Taylor & Francis
Taylor & Francis Group

Inequalities in access to health care for people with disabilities in Chile: the limits of universal health coverage

Elena S. Rotarou & Dikaios Sakellariou

Taylor & Francis
Taylor & Francis Group

RESEARCH PAPER

🔓 OPEN ACCESS   Check for updates

Inequalities in access to health care for people with disabilities in Chile: the limits of universal health coverage

Elena S. Rotarou[a] and Dikaios Sakellariou[b]

[a]Department of Economics, University of Chile, Santiago, Chile; [b]School of Healthcare Sciences, Cardiff University, Cardiff, UK

ABSTRACT

We analysed cross-sectional data collected as part of the National Socioeconomic Characterisation Survey (2013) in Chile, in order to explore if there are differences in access to health care between adult Chileans with and without disability. The study included 7459 Chilean adults with disability and 68,695 people without disability. Logistic regressions were performed in order to determine the adjusted odds ratios for the associated variables. We found that despite universal health coverage, Chileans with disabilities are more likely to report worse access to health care, even when controlling for socio-economic and demographic variables, including age, gender and income. Specifically, they are more likely to face greater difficulty arriving at a health facility, obtaining a doctor's appointment, being attended to in a health facility, paying for treatment due to cost, and obtaining necessary medicine. Both people with and without disability are more likely to face difficulties in accessing health services if they are affiliated with the public health provider, an indication of the economic factors at play in accessing health care. This study shows that universal health coverage does not always lead to accessibility of health services and underlines the disadvantaged position of disabled people in Chile in accessing health services. While efforts have been made recently to improve equity in health care access, disability in Chile poses an additional burden on people's access to health care, emphasising the necessity for policy to address this perpetual cycle of disadvantage for disabled people.

Introduction

In this article, we focus on inequalities in access to health care for people with disabilities, and how these intersect with socio-economic factors. Evidence from several countries, operating a variety of health care systems, suggests that people with disabilities experience worse access to health care compared to the general population (AIHW, 2015; Gudlavalleti et al., 2014; Lee, Kim, & Shin, 2013; Maart & Jelsma, 2014; Popplewell, Rechel, & Abel, 2014). A systematic review on access to health care demonstrated that '… disabled people are restricted in accessing health care and report less satisfaction with their medical care' (Gibson & O'Connor, 2010, p. 21), with problems including lack of transport, inaccessible buildings, inadequate training of health care professionals, needs not being understood, and feeling of low priority due to pre-existing conditions (Gibson & O'Connor, 2010). Such inequalities can be further

compounded by the systematic exclusion that people with disabilities often face, exemplified by lower employment rates, lower income levels, and higher levels of poverty than the general population (Beresford, 1996; Braithwaite & Mont, 2009).

Since 1973, Chile has undergone an extensive process of marketisation of its health care, as part of a broader social policy approach heavily influenced by neoliberalism. The highly divided two-tier health system in the country is comprised mainly of the National Health Fund (FONASA, from the Spanish original Fondo Nacional de Salud), which is the public health provider, and Health Insurance Institutions (ISAPREs, from the Spanish original Instituciones de Salud Previsional), which are private health providers. This health system has resulted in greater inequality and dehumanisation of health care: the low-income populations have mostly access to the underfunded and overburdened FONASA, while high-income populations are usually affiliated with an ISAPRE (Unger, De Paepe, Cantuarias, & Herrera, 2008). Thus, the Chilean health system – despite a series of recent health reforms, aimed at increasing equity in health care access, financing and service provision – is quite regressive due to the existence of vast differences in the type and quality of health care between those with financial resources and those with limited or no resources (Missoni & Solimano, 2010).

The last few years have seen the emergence of discussion regarding the rights of people with disabilities in Chile (see e.g. Guajardo, Albuquerque, & Diaz, 2016). Despite the increased attention to the rights of disabled people in Chile and the disadvantages that they experience, relevant research has been very limited. Existing studies have mostly focused on employment (Barrera & Fritz, 2009), quality of life (González et al., 2012), disability and immigrant populations (Cabieses, Tunstall, & Pickett, 2010), and the socio-economic impacts of disability (Contreras, Ruiz-Tagle, Garcés, & Azócar, 2006; Zitko & Cabieses, 2011). The 2004 and 2015 National Studies on Disability in Chile provide country-wide socio-economic and demographic information on people with disabilities, and on the impediments they face in their activities and social participation, but do not analyse access to health services (INE, 2005; Ministry of Social Development, 2016a).

To the best of our knowledge, there is no quantitative study in Chile investigating access to health services between people with and without disability. Our study aims to address this gap by looking at various barriers to health care that adults with and without disabilities are facing in Chile, as well as investigating these barriers in relation to health care provider, which is an indicator of socio-economic status. Thus, our research allows an exploration of the intersections between disability, socio-economic condition, and access to health care for people in Chile. This is essential in order to better understand how disability and socioeconomic condition impact on a very important aspect of the daily lives of disabled people, that is, access to health care. This knowledge can also contribute to more equitable access to care, since simply the availability of services guarantees neither the accessibility of services nor their usability, as well as to the formulation of policies and strategies to address impediments to accessing health services for disabled Chileans.

We will first provide a brief background of the Chilean health system and disability in Chile. We use interchangeably the terms people with disabilities and disabled people, to highlight disability as both in terms of impairment and in terms of social oppression.

Background

The marketisation of the Chilean health system

The first neoliberal policies in the Chilean health system began with the ascension to power of Augusto Pinochet in 1973 and his redirection of the economy towards a neoliberal model, according to the free-market economic policies advocated by Milton Friedman and the 'Chicago boys' (Sewell, 2005). Between 1974 and 1989, the goal of reducing the role of the state in the health system was partly accomplished: out of the various financing sources for health, fiscal contributions dropped from 68 to 35%, while compulsory health insurance contributions increased from 16 to 45% (Labra, 2002).

The military government introduced a two-tier health system through the creation of the National Health Fund (FONASA) in 1979 and the introduction of private health insurance institutions (ISAPREs)

in 1981. The health coverage in Chile is universal, in the sense that all citizens are entitled to access to health care. FONASA is divided into four segments (A–D) depending on people's income – with people without income belonging to segment A; the majority of people in higher income deciles are affiliated with one of the thirteen existing ISAPREs. In 2014, the majority of the population (75.2%) was affiliated with FONASA (all segments), followed by 18.5% of the population affiliated with an ISAPRE; the remaining 6.3% either pays out-of-pocket or is affiliated with the health provider of the Armed Forces (FONASA, 2015).

According to French-Davis (2005), the separation of the health system in Chile into mainly FONASA (public) and ISAPREs (private) constituted a '… regressive form of targeting and it helped to deepen the crisis in the public health system' (p. 202). This separation has led to the stratification of access to health care in Chile, so that: (a) the higher socioeconomic classes pay for private health insurance available in the market (ISAPREs), and therefore, enjoy better-quality health care services and timely attention; (b) the middle-income classes access public health insurance, with variable co-payments depending on their income (FONASA); and (c) the lower socioeconomic classes access the public health system for free or by paying an amount depending on their income (Labra, 2002). As a result, ISAPREs mostly attract the affluent, male, young, and urban, as other parts of the population are excluded from it due to cost (Sanhueza & Ruiz-Tagle, 2002). Adult women of reproductive age may pay up to four times more than men, and the proportion of people over 60 years of age affiliated with ISAPREs drops dramatically since they face premiums of up to eight times as much as those of young adults (Unger et al., 2008).

The democratic governments that succeeded the Pinochet regime managed to reverse the regressive trends in the Chilean society, although they still maintained the neoliberal economic model. With the return to democracy there was an increase in social spending that led to a large reduction in poverty rates (from about 45% in 1987 to 11.7% in 2015) and improvement in the standard of living of the middle class and the poor (CEME, 2010; Ffrench-Davis, 2014; Ministry of Social Development, 2016b). There was a significant improvement in various health indicators (e.g. infant mortality dropped from 35/1000 in 1980 to 7.2/1000 in 2014, while maternal mortality decreased from 66/100,000 to 18.5/100,000 during the same period), as well as an increase in both public spending as a percentage of total health expenditure (49.5% in 2014) and total spending on health, which in 2014 reached 7.8% of GDP (Goic, 2015; World Bank, 2016).

Despite the improvement of various health indicators, the epidemiological changes happening in Chile have increased demand for health care, and thus, have affected the quality and timely access to health care services, especially in the public sector (Bossert & Leisewitz, 2016). As a result, the country still suffers from large inequalities in access to health care, insufficient protection from health risks (both financial protection and access to timely attention), problems of 'responsiveness' (treatment, autonomy, financial justice), and cost scaling because of ageing, technology, and inefficiencies (Rojas, 2011).

The health reform initiated in 2000 aimed at increasing equity in health care through, among others, the establishment of explicit guarantees for people in a group of prioritised pathologies (AUGE-GES plan), independent of their ability to pay for health services and treatment (Kuncar Fritz, 2013). The AUGE-GES plan is a mechanism that guarantees the timely treatment and rehabilitation of all Chileans suffering from specific diseases that pose the greatest health impact to the population. As of October 2016, the AUGE-GES plan includes eighty diseases, such as various types of cancer, heart diseases, mental diseases and chronic diseases.[1]

Disability in Chile and access to health care

The latest census from 2012 revealed that 2,119,316 people in Chile have one or more disabilities, i.e. 12.7% of the total population (INE, 2013). In the census, disabled people are defined as people who have declared themselves as having one or more of the following conditions: physical difficulty and/or mobility, muteness or difficulty in speaking, psychiatric, mental or intellectual disability, deafness or hearing impairment even when wearing a hearing aid, and blindness or problems with seeing even when wearing glasses. Of those with disabilities, 1,131,563 (54.3%) were women and 987,753 (46.6%) men.

More recently, according to the second National Study on Disability (2015), about 20% of Chileans have one or more disabilities, with 8.3% of the population facing severe disability and 11.7% facing low and medium disability (Ministry of Social Development, 2016a).[2] The study identified more adult women than men with a disability (26% vs. 15%, respectively). It also showed that, with regard to health care access, 74.3% of people with disability are affiliated with FONASA, 18.3% with an ISAPRE, 4.9% pay out-of-pocket, and 2.6% are affiliated with the Armed Forces health provider or other system. Concerning income quintile, while about 90% of people with disability are covered by FONASA in the first three quintiles, this percentage falls to less than 50% in the fifth richest quintile (Ministry of Social Development, 2016a).

There are many lines of evidence pointing to a high correlation between poverty and disability, and how socio-economic deprivation can itself lead to ill health (Wilkinson & Marmot, 2003; World Health Organisation, 2008), posing further challenges for disabled people and their families. In Chile, Zitko and Cabieses (2011) found a strong correlation between indicators of socioeconomic position, such as income and education, and the likelihood of having a disability, so that people with lower levels of education and income had a higher chance of having a disability. Contreras et al. (2006) argue that there is a strong relationship between people with disability in Chile and difficulty in accessing labour market, unequal education opportunities, and lower wages, reflecting existing evidence from other countries (e.g. Bell & Heitmueller, 2009; Braithwaite & Mont, 2009; Randolph, 2004). However, it is not clear to what extent people with disabilities in Chile face difficulties accessing health care, whether these difficulties are greater to those faced by the general population, and whether they are linked to type of health care provider.

Methodology

Study aim and methods

Our aim was to investigate access to health services in Chile for adults with and without disability. We analysed cross-sectional data from the 2013 National Socioeconomic Characterisation Survey (CASEN). This survey is conducted every two to three years by the Ministry of Social Development of the Government of Chile, with the aim of estimating the magnitude of poverty and income distribution, identifying the needs of the population, and evaluating the gaps that separate the different social segments and geographical areas (Ministry of Social Development, 2016c). The results are anonymised and are freely available, as is the methodology, from the website of the Ministry of Social Development.[3]

The definition of disability on which the CASEN survey is based is the one provided by Law No. 20.422 of 2010, which defines a disabled person as one that has one or more physical, mental, or sensory impairments, and who in an effort to interact with his/her environment, finds that his/her full and effective participation in society on an equal basis with others is impeded or restricted (Ministry of Social Development, 2015). The 2013 CASEN survey employed the same categorisation of types of disability as the one used in the 2012 census, asking people to declare themselves if they experience a disability.

The units of analysis (households and people) of the survey were selected in a probabilistic, stratified, and multistage manner, with the sample being representative at country level, geographic area (urban and rural), and region (fifteen country regions and 324 municipalities in total). For the 2013 CASEN survey, of the 83,659 eligible households selected in the sample, 66,725 households – 218,491 people – were included, giving a response rate of 77.5%. Survey data was collected via a personal interview of adult members of households – lasting, on average, 42 min for a household of four people – conducted between November 2013 and February 2014, covering seven modules: registry of residents, education, labour, income, health, residents and housing.

We used STATA Version SE 11.2 to compare socio-economic, demographic, and health characteristics, as well as barriers to health care between people with and without disabilities in Chile. We tested associations with chi-square tests and calculated adjusted odds ratios (ORs) for people with and without disability with regard to barriers to accessing health care, after controlling for various socioeconomic,

demographic, and health-related variables. We calculated both the adjusted OR and the estimated probabilities of having difficulty in accessing health care services depending on health provider affiliation.

Data and variables

In the 2013 CASEN survey, there are 15,129 observations in total of people with at least one type of disability and 203,232 observations of people without any type of disability (response rate of 99.94%). In this study, we included 7459 Chilean adults with disabilities and 68,695 Chilean adults without disability (all adult respondents with complete answers). We removed 56,766 observations for people under 18 years of age, while any observations with missing values were deleted (listwise deletion); due to the large remaining sample, we have adequate power to detect meaningful effects. The frequency distributions of various types of disability by gender are in Supplemental data (Web Appendix Table 1).

The variable *disability* was recoded as follows: all types of disability were merged and formed the category 'With disability', while category 7 was left as 'No disability'. The socio-economic and demographic variables that are used as controls, their description, and categories are the following: *geographical location* (urban/rural); *gender* (male/female); *age* (grouped 18–30/31–45/46–65/66+); *civil status* (married/living with or in a relationship/separated, divorced or annulled/widowed/single); *health provider* (affiliation with FONASA (public health provider)/Armed forces/ISAPREs (private health providers)/Out-of-pocket); *health score* (self-declared health, recoded as 'bad' (values 1–3), 'neither good nor bad' (values 4–5), and 'good' (values 6–7); and *income* (total household) (quintile 1 (poorest) – quintile 5 (richest)).

For *income*, missing data were imputed by the organisation in charge of processing the data of the CASEN survey (Centre of Micro-data, Department of Economics, University of Chile), using the income reported by households with similar features as the non-responders.

Results

Characteristics of people with disabilities

Table 1 summarises the characteristics of the sample. The sample included a disproportionate number of female respondents, with 66% of both disabled and non-disabled people female. Sample representativeness in terms of gender was addressed through introducing sampling weights for the variable *gender*.

The largest age group of disabled people interviewed was over 66 years (47.5%); the largest age group of non-disabled people was the 46–65 age category (36.2%). The majority of disabled people were married (40.5%). More disabled people belonged to the lowest quintile (32.6%) than non-disabled people (18.6%), while more non-disabled people belonged to the highest quintile than disabled people.

Both health self-assessment and health care provider are significantly associated with disability, that is $\chi(2) = 5.500$, $p < .000$, and $\chi(3) = 426.638$, $p < .000$, respectively. A higher percentage of non-disabled people reported that their health is good (54.3%) than disabled people (20%). A higher percentage of disabled people (93%) have FONASA, while, more non-disabled people have ISAPREs (10.5%) than disabled people (3.4%).

Access to health care

Table 2 summarises barriers to accessing health services for people with and without disability, and reports unadjusted and adjusted ORs. Dependent variables were selected from the 2013 CASEN survey as indicators to investigate whether there is any difference in access to health care between disabled and non-disabled people; other studies have used similar variables to investigate this difference (e.g. Badu, Agyei-Baffour, & Opoku, 2016; Drainoni et al., 2006; Hwang et al., 2008). All were significantly associated with disability. More disabled people reported facing difficulty in arriving at health facility (18.3%), obtaining a doctor's appointment (32.4%), being attended (23.7%), paying for treatment due to cost (11.4%), and obtaining medicine (14.4%), than non-disabled people.

Table 1. Comparison of socioeconomic, demographic, and health characteristics of Chilean adults with and without disability.

Parameter	People with disability (N = 7,459)		People without disability (N = 68,695)	
	n	%	*n*	%
Gender				
Male (*n* = 25,477)	2,537	34.00	22,940	33.39
Female (*n* = 50,677)	4,922	66.00	45,755	66.61
		Pearson $\chi^2(1) = 1.157, p < .282$		
Age (mean)	63.00	SD = 15.97	46.99	SD = 16.81
18–30 (*n* = 13,937)	297	3.98	13,640	19.86
31–45 (*n* = 20,131)	742	9.95	19,389	28.22
46–65 (*n* = 27,711)	2,875	38.54	24,836	36.15
66+ (*n* = 14,375)	3,545	47.53	10,830	15.77
		Pearson $\chi^2(3) = 5.400, p < .000$		
Geographical location				
Urban (*n* = 60,465)	5,841	78.31	54,624	79.52
Rural (*n* = 15,689)	1,618	21.69	14,071	20.48
		Pearson $\chi^2(1) = 6.009, p < .014$		
Civil status				
Married (*n* = 32,231)	3,022	40.51	29,209	42.52
Living with or in a relationship (*n* = 12,531)	670	8.98	11,861	17.27
Separated, annulled or divorced (*n* = 7,273)	782	10.48	6,491	9.45
Widowed (*n* = 6,260)	1,564	20.97	4,696	6.84
Single (*n* = 17,859)	1,421	19.05	16,438	23.93
		Pearson $\chi^2(4) = 2.000, p < .000$		
Income				
1st quintile (*n* = 15,233)	2,434	32.63	12,799	18.63
2nd quintile (*n* = 15,229)	1,716	23.01	13,513	19.67
3rd quintile (*n* = 15,231)	1,399	18.76	13,832	20.14
4th quintile (*n* = 15,231)	1,140	15.28	14,091	20.51
5th quintile (*n* = 15,230)	770	10.32	14,460	21.05
		Pearson $\chi^2(4) = 1.200, p < .000$		
Health self-assessment				
Bad (*n* = 6,004)	1,967	26.37	4,037	5.88
Neither good nor bad (*n* = 31,415)	4,031	54.04	27,384	39.86
Good (*n* = 38,735)	1,461	19.59	37,274	54.26
		Pearson $\chi^2(2) = 5.500, p < .000$		
Health provider				
FONASA (*n* = 64,968)	6,909	92.63	58,059	84.52
Armed forces (*n* = 1,704)	170	2.28	1,534	2.23
ISAPREs (*n* = 7,427)	251	3.37	7,176	10.45
Out-of-pocket (*n* = 2,055)	129	1.73	1,926	2.80
		Pearson $\chi^2(3) = 426.638, p < .000$		

People with disability had three times higher risk of facing difficulty in arriving at a health facility, 1.8 times higher risk of facing difficulty in obtaining a doctor's appointment, 1.7 times higher risk of experiencing difficulty in being attended, 1.9 times higher risk of having difficulty in paying for treatment due to cost, and 1.8 times higher risk of facing difficulty in obtaining necessary medicine, compared to people without disabilities.

Table 3 presents the unadjusted and adjusted ORs for barriers to health care, depending on health provider affiliation (FONASA: public provider, Armed forces, ISAPRE: private provider, Out-of-pocket). Both people with and without disability are less likely to face barriers to health care if they are affiliated with an ISAPRE. For example, disabled people with ISAPRE are 3.6 times less likely to face some kind of difficulty in being attended than if they were affiliated with the public health care provider.

The estimated probabilities for barriers to health care access when the predictor variable is *health provider*, while holding the other predictor variables at their mean can be found in Supplemental data (Web Appendix Figure 1). People with disabilities are more likely to face difficulties in accessing health services than people with no disability, no matter which health provider they are affiliated with

Table 2. Comparison of barriers to accessing health services for Chilean adults with and without disability (unadjusted and adjusted ORs).

Parameters	n	%	Unadjusted OR 95% CI	Adjusted OR* 95% CI
Difficulty in arriving at health facility (Yes: n = 4,390)				
People without disability	3,027	4.41	1.0	1.0
People with disability	1,363	18.27	4.718 (4.392–5.068)	2.952 (2.724–3.199)
Difficulty in obtaining a doctor's appointment (Yes: n = 13,359)				
People without disability	10,946	15.93	1.0	1.0
People with disability	2,413	32.35	2.449 (2.319–2.586)	1.825 (1.718–1.939)
Difficulty in being attended (Yes: n = 9,599)				
People without disability	7,831	11.40	1.0	1.0
People with disability	1,768	23.70	2.354 (2.216–2.500)	1.720 (1.609–1.839)
Difficulty in paying for treatment due to cost (Yes: n = 4,047)				
People without disability	3,197	4.65	1.0	1.0
People with disability	850	11.40	2.601 (2.395–2.825)	1.911 (1.743–2.094)
Difficulty in obtaining medicine (Yes: n = 5,157)				
People without disability	4,083	5.94	1.0	1.0
People with disability	1,074	14.40	2.636 (2.448–2.840)	1.844 (1.696–2.004)

Note: There were no open-ended questions in the survey, allowing people to expand on the kind of difficulties they face while accessing health services.
*Adjusted for age, sex and other variables presented in Table 1.;
**All p values are $p < .000$ (for χ^2 tests of association, unadjusted and adjusted OR).

Table 3. Barriers to health care on the basis of health provider affiliation (unadjusted and adjusted ORs).

		Armed forces		ISAPRE		Out-of-pocket	
		Unadjusted OR	Adjusted OR[a]	Unadjusted OR	Adjusted OR[a]	Unadjusted OR	Adjusted OR[a]
(1)	Without disability	.476***	.760	.247***	.477***	.698**	.813
	With disability	.515*	.576*	.304***	.458**	.667	.698
(2)	Without disability	.408***	.517***	.217***	.313***	.478***	.557***
	With disability	.535**	.631*	.305***	.349***	.604*	.615*
(3)	Without disability	.425***	.527***	.185***	.262***	.613***	.710***
	With disability	.576*	.641*	.252***	.277***	.842	.878
(4)	Without disability	.602**	.740	.511***	.736***	1.166	1.347**
	With disability	.910	.993	1.229	1.391	2.500***	2.570***
(5)	Without disability	.438***	.525***	.324***	.454***	.696**	.814
	With disability	.888	.901	.902	.944	1.090	1.128

Reference: FONASA.
Notes: (1): faced difficulty in arriving at health facility/ (2): faced difficulty in obtaining a doctor's appointment/ (3): faced difficulty in being attended/ (4): faced difficulty in paying for treatment due to cost/ (5): faced difficulty in obtaining medicine.
[a]Adjusted for age, sex and other variables presented in Table 1.
*$p < .05$; **$p < .01$; ***$p < .001$.

(exception being 'obtaining a doctor's appointment' and 'being attended', where disabled people with ISAPRE were less likely to face difficulties if compared to non-disabled people with FONASA). For all barriers to health care access, non-disabled people are less likely to face some kind of difficulty if they are affiliated with an ISAPRE; the same applies to disabled people, with the exception of 'paying for treatment due to cost'.

Discussion

When universal health care coverage does not mean universal health care access: vectors of disadvantage

Our aim in this study was to explore the intersections between disability and access to health care for people in Chile, acknowledging the broader social realities that surround access to health care.

This is, to our knowledge, the first study exploring access to health care for disabled people in Chile. Mactaggart et al. (2016) showed that universal, equal access does not necessarily mean equal quality of services. Our study shows that universal health coverage does not always lead to universal accessibility of health services.

The findings show that Chileans with disabilities are more likely to report greater problems in accessing health care than people without a disability. Chileans with disabilities face greater problems not only in regard to arriving at a health facility, but also in regard to obtaining an appointment, being attended to, and paying for treatment, including medications. This inequality is even more troubling when we consider that people with disabilities often have greater health needs beyond those related to their primary disability (WHO, 2011).

This disparity between people with and without disability in accessing health services is incompatible with the pledge that the Chilean government undertook when it ratified in 2008 the UN Convention on the Rights of Persons with Disabilities. Article 25 of this Convention asserts that:

> States Parties recognise that persons with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination on the basis of disability … [They should] provide persons with disabilities with the same range, quality and standard of free or affordable health care and programmes as provided to other persons. (United Nations, 2006, p. 18)

By the time it signed the Convention, Chile had already adopted a social approach to disability through the introduction of a series of legal, political, and institutional policies aiming at the social inclusion of people with disabilities Since 1990, the country has undertaken significant steps towards the promotion of equality of opportunity for people with disabilities, as well as a gradual transition from the traditional welfare-based programmes focusing on poverty reduction towards a rights-based approach that promotes active citizenship, social inclusion, and community participation (United Nations, 2014)

Examples of the actions taken include: (a) the expansion of the Universal Access with Explicit Guarantees (AUGE-GES) health care plan to cover certain treatments related to physical and mental disabilities (which could potentially cover 780,000 people with physical disabilities), (b) inclusion in the country's primary care programmes screening for and early treatment of presbycusis (age-related hearing loss) and presbyopia (age-related inability to see up close), (c) increase in the number of community rehabilitation centres (143) and comprehensive rehabilitation centres (96) and (d) the adoption by an additional 60 community hospitals and 153 low-complexity hospitals of a community-based rehabilitation strategy (United Nations, 2014).

However, as shown in our study, problems in access to health care for people with disabilities persist and the intersections between disability and socio-economic condition affect access to health care. Our findings show that access to health care is mediated by the type of health service provider, which is in turn mediated by income. People with higher incomes can pay for private coverage, which can ensure them better access to health care. The inequalities in income and the subsequent differences between service providers can act as vectors of disadvantage leading to compromised access to health care.

Evidence – both from Chile (Subramanian, Delgado, Jadue, Vega, & Kawachi, 2003) and internationally (see e.g. De Maio, 2012) – suggests that there is a connection between income inequality and health. While the nature of our data cannot speak to the direct causes of inequalities in health care access, we hypothesise that what Schrecker defined as the 'neoliberal epidemics' (2016, p. 479), that is, the material effects of neoliberalism, is a major contributing factor. As people with disabilities are often excluded from the job market and they also have higher daily living costs (for instance, increased heating costs if they spend more time at home, or out-of-pocket payments for equipment or medication) (Zaidi & Burchardt, 2005), they often cannot afford to pay for private coverage. Our study shows that only 3.4% of disabled adults have ISAPRE coverage, compared to 10.5% of the non-disabled population. Previous research has found that people with mental health needs are often excluded from ISAPREs due to cost and thus need to access the overburdened and underfunded FONASA (Araya, Rojas, Fritsch, Frank, & Lewis, 2006).

This disadvantage has a gender dimension too, with women consistently reporting worse access to health care (Smith, 2008). Previous research has shown that the number of disabled women is often reported as being higher than that of disabled men, due to various factors, including neglect in health

care, poor workforce conditions, gender-based violence, sex-based differences in the prevalence or the disabling effects of common medical conditions, physical inactivity, and double discrimination in the case of disabled women being refugees, indigenous people or older people (Egüez-Guevara & Andrade, 2015; WUNRN, 2011).

Furthermore, the type of health care provider mediates access so that disabled people with ISAPRE coverage are more likely to have better access to health care than disabled people with FONASA coverage. However, despite its significance, type of provider is not necessarily the most important determinant of access to health care. There are other issues that need to be considered here, that also act as vectors of disadvantage. Access to health care is shaped by the interplay of multiple factors, such as age, disability, income, gender, sexual orientation, and ethnicity, among others. To determine, therefore, the real accessibility of health care for people, it is important to embrace an intersectionality approach, focusing on multiple inequalities (Walby, Armstrong, & Strid, 2012). For Hankivsky and Christoffersen (2008), an intersectionality approach is 'essential to developing policies that respond to the multiplicity of social locations and lived experiences' (p. 279).

The environments in which people live can facilitate or impede people's participation in daily life, including their access to health care. These effects can take various forms: lack of appropriate or reliable means of transportation, for example, can mean that people might not be able to access, and thus utilise, health services, despite their 'availability'. Or, sometimes, people might be able to get to the clinic or hospital, only to face problems in being attended to once there (because, e.g. the examination table might not be accessible), as our findings indicate (see Table 2).

Disabled people as costly bodies in a marketised health system

Issues of access to health care speak to broader issues than simply to the physical accessibility of spaces or financial resources. We propose that in an overburdened public health system, like FONASA, which operates within the confines of a neoliberal system valuing cost-effectiveness and resource prioritisation, disabled people might be implicitly viewed as 'costly' bodies; in other words, as people who use limited resources, despite their access to these resources being indirectly restricted, through, for example, lack of appropriate transportation. This might in part explain Gibson and O'Connor's (2010) finding that people with disabilities feel like patients of low priority. Poorer access to health care can then lead to even poorer health. Several studies have evidenced how access to some cancer screening services, for example, can be compromised due to the presence of pre-existing disability (Angus et al., 2012; Peters & Cotton, 2015), leading to delays in diagnosis (Merten, 2015).

Manderson and Warren (2016) recently used the terms 'cascades of chronicity' to draw attention to the syndemic nature of chronic illness; people often live with multiple health issues, which may or may not be medically related, and these issues can lead to compromised participation in daily life, social isolation, and reduced income, which can in turn further impact upon people's health. Our study shows how access to health care is mediated by disability, income, and service provider. Previous studies have shown how other factors are at play, for example, age (Maart & Jelsma, 2014; Miller, Kirk, Alston, & Glos, 2014); this last factor is especially relevant in the context of an increasingly ageing population (see e.g. Gitlin & Fuentes, 2012).

Furthermore, the close alignment of Chilean social policies with neoliberalism has produced several effects which impact upon people's access to health care: these include the marketisation of health care, but also an increasingly powerful discourse of responsibilisation. In this discourse, people are accountable, and in fact responsible, for their own health. As Manderson and Warren (2016) and others (see e.g. Trnka & Trundle, 2014) have demonstrated, this discourse is often acontextual, treating people as entirely autonomous units, with equal amounts of agency to effect change in their lives. This is problematic for a variety of reasons. First, the presence of disability (or chronicity) forms a structural disadvantage, which can lead to reduced economic and social capital, often resulting in further ill health. Second, the local environments where people live, work, fall ill, and seek health services, play a major role in experiences of health and illness and in the ways these are negotiated within people's lives.

Study limitations

In the 2013 CASEN survey, disability is self-reported, which limits comparisons with studies using other measures. We found no information regarding response bias in the CASEN survey and how it was addressed. Another issue is that in the survey people did not have the opportunity to expand on the exact nature of the difficulties they face in their effort to access health care. However, understanding the reasons behind disabled Chileans' compromised access to health care is important in order to develop effective policies. Although national surveys and census-based studies provide useful information in order to make visible patterns of access to health care at a population-wide level, it is essential that further information is gathered in future CASEN surveys in order to obtain a clearer picture on barriers to health care access. Also, further analysis is necessary on the existing databases, in order to highlight the influence of other vectors of disadvantage, such as gender.

Conclusions

The data presented in this article show that despite universal health coverage, Chileans with disabilities report worse access to health care. They face problems not only getting to health care facilities but also paying for medication and being attended to by health care professionals. Disabled people who access health care through the public health system (FONASA) consistently report more problems compared to disabled people who use private health providers (ISAPREs). This study introduces the notion of vectors of disadvantage to highlight the intersection of multiple factors in the production of disadvantage for access to health care for disabled people. Building upon previous research (Hankivsky & Christoffersen, 2008), we propose the use of an intersectionality approach to explore issues of access to health care. It is important to acknowledge the correlation between access to health care and several other factors, which can have an additive impact on people's ability to access health care, producing enduring disadvantage.

Notes

1. For more information, see http://www.supersalud.gob.cl/difusion/572/w3-propertyvalue-3130.html.
2. The grading of disability was made according to the methodology applied in the 2011 World Report on Disability (WHO, 2011). A person is considered to have low or medium disability if he/she presents severe difficulty in the capacity-based index and light or moderate problems in the performance index, and severe disability if he/she presents severe difficulty in both the capacity-based and the performance indices (Ministry of Social Development, 2016a). This categorisation is arbitrary, as the severity of problems in the performance index (that is how people carry out their usual activities) can be evaluated in different ways.
3. For more information see http://observatorio.ministeriodesarrollosocial.gob.cl/casen_obj.php).

Acknowledgements

Disclosure statement

Funding

References

AIHW. (2015). *Access to health services by Australians with disability 2012*. AIHW Bulletin No. 129. Cat. No. AUS 191. Canberra: Author.

Angus, J., Seto, L., Barry, N., Cechetto, N., Chandani, S., Devaney, J., Fernando, S., Muraca, L., & Odette, F. (2012). Access to cancer screening for women with mobility disabilities. *Journal of Cancer Education, 27*, 75–82. doi:10.1007/s13187-011-0273-4

Araya, R., Rojas, G., Fritsch, R., Frank, R., & Lewis, G. (2006). Inequities in mental health care after health care system reform in Chile. *American Journal of Public Health, 96*, 109–113.

Badu, E., Agyei-Baffour, P., & Opoku, M. P. (2016). Access barriers to health care among people with disabilities in the Kumasi Metropolis of Ghana. *Canadian Journal of Disability Studies, 5*, 131–151.

Barrera, P. O., & Fritz, M. R. (2009). *Integración laboral de personas con discapacidad física* [Labour integration for people with physical disability] (Thesis for the title of Social Assistant). University of Concepción, Concepción, Chile.

Bell, D., & Heitmueller, A. (2009). The Disability Discrimination Act in the UK: Helping or hindering employment among the disabled? *Journal of Health Economics, 28*, 465–480. doi:10.1016/j.jhealeco.2008.10.006

Beresford, P. (1996). Poverty and Disabled People: Challenging dominant debates and policies. *Disability & Society, 11*, 553–568. doi:10.1080/09687599627598

Bossert, T. J., & Leisewitz, T. (2016). Innovation and change in the Chilean health system. *New England Journal of Medicine, 374*, 1–5. doi:10.1056/NEJMp1514202

Braithwaite, J., & Mont, D. (2009). Disability and poverty: A survey of World Bank Poverty Assessments and implications. *ALTER, European Journal of Disability Research, 3*, 219–232. doi:10.1016/j.alter.2008.10.002

Cabieses, B., Tunstall, H., & Pickett, K. E. (2010). Social determinants of disability among the immigrant population in Chile. *Journal of Epidemiology and Community Health, 64*, A58–A59. doi:10.1136/jech.2010.120477.64

CEME. (2010). *Análisis económico de los gobiernos chilenos 1964–2000* [Economic analysis of Chilean governments 1964–2000]. Centro de Estudios Miguel Enríquez. Retrieved October 26, 2016, from http://www.archivochile.com/Gobiernos/varios_otros_gob/GOBotros0010.pdf

Contreras, D., Ruiz-Tagle, J., Garcés, P., & Azócar, I. (2006). *Socioeconomic impact of disability in Latin America: Chile and Uruguay*. Santiago: University of Chile.

De Maio, F. (2012). Advancing the income inequality – Health hypothesis. *Critical Public Health, 22*, 39–46. doi:10.1080/09581596.2011.604670

Drainoni, M. L., Lee-Hood, E., Tobias, C., Bachman, S. S., Andrew, J., & Maisels, L. (2006). Cross-disability experiences of barriers to health-care access: Consumer perspectives. *Journal of Disability Policy Studies, 17*, 101–115. doi:10.1177/10442073060170020101

Egüez-Guevara, P., & Andrade, F. C. (2015). Gender differences in life expectancy with and without disability among older adults in Ecuador. *Archives of Gerontology and Geriatrics, 61*, 472–479. doi:10.1016/j.archger.2015.08.012

Ffrench-Davis, R. (2014). *Chile entre el neoliberalismo y el crecimiento con equidad* [Chile between neoliberalism and growth with equity] (5th ed.). Santiago: J.C. Sáez Editor SpA.

FONASA. (2015). *Boletín estadístico 2013–2014* [Statistical bulletin 2013–2014]. Retrieved from https://www.fonasa.cl/sites/fonasa/institucional/archivos

French-Davis, R. (2005). *Economic reforms in Chile: From dictatorship to democracy*. Michigan: University of Michigan Press.

Gibson, J., & O'Connor, R. (2010). Access to health care for disabled people: A systematic review. *Social Care and Neurodisability, 1*, 21–31. doi:10.1080/09687599627598

Gitlin, L. N., & Fuentes, P. (2012). The Republic of Chile: An upper middle-income country at the crossroads of economic development and aging. *The Gerontologist, 52*, 297–305. doi:10.1093/geront/gns054

Goic, A. G. (2015). El sistema de salud de Chile: una tarea pendiente [Healthcare system in Chile: A pending task]. *Revista médica de Chile, 143*, 774–786. doi:10.4067/S0034-98872015000600011

González, S., Tello, J., Silva, P., Lüders, C., Butelmann, S., Fristch, R., Solar, F., Rigo-Righi, C., & David, P. (2012). Quality of life in motor-handicapped patients according to socio-demographic factors and mental health. *Revista Chilena de Neuro-Psiquiatria, 50*, 23–34. doi:10.4067/S0717-92272012000100003

Guajardo, A., Albuquerque, D., & Diaz, M. (2016). *Derechos Humanos y Discapacidad; Dialogos Colectivos en Torno a la Autonomia de Personas en Situacion de Dependencia* [Human rights and disability: Collective dialogue regarding the autonomy of people with dependencies]. Santiago: Editoria USACH.

Gudlavalleti, M. V. S., John, N., Allagh, K., Sagar, J., Kamalakannan, S., Ramachandra, S. S., & South India Disability Evidence Study Group. (2014). Access to health care and employment status of people with disabilities in South India, the SIDE (South India Disability Evidence) study. *BMC Public Health, 14*, 1–8. doi:10.1186/1471-2458-14-1125

Hankivsky, O., & Christoffersen, A. (2008). Intersectionality and the determinants of health: A Canadian perspective. *Critical Public Health, 18*, 271–283. doi:10.1080/09581590802294296

Hwang, K., Johnston, M., Tulsky, D., Wood, D., Dyson-Hudson, T., & Komaroff, E. (2008). Access and coordination of health care service for people with disabilities. *Journal of Disability Policy Studies, 20*, 28–34.

INE. (2005). Primer estudio nacional de la discapacidad [First national study on disability]. Retrieved September 7, 2016, from http://www.ine.cl/canales/chile_estadistico/encuestas_discapacidad/discapacidad.php

INE. (2013). Censo 2012: Síntesis de resultados [2012 Census: Synthesis of results]. Retrieved August 3, 2016, from http://www.iab.cl/wp-content/files_mf/resumencenso_2012.pdf

Kuncar Fritz, E. U. C. (2013). *Sistema de salud en Chile* [Healthcare system in Chile]. Santiago: Universidad San Sebastián.

Labra, M. E. (2002). La reinvención neoliberal de la inequidad en Chile. El caso de la salud [The neoliberal reinvention of inequality in Chile. The case of health]. *Cadernos de Saúde Pública, 18*, 1041–1052. doi:10.1590/S0102-311X2002000400010

Lee, J. E., Kim, H. R., & Shin, H. I. (2013). Accessibility of medical services for persons with disabilities: Comparison with the general population in Korea. *Disability and Rehabilitation, 36*, 1728–1734.

Maart, S., & Jelsma, J. (2014). Disability and access to health care – A community-based descriptive study. *Disability and Rehabilitation, 36*, 1489–1493. doi:10.3109/09638288.2013.807883

Mactaggart, I., Kuper, H., Murthy, G. V., Sagar, J., Oye, J., & Polack, S. (2016). Assessing health and rehabilitation needs of people with disabilities in Cameroon and India. *Disability and Rehabilitation, 38*, 1757–1764. doi:10.3109/09638288.2015.1107765

Manderson, L., & Warren, N. (2016). Just one thing after another; recursive cascades and chronic conditions. *Medical Anthropology Quarterly*. doi:10.1111/maq.12277

Merten, J. W. (2015). Barriers to cancer screening for people with disabilities: A literature review. *Disability and Health Journal, 8*, 9–16. doi:10.1016/j.dhjo.2014.06.004

Miller, N., Kirk, A., Alston, B., & Glos, L. (2014). Effects of gender, disability, and age in the receipt of preventive services. *The Gerontologist, 54*, 473–487. doi:10.1093/geront/gnt012

Ministry of Social Development. (2015). *CASEN 2013: Inclusión social de personas con dificultades y/o condiciones permanentes y de larga duración* [CASEN 2013: Social inclusion of people with difficulties and/or permanent and long-lasting conditions]. Santiago: Ministry of Social Development.

Ministry of Social Development. (2016a). *II estudio nacional sobre discapacidad* [II national study on disability]. Retrieved August 3, 2016, from http://observatorio.ministeriodesarrollosocial.gob.cl/endisc/endisc_sobre_estudio.php

Ministry of Social Development. (2016b). *CASEN 2015: Situación de la pobreza en Chile* [CASEN 2015: Poverty situation in Chile]. Retrieved October 26, 2016, from http://observatorio.ministeriodesarrollosocial.gob.cl/casen-multidimensional/casen/docs/CASEN_2015_Situacion_Pobreza.pdf

Ministry of Social Development. (2016c). *Observatorio social: Encuesta CASEN* [Social observatory: CASEN survey]. Retrieved from http://observatorio.ministeriodesarrollosocial.gob.cl/casen_obj.php

Missoni, E., & Solimano, G. (2010). *Towards universal health coverage: The Chilean experience*. World Health Report, Background Paper 4. Geneva: World Health Organisation.

Peters, K., & Cotton, A. (2015). Barriers to breast cancer screening in Australia: Experiences of women with physical disabilities. *Journal of Clinical Nursing, 24*, 563–572. doi:10.1111/jocn.2015.24.issue-3pt4

Popplewell, N., Rechel, B., & Abel, G. (2014). How do adults with physical disability experience primary care? A nationwide cross-sectional survey of access among patients in England. *BMJ Open, 4*, 1–9. doi:10.1136/bmjopen-2013-004714

Randolph, S. D. (2004). Predicting the effect of disability on employment status and income. *Work, 23*, 257–266.

Rojas, J. L. B. (2011). *GES (Explicit Health Care Guarantees) and transplants: Funding system in Chile*. 2011 Organ Donation Congress. Retrieved July 3, 2016, from http://www.slideshare.net/incucai_isodp/jose-luis-rojas-chile-monday-28-financing-the-donation-and-transplantation-process

Sanhueza, R., & Ruiz-Tagle, J. (2002). Choosing health insurance in a dual health care system: The Chilean case. *Journal of Applied Economics, V*, 157–184.

Schrecker, T. (2016). 'Neoliberal epidemics' and public health: Sometimes the world is less complicated than it appears. *Critical Public Health, 26*, 477–480. doi:10.1080/09581596.2016.1184229

Sewell, W. H., Jr. (2005). From state-centrism to neoliberalism: Macro-historical contexts of population health since World War II. In P. Hall & M. Lamont (Eds.), *Successful societies: Institutions, cultural repertoires, and health* (pp. 254–287). Cambridge: Cambridge University Press.

Smith, D. (2008). Disparities in health care access for women with disabilities in the United States from the 2006 National Health Interview Survey. *Disability and Health Journal, 1*, 79–88. doi:10.1016/j.dhjo.2008.01.001

Subramanian, S. V., Delgado, I., Jadue, L., Vega, J., & Kawachi, I. (2003). Income inequality and health: Multilevel analysis of Chilean communities. *Journal of Epidemiology and Community Health, 57*, 844–848. doi:10.1136/jech.57.11.844

Trnka, S., & Trundle, C. (2014). Competing responsibilities: Moving beyond neoliberal responsibilisation. *Anthropological Forum, 24*, 136–153. doi:10.1080/00664677.2013.879051

Unger, J. P., De Paepe, P., Cantuarias, G. S., & Herrera, O. A. (2008). Chile's neoliberal health reform: An assessment and a critique. *PLoS Medicine, 5*, e79. doi:10.1371/journal.pmed.0050079

United Nations. (2006). *Final report of the ad hoc Committee on a comprehensive and integral international convention on the protection and promotion of the rights and dignity of persons with disabilities*. A/61/611. Retrieved August 3, 2016, from https://documents-dds-ny.un.org/doc/UNDOC/LTD/N06/645/30/PDF/N0664530.pdf?OpenElement

United Nations. (2014). *Consideration of reports submitted by States parties under article 35 of the Convention: Initial reports of States parties due in 2010-Chile*. CRPD/C/CHL/1. Retrieved August 3, 2016, from https://documents-dds-ny.un.org/doc/UNDOC/GEN/G14/159/64/PDF/G1415964.pdf?OpenElement

Walby, S., Armstrong, J., & Strid, S. (2012). Intersectionality: Multiple inequalities in social theory. *Sociology, 46*, 224–240. doi:10.1177/0038038511416164

Wilkinson, R., & Marmot, M. (2003). *Social determinants of health; the solid facts*. Geneva: World Health Organisation.

World Bank. (2016). *Data: Health expenditure*. Retrieved October 26, 2016, from http://data.worldbank.org/indicator/SH.XPD. PUBL?locations=CL

World Health Organisation. (2008). *Primary health care; now more than ever*. Geneva: Author.

World Health Organisation. (2011). *World report on disability*. Geneva: Author.

WUNRN. (2011). *Women with disabilities – Statistics*. Retrieved August 11, 2016, from http://www.wunrn.com/2011/05/ women-with-disabilities-un-convention-on-rights-of-disabled/

Zaidi, A., & Burchardt, T. (2005). Comparing incomes when needs differ: Equivalization for the extra costs of disability in the UK. *Review of Income and Wealth, 51*, 89–114. doi:10.1111/roiw.2005.51.issue-1

Zitko, M. P., & Cabieses, V. B. (2011). Socioeconomic determinants of disability in Chile. *Disability and Health Journal, 4*, 271–282. doi:10.1016/j.dhjo.2011.06.002