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INTRODUCTION

Number of patients with diabetes has rapidly increased globally, being projected to reach 4.8% in the year 2030

- Rise in prevalence type 2 diabetes mellitus, estimated to affect 380 million people by 2025, led by the older adults:
 - represent around 50% of the people with diabetes and whose prevalence of diabetes is near 25 %

Burden of Diabetes has been ranked as the seventh and eighth cause of years of life lost and Disability-Adjusted Life Years (DALYs), respectively, in Western Societies and the 14th cause all over the world in the ranking of causes of DALYs

Medical costs for patients with diabetes are up to three times higher than costs for patients without the disease

Due to its disabled feature, diabetes increases the risk of early labour-force exit

AIMS

- To estimate the association between diabetes and diabetes-related complications with **nursing home admission and costs** in the elderly across Europe
- To assess the relationship between diabetes and diabetes-related complications with two measures of **productivity** for people in **the labour force and out of it**, both for **paid and unpaid work**, especially during the European financial crisis
- To evaluate the impact of diabetes and diabetes-related complications on **quality of life** in a subsample of Spanish old adults (+65). *Work in progress*

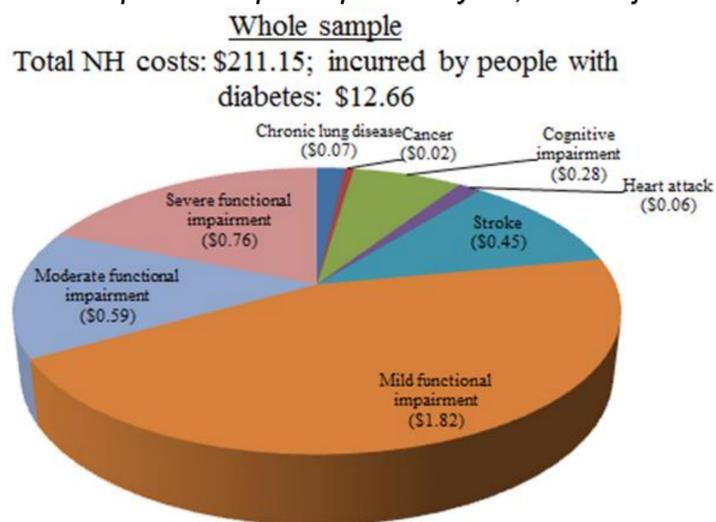
RESULTS

Results regarding diabetes and its clinical and functional complications as determinants of nursing home admission

Diabetes is always a good predictor of nursing home placement, although when adjusting for clinical and functional complications, its coefficient decreases. The effect of diabetes is mediated by the clinical and functional complications.

- Moreover, the relationship between functional status and admission in nursing home is age-dependent, as it is clearly shown in people older than 65, but not so evident in people with ages ranging from 50 to 65.

Graph 1: Components of attributable costs to diabetes and its complications per capita and year, PPP adjusted



Graph 1 shows the main drivers of nursing costs attributed to diabetes and its clinical and functional complications, followed by stroke

Results regarding the association of diabetes and its complications with productive activities

Across the twelve European countries, diabetes increased the probability of being afraid health limited work for those who were still in the labour force by nearly 11%, adjusted by clinical complication.

- Moreover, having diabetes had a larger effect on being afraid health limits work during the crisis year 2010.

Diabetes reduced the likelihood of being a formal volunteer in the already retired subsample by 2.7%, additionally adjusted by mobility problems.

We also found that both the probability of being afraid health limits work and the probability of being a formal volunteer increased during and after the crisis.

Table 1: Average marginal effects for being afraid health limits work and being a formal volunteer

VARIABLES	BEING AFRAID HEALTH LIMITS WORK		FORMAL VOLUNTEERING	
	Average marginal effects	Average marginal effects	Average marginal effects	Average marginal effects
Diabetes	0.116*** (0.00802)	0.101*** (0.00609)	-0.0269*** (0.00605)	-0.0279*** (0.00660)
Diabetes # Wave4		0.127** (0.0109)		-0.0017 (0.0083)
Diabetes # Wave5		0.111 (0.0095)		-0.0398 (0.0062)
Wave 4 (2010)	0.0111*** (0.00363)	0.0109*** (0.00359)	0.0562*** (0.00565)	0.0542*** (0.00530)
Wave 5 (2013)	0.0134*** (0.00457)	0.0132*** (0.00455)	0.0382*** (0.00695)	0.0382*** (0.00703)
Observations	53,631	53,631	45,384	45,384
Clusters	34,393	34,393	18,647	18,647

CONCLUSIONS

Diabetes is associated with higher risk of institutionalization even after adjusting for complications. Among them, functional impairment explains the major part of the association between diabetes and nursing home admission and leads to increasing costs.

Diabetes significantly affects the perception of people regarding effects of their condition on work, increasing the fear that health limits their ability to work, as well as the participation in volunteering work among retired people.