

Factors associated with access to disability certificate in patients with MS and NMOSD in Argentina



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CONFLICT OF INTEREST

- . The authors do not have any potential financial conflict of interest relating to this poster.
- . Unrestrictive research grants from Biogen Argentina, Genzyme Argentina, Merck Argentina, Novartis Argentina and Roche Argentina allowed the development and implementation of the Registry (RelevarEM). Those grants did not interfere in the development plan, variables, PI selection, patient information nor other aspects of the Registry.



INTRODUCTION

Disability certificate (DC) is a free public document valid throughout Argentina. DC offers economic and social benefits to people with disabilities and improves barriers to accessing health services. Multiple sclerosis (MS) and neuromyelitis optic spectrum diseases (NMOSD) are disabling diseases that affect economically active people.

Most of the countries around the world offer to MS and NMOSD patients a disability pension (DP), which consists of an economic compensation to those patients who cannot work. This, in general, occurs in severely disabled patients.

In Argentina, MS and NMOSD patients have access to a DC if they have an EDSS greater than or equal to 4.

This DC does not offer an economic compensation, but it does provide certain social benefits, such as free access to medication and public transportation. MS and NMO patients who continue to work and patients who do not continue can access to DC. In addition, if patients cannot work, they have access to a DP

AIM

To analyze access to DC in patients with MS (PwMS) and NMOSD (PwNMOSD) in patients included in the Argentinean MS and NMOSD registry (RelevarEM, NCT 03375177).

MATERIALS AND METHODS

Demographical, clinical and social data from RelevarEM were analyzed using SPSS v22. Parametric and nonparametric statistics were performed, to define significance a p value <0.05 was accepted.

RESULTS



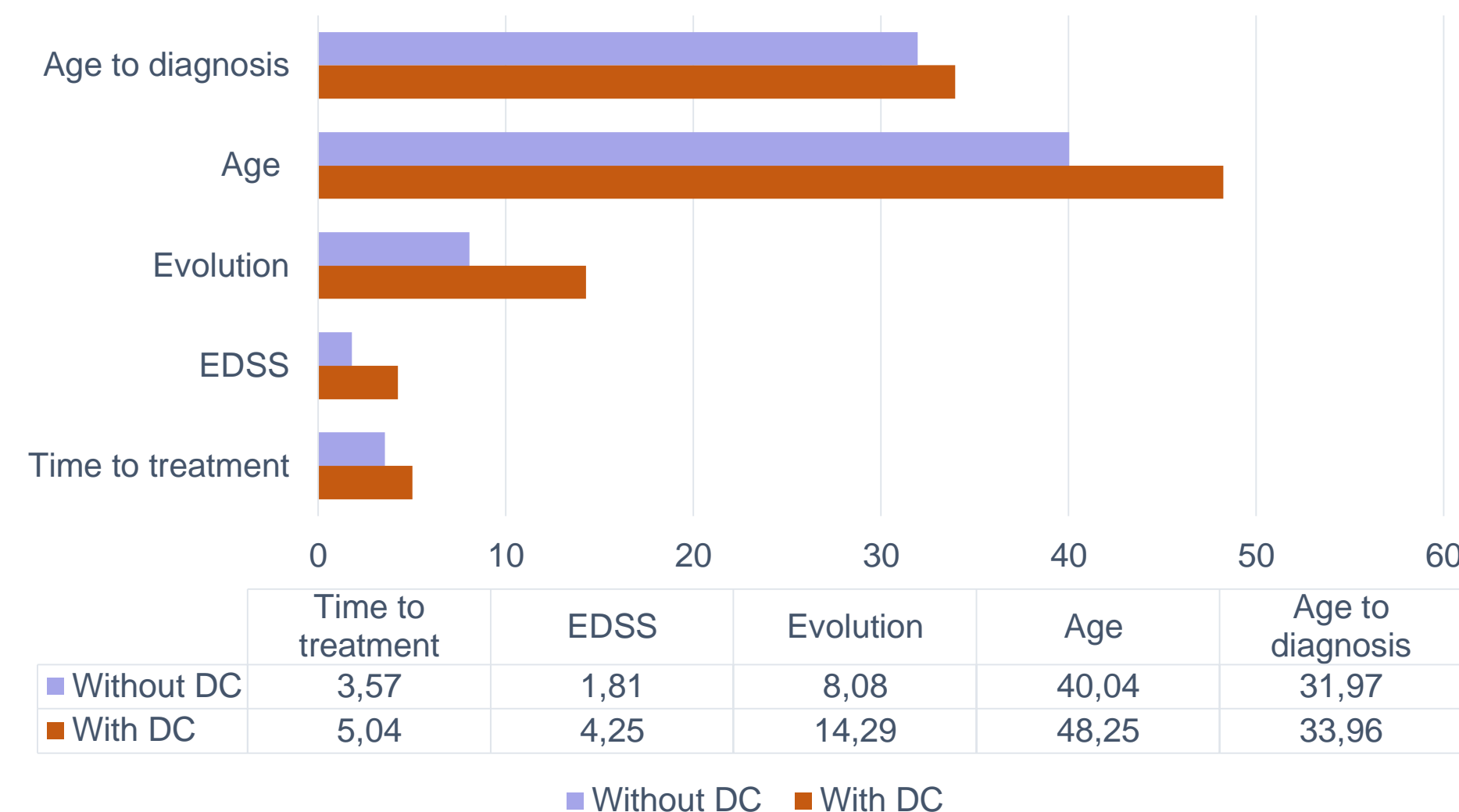
	PwMS n=2814	PwNMOSD n=165
Gender	65.2 % female	77% female
Mean age (years)	43.5 ± 12.9	44.7 ± 14.8
Age at diagnosis (years)	32.8 ± 11.1	37.4 ± 14.7
Disease evolution (years)	10.7 ± 8.9	7.2 ± 5.9
EDSS	2.8 ± 2.2	3.3 ± 2.3
Clinical phenotypes	RRMS 80.7 % SPMS 6.3 % PPMS 7 % SCA 5.9 %	N/A
Employment status	33.9 % unemployed	43.6 % unemployed
Disabilty certificate	43.1 %	41.2 %
Healthcare insurance	Private 26.4% Social security 60.9% Public 11.2 %	Private 23 % Social security 53.3% Public 23.6 %
Place of residence	Ciudad Autónoma de Buenos Aires and Buenos Aires province 55.3 % Rest of the country 44.7%	Ciudad Autónoma de Buenos Aires and Buenos Aires province 52.1 % Rest of the country 47.9%



RESULTS

Comparison between clinical and demographic variable in MS patients with and without disability certificate.

Patient Characteristics		N	With DC	Without DC	p-value
Gender	Female	1836	782	1054	0.42
	Male	1978	432	546	
Residence	Buenos Aires *	1556	588	968	< 0.01
	Other provinces	1258	626	632	
Health insurance	Public	314	151	163	< 0.01
	Social security	1714	822	892	
	Private	744	238	506	
Work status	Employed	1861	526	1335	< 0.01
	Unemployed	953	688	265	
Treatment	Injectable	634	270	364	< 0.01
	Oral	1233	495	738	
	Cladribine	67	20	47	
	Monoclonal Antibodies	277	142	135	
Relapses in the last 6 months	Yes	210	70	140	< 0.01
	No	2602	1143	1459	

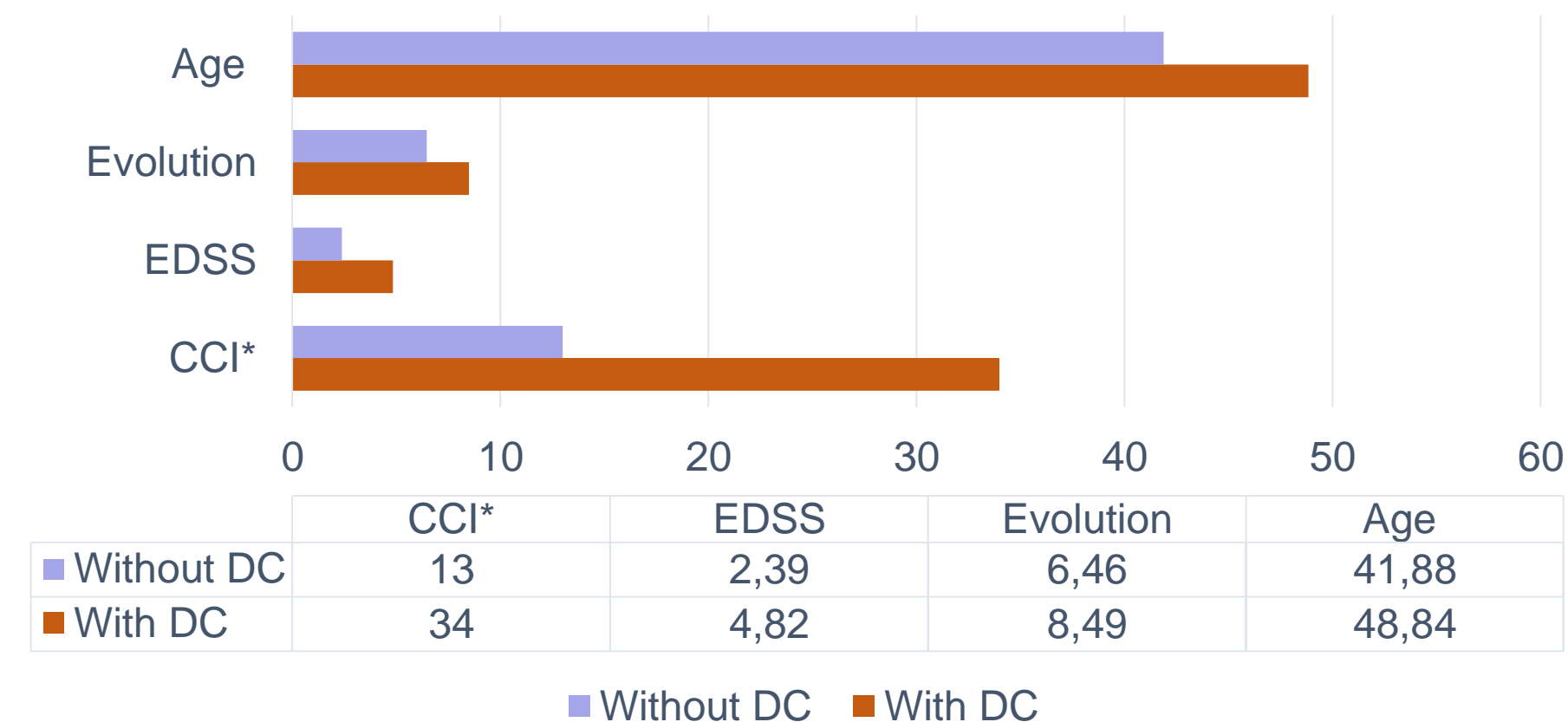




RESULTS

Comparison between clinical and demographic variable in NMOSD patients with and without disability certificate.

Patient Characteristics		N	With DC	Without DC	p-value
Gender	Female	127	52	75	0.89
	Male	38	16	22	
Residence	Buenos Aires *	86	29	57	0.04
	Other provinces	79	39	40	
Health insurance	Public	39	17	22	0.01
	Social security	88	43	45	
	Private	38	8	30	
Work status	Employed	93	17	76	< 0.01
	Unemployed	72	51	21	





Multivariate analysis

- ✓ For PwMS: EDSS (OR=1.60, p<0.01), time to treatment (OR=1.06, p=0.01), comorbidity index (OR=3.19, p<0.01), place of residence (OR=0.66, p<0.01), healthcare insurance (OR=1.36, p=0.02), and employment status (OR=0.41, p<0.01) were independently associated with access to DC
- ✓ In PwNMOSD: it was associated with EDSS (OR=1.57, p<0.01), place of residence (OR=0.34, p=0.03), healthcare insurance (OR=5.72, p=0.01), and employment status (OR=0.22, p=0.01).

Binary logistic regression predicting disability certificate possession in MS patients.

Predictor	β	Wald	Exp(β)	p
No Buenos Aires	-0,41	12,94	0,67	<0,01
Unemployed	-0,89	40,30	0,41	<0,01
Social Security	0,07	5,57	1,36	0,02
>EDSS	0,47	179,47	1,60	<0,01
> Time To Treatment	0,06	10,73	1,06	<0,01
>CCI	1,16	60,74	3,19	<0,01

Binary logistic regression predicting disability certificate possession in NMOSD patients.

Predictor	β	Wald	Exp(β)	p
No Buenos Aires	-1,07	7,45	0,34	<0,01
Employed	-1,52	6,16	0,22	0,01
Social Security	1,74	4,74	5,72	0,03
>EDSS	0,45	11,47	1,57	<0,01

CONCLUSION



- ✓ Demographic and social factors are associated with unequal access to the CUD in Argentina
- ✓ This research is the largest to explore DC access and related factors in Argentinian PwMS and PwNMOSD
- ✓ This work lays the groundwork for the beginning of a coordinated work between the different social actors that allow equal access to the CUD
- ✓ Future research should explore which factors affect the decisions of individuals to seek DC and how neurologists can assist in that process