds (the difference goes from 13 to 10 percentage points, with both being statistically significant).

Maybe more interesting is to note that caregivers are willing to work but declare that they simply cannot. When looking at the reasons for not participating in the labour market, caregiving tasks are an important reason among caregivers. These results are relevant not only because they explain what is behind the low caregiver labour participation, but also because they highlight the involuntary nature of this decision: many caregivers would like to have a paid job in the formal labour market, but their situation constrains their set of choices and opportunities (Sen, 1985).

Other indicators also show the many dimensions in which caregivers are worst-off in terms of labour outcomes: they not only work less and receive less money, but they also have more precarious jobs, on average. Caregivers tend to work more on a part-time basis and, consequently, contribute less to the social security system, receiving lower pension coverage on retirement. This implies that they have

Table 6 Individual effects of being an informal caregiver

	Caregiver (A)	Non-caregiver (B)	Difference (A − B)
Years of schooling	9.96	11.21	−1.25***
Higher education or more	12.35%	20.26%	−7.91%***
Did you work last week?	40.15%	53.34%	−13.19
Are you available for working	16.41%	15.97%	0.44%***
Reasons for not working: care	11.62%	0.32%	11.30%***
Part-time job	1.48%	9.54%	−8.06%***
Pension (contributive) coverage	68.01%	69.40%	−1.39%***
Did you receive any income last month?	43.88%	56.74%	−12.86%***
Net monthly salary (US$ 2017)	559.16	758.00	−198.84***
Poor health (1 or 2 in a 1–7 scale)	3.15%	2.94%	0.21%**
Good health (6 or 7 in a 1–7 scale)	45.17%	59.72%	−14.55%***
Why did not visit a physician? No time	7.60%	4.38%	3.22%***
Why did not visit a physician? No money	7.99%	2.37%	5.62%***
Public health insurance	85.74%	77.41%	8.33%***
Private health insurance	7.26%	14.68%	−7.42%***
No health insurance	2.96%	3.12%	−0.16%
Social participation	31.19%	27.24%	3.95%***

Note: Exchange rate 2017 = 649.33 CLP$/US$.
Source: Author's elaboration. ***$P < 0.01$, **$P < 0.05$, *$P < 0.1$.

both lower present income and lower expected income (and probably higher expected expenditures) in the future.

In terms of health outcomes, caregivers' self-assessments of their health status are worse than the rest of the population: a larger fraction reports having poor health and a lower proportion reports having good health. This is expected to be a direct consequence of caregiving tasks, as found in previous studies on caregivers' burden in Chile (Albala *et al.*, 2007; Jofré and Sanhueza, 2010; Espinoza and Jofré, 2012; Flores *et al.*, 2012; Benavides *et al.*, 2013; Rosson *et al.*, 2013; Slachevsky *et al.*, 2013; Aravena *et al.*, 2017). Health is relevant *per se* and because it is a relevant component of human capital (Schultz, 2002; Adams *et al.*, 2003; Weil, 2007). Poor health among caregivers reinforces the negative effect on income already found for education and labour participation, creating a vicious cycle: income and education are social determinants of health and, at the same time, health affects these individuals' possibilities for studying and working. Not surprisingly, when asked about the reasons for not seeing a physician, caregivers are more likely to identify time and money as obstacles to care seeking.

The share of caregivers covered by Chilean public health insurance is larger, and a lower proportion of them participate in the private insurance market than their non-caregiver counterparts. This result is expected in a segmented system in which private insurers can select affiliates and where public insurance serves as the safety net that receives the poorer and riskier beneficiaries (Villalobos Dintrans, 2018b). Although the percentage of uninsured caregivers is lower than in the general population, this difference is not statistically significant.

Finally, and maybe the only dimension in which caregivers exhibit some advantage is social participation. As in the case for labour market participation, these results could be explained by the larger proportion of elderly people as caregivers: since the elderly generally have higher social participation, the findings could be simply the effect of this different composition in both groups. However, when dividing the sample into the elderly and non-elderly population, these differences remain, with caregivers being more likely to participate in social organizations than others, regardless of their age.

In summary, compared to the rest of the population, caregivers must provide for greater needs (both for themselves and for the dependents they care for) with fewer resources (in terms of money and time). These effects reinforce themselves, generating a situation of increasing needs and increasing inequality over time.

Discussion

First, in terms of the caregiver's profile, the results for Chile exhibit several similarities to those found in other contexts. For example, in countries of the Organization for Economic Cooperation and Development (OECD), on average, 60% of informal caregivers are women, while in countries like Poland and Portugal, this figure reaches 70% (Organisation for Economic Cooperation and Development, 2017). Similar to in Chile, most caregivers in OECD countries are looking after a parent or spouse, with younger caregivers more likely to provide care for parents and older caregivers more likely to provide care for spouses. These findings are repeated when looking at data from the USA. According to a study from the National Research Council (Schultz and Tompkins, 2010), almost 30% of the population provides some kind of unpaid care, with the typical caregiver being a 48-year-old woman who spends >20 h per week providing care to a relative.

National-level information is scarce in other countries in Latin America. However, several studies using samples of caregivers show similar patterns to those described in Chile. In Uruguay, Banchero and Mihoff (2017) report that, for a sample of 74 caregivers, the average age was 71 years, with 82% of them being women; 60% of the caregivers live with other older person. Luxardo *et al.* (2009) studied a sample of 50 informal caregivers providing palliative care in Argentina. Their sample showed that 84% of caregivers were women, with 40% being spouses and 34% sons or daughters. The average age of caregivers was 58 years. Similarly, Islas *et al.* (2006) presented data on 46 caregivers of patients with chronic obstructive pulmonary disease in Mexico. Caregivers were mostly women (83.6%), between 45 and 65 years old (average age: 59.2 years), with a direct family link to the patient: 45.6% spouse and 36.2% daughter. Overall, 97.8% of them reported not receiving any payment for this job. The results of Lara *et al.* (2008) using a sample of 60 caregivers from Mexican primary care confirm these findings: 88.3% were female caregivers with an average age of 59.1 years; 68.3% provided care to a parent. A similar study on Cuban caregivers (Pérez *et al.*, 2013) repeated the results: 67% were women with almost half of them (47.6%) being older than 60 years ($n = 42$). Finally, data from a Colombian study (Pinzón-Rocha *et al.*, 2012) exhibited a similar pattern. In this case, out of the 180 caregivers in the study, 79% were women. Spouses represented 26% of the sample, while 48% were children taking care of parents. In terms of age, 61% of them were older than 40 years (average age: 46 years), reflecting the younger demographic profile of this country versus the others.

Second, this analysis shows important disparities between caregivers and the rest of the population. These are summarized in Figure 1, which proposes a visual interpretation of the results. The gaps in the figure can be seen in terms of differences between households with and without dependents, as well as differences between needs and resources to meet them. Figure 1 illustrates the way in which these differences are sustained and reinforced over time, creating the vicious cycle previously described.

The process starts with the increase in LTC needs at household level, which generates a resources gap, since dependents require both extra time and money to meet their needs. Households meet these needs through informal caregiving, using a combination of money and time: time constraints limit the accumulation of human capital and participation in the formal labour market for caregivers that, in turn, reinforce the income gap. Fewer resources to deal with care dependency imply an expected increase of LTC needs in the future, considering that prevention and rehabilitation strategies can be used to decelerate the dependency process (World Health Organization, 2015, 2017).

The nature of the caregiver's tasks creates an increase in the caregiver's own needs, worsening their health status; as shown by the estimations provided for Chile, caregivers identify money and time as barriers to seeking healthcare. Access to healthcare and the impact of caregiving on the caregiver's health status are mediated by health insurance and social participation. Finally, a decrease in the caregiver's health is associated with a decrease in the quality of care provided which, again, exacerbates the initial dependency (Arechabala *et al.*, 2011; Ejem *et al.*, 2015).

Results confirm that caregivers differ from non-caregivers in several aspects, but can these differences be interpreted as inequities, or should be considered as inequalities? Health inequalities can be considered inequities if they are: (1) avoidable and unnecessary and (2) unfair and unjust (Dalhgren and Whitehead, 1991; Whitehead, 1992). Likewise, disparities can be considered unjust if: (1) they are

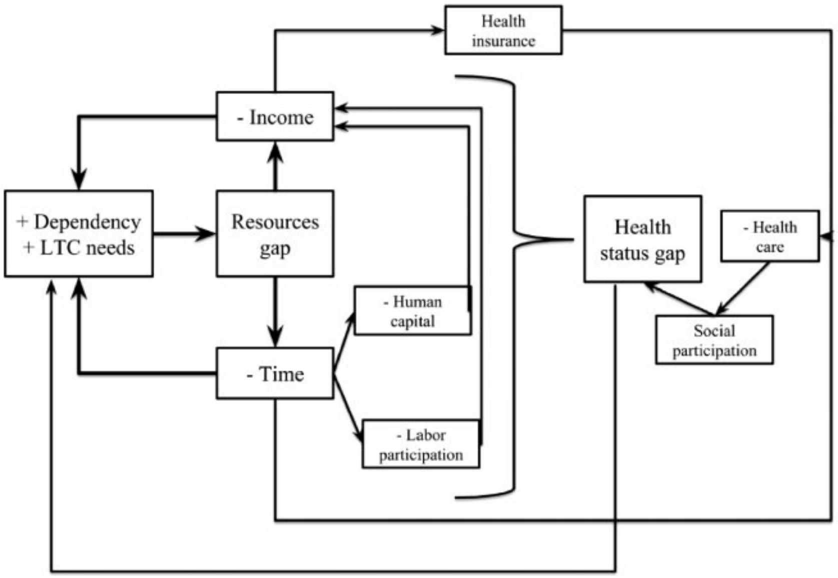

Figure 1 LTC inequities flow chart. *Source:* Author's elaboration.

socially produced, i.e. there are socially controllable factors that explain those health disparities and (2) assuming the existence of 'natural' (e.g. genetic) factors that justify the differences, society does not deal with them, though it has the capacity to do so (Daniels, 2008).

In the case under study, disparities should be considered as inequities. Results are particularly alarming, considering the reinforcing negative effects between caregiver status, education, health, labour participation and income-generating capacity, and social protection. All this combines with the larger situation, age and gender bias. The ethical assessment of the caregivers' situation—particularly regarding whether or not it is avoidable and unnecessary—should consider the evidence on the positive effects of providing support to caregivers (Colombo *et al.*, 2011; Umegaki *et al.*, 2014; Flores González and Seguel Palma, 2016) and the feasibility of establishing comprehensive and coordinated initiatives. These results should be considered when discussing the need and urgency of designing and implementing an LTC system in the country (Villalobos Dintrans, 2018a). As defined by the World Health Organization, LTC should allow dependents to live lives consistent with their basic rights, fundamental freedoms and human dignity (World Health Organization, 2015). The same should apply to caregivers.

Despite its usefulness, the study has several limitations that need to be assessed when interpreting the findings. First, it relies on a particular definition of the caregiver; in this case, the strategy was classifying as caregivers people who are identified by the dependent as the one providing help in performing ADL, living under the same roof. The literature provides several definitions for a caregiver based, e.g. on the existence of a family tie, monetary payments, formal training, etc. Depending on the definition used, these profiles could vary (Schultz and Tompkins, 2010; Colombo *et al.*, 2011; World Health Organization, 2015). Similarly, even though dyads were directly identified through the survey, it was not possible to establish a *vis-a-vis* link between caregivers (as defined by one question in the sample) and dependents (as defined by in Table 1). Consequently, almost 15% of the caregivers appear to be taking care of someone who is not classified as a care dependent. This raises an important issue when using the CASEN survey for dependency analysis: it does not have questions to identify people with dementia and, therefore, underestimates the prevalence of dependency in the population (Villalobos Dintrans, 2019). Finally, the strategy only identifies a fraction of the country's caregivers, and possibly a fraction of the country's informal caregivers. As explained in the methods section, the analysis utilizes one question that allows both defining a caregiver and identifying it in the sample. This was a necessary trade-off between breadth (identifying more caregivers) and depth (having more information for each caregiver).

Conclusion

This study presents a nationwide picture of the situation of informal caregivers in Chile. The analysis finds that caregivers are mostly women and also involve a large fraction of elders caring for other elders. These results confirm what has been found in other countries and previous studies in Chile.

The article inquires into other aspects of caregiving. Data show that households with dependents and caregivers have less income and are at higher risk of poverty; they also have less social security and report having worse health than the rest of the population. These factors combine to create a vicious cycle in which families with dependents have more needs and less capacity to meet these needs by themselves. The time-consuming nature of caregiving tasks generates direct as well as indirect effects: caregivers have fewer opportunities to work, and even those who can work formally have less human capital on which to draw.

The results presented here call for a change in the way health and social security systems operate today in Chile. The inequities produced by the increase in LTC needs in the country are not addressed by the social security apparatus, which means it is failing to fulfil its goal of providing healthcare and income security (Subsecretaría de Previsión Social, 2019). This result shows the existence of a gap that is covered neither by social nor by healthcare policies, revealing room for change and an opportunity to complement these subsystems with an LTC system (Villalobos Dintrans, 2018a).

The picture presented in this article shows that the problems faced by dependents and their caregivers affect an important proportion of the population. The demographic change and the cumulative nature of the negative effects of caregiving imply that these challenges will increase in both scale and intensity. Currently, the country has several initiatives focused on dependents and caregivers. For example, the programme Chile Cuida (Ministerio de Desarrollo Social, 2019) offers services for dependents and caregivers. Today, the programme operates in 22 out of 345 municipalities of the country. The programme includes education and respite services for caregivers. Other LTC-related services are offered by the National Elderly Office and the Ministry of Health, but they have very limited coverage. These initiatives need to be scaled up and coordinated to provide a comprehensive response to the increase in long-term care needs (Villalobos Dintrans, 2017). The current LTC services could be used as the basis for a future LTC system, that—in line with the call of the World Health Organization (2016) to establish LTC systems in every country—would define beneficiaries, benefits, providers and a financing mechanism to deal with the increase in LTC needs in Chile. Additionally, in order to address the inequities of caregiving in the country, policies that increase labour participation of informal caregivers' country—like schedule flexibility, absence leaves or home-base work—should complement the implementation of the LTC system.

This system would constitute a next step in responding to the challenges of population ageing, and will not only reduce the burden that caregivers bear in their everyday life, but also improve their opportunities and freedom.

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