

EPIDEMIOLOGY AND COSTS OF DEPRESSIVE DISORDER IN SPAIN

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INTRODUCTION

- Depressive disorder (DD) affects more than 264 million people around the world¹.
- It is a very disabling disease that alters the perceived quality of life and increases health resource use², especially prevalent among women, and is strongly associated with disadvantaged groups due to personal or socioeconomic circumstances³.
- No recent published data exists on the prevalence and cost of DD in Spain; the reported data are from more than a decade ago, other methodology was followed, or come from specific groups^{4, 5}.

METHODS

- A retrospective, observational study was carried out using data from the BIG-PAC database® (<http://www.encepp.eu/encepp/viewResource.htm?id=29236>), from several regions of Spain
- Study population: patients aged ≥ 18 years diagnosed with DD (ICD-10-CM codes F32, F33, F41.8, F34.1 and F39) in 2015-2017.
- Prevalence was calculated as the proportion of total diagnosed cases of DD in the adult general population. Incidence rates were calculated as the number of new cases of DD diagnosed per 1,000 person-years in the population attended in 2015-2017
- We collected demographic variables, comorbidity, utilization of resources and unit costs, temporary and permanent disability
- Direct health costs of DD were estimated based on the annual resource use rate (resource/patient/year). Indirect costs were calculated based on the human capital method
- Societal costs of DD, including premature mortality, were estimated using data from the National Statistical Institute (INE-Spain) (average annual earnings).

RESULTS

- 69,217 patients aged ≥ 18 years who met the study inclusion/exclusion criteria were analyzed (mean age: 56.8 years; female: 71.4%; deaths: 2.2%).
- Prevalence of DD in the general population was 4.73% (95% CI: 4.70-4.76).
- Annual incidence rates were 7.12; 7.35; and 8.02 per 1,000 person-years for 2015, 2016 and 2017, respectively. (Table 1).
- Overall total costs in the study population (direct costs plus indirect) were € 223.9 million (69,217 patients x € 3,235.3; mean/patient/year): 18.4% direct health costs and 81.6% indirect costs (temporary occupational disability: 18%; permanent disability: 63.6%). (Table 1)
- Societal cost of DD in the Spanish adult population estimated for 2017 were € 6,145 million.
- Mean cost per patient/year was € 3,402, being the mean cost per inhabitant/year € 161. (Table 2, Fig. 1)

Table 1. Costs of depressive disorder (1 year, in EUR)

Cost components (average/patient/year)	N = 69.217
Primary care visits	183.0 (166.2)
Hospital emergency visits	15.0 (121.4)
Specialist visits	40.5 (141.2)
Hospital stays	130.6 (5,792.4)
Lab tests	24.5 (31.7)
Conventional radiology	6.0 (24.1)
Axial tomography	0.6 (5.4)
Magnetic nuclear resonance	1.7 (13.3)
Other complementary tests	36.7 (467.7)
Electroconvulsive therapy	9.5 (1.1)
Antidepressant medication	155.8 (449.3)
Health costs	594.2 (6,031.7)
Non-health costs	
- Temporary disability (days off work)	582.3 (2,493.1)
- Permanent disability	2,058.8 (6,711.7)
Total cost	3,235.3 (10,606.7)

Values expressed as mean (SD: standard deviation).

CONCLUSIONS

Compared with other international studies based on general population surveys, our results show slightly lower prevalence rates. This might be due to our study considering only clinically confirmed diagnosed depression.

Our data suggest that prevalence and incidence of DD in Spain are high.

Indirect costs related to long-term sick leaves/permanent disabilities have the greatest weight within the total cost of depressive disorder in Spain.

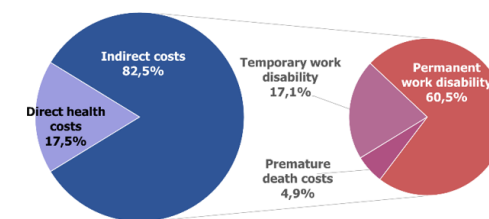
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Table 2. Estimate of the study results (cost of depressive disorder) to the Spanish population (year 2017, in EUR)

	Study results (years 2015 -2017)	Spanish population * (simulation stage)	
<i>Epidemiological data</i>	<i>N, %</i>	<i>Demographic data</i>	
General population	1,801,072	46,515,845	
Population ≥ 18 years	1,469,659	38,158,732	
Population attended ≥ 18 years	1,280,284		
Prevalence (DD diagnosis)	69,146	1,806,180	
Prevalence in adults (≥ 18 years)	4.73%		
Costs 2015-2017 / annualized-adults	lean / patient-year	Cost components	%
Health	€ 594	€ 1,073,232,145	17.5%
Temporary work disability	€ 582	€ 1,051,738,603	17.1%
Permanent disability	€ 2,059	€ 3,718,563,346	60.5%
Estimate for premature death **	---	€ 301,571,055	4.9%
Total cost DD - Spain	€ 3,235	€ 6,145,105,149	100%
Cost / patient / year - Spain		€ 3,402	
Cost per capita (population ≥ 18 years)		€ 161	

* Source: Statistics National Institute (Spanish population pyramid, year 2017). ** The costs for premature death include those related to suicide during the year 2017. DD: depressive disorder

Fig 1. Estimate of healthcare and non-healthcare costs in the Spanish population



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