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**Epidemiología para construir el futuro**  
**Epidemiologia para construir o futuro**



# Prevalence of Self-reported Common Mental Health Disorders in the 2015 Resident Population in Portugal

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# Declaration of Conflict of Interests

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The authors declare they have nothing to disclose.

# Antecedents

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- **Depressive** and **anxiety** disorders are the most prevalent psychiatric disorders and a main cause of burden worldwide <sup>1</sup>
- The 2019 Global Burden of Diseases estimates place Portugal as one of the countries with the **highest prevalence** of these illnesses in the European Union <sup>1</sup>
- The last national prevalence study of mental disorders, the World Mental Health Survey, analysed data from **2009** <sup>2</sup>

1. Institute of Health Metrics and Evaluation. Global Health Data Exchange (GHDx), <https://vizhub.healthdata.org/gbd-results/>, accessed 30 August 2023  
2. Almeida J, Xavier M, Cardoso G, et al. Estudo Epidemiológico Nacional de Saúde Mental. 1.º Relatório. 2013

# Objectives

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To estimate **the prevalence of self-reported common mental health disorders**

- at national and regional levels,
- globally and according to sociodemographic factors,

in the population living in Portugal in 2015.

# Methods

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**Descriptive,  
nationally and  
regionally-  
representative cross-  
sectional study**



**Portugal**



**Data from the  
National Health  
Survey with Physical  
Examination (INSEF,  
2015)<sup>3</sup>:**

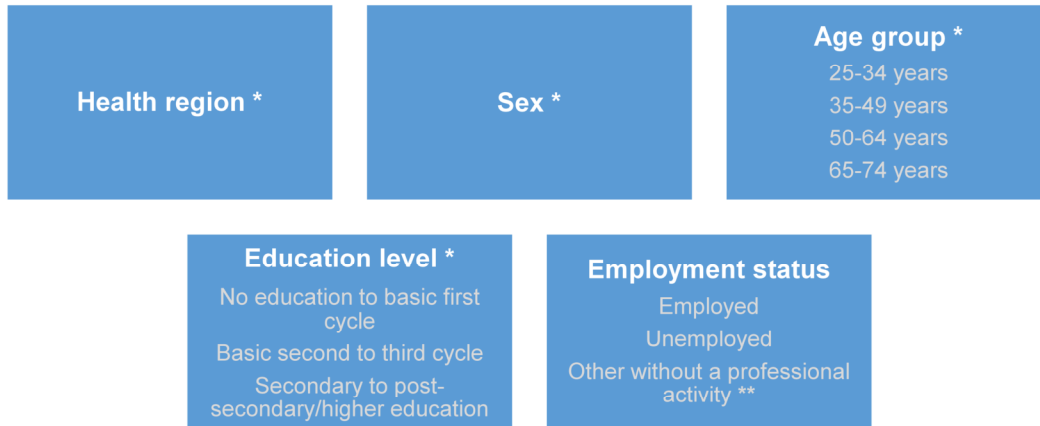
- probabilistic sample of 4911 individuals
- 25 to 74 years old
- face-to-face interviews with health professionals

3. Nunes B, Barreto M, Gil AP, et al. The first Portuguese National Health Examination Survey (2015): design, planning and implementation. *J Public Health (Oxf)*. 566 2019;41(3):511-517

# Methods

All estimates were weighted according to the different selection probabilities and population distribution.

The **prevalence (and 95%CI)** of self-reported medical diagnoses of depressive and anxiety disorders were estimated by:

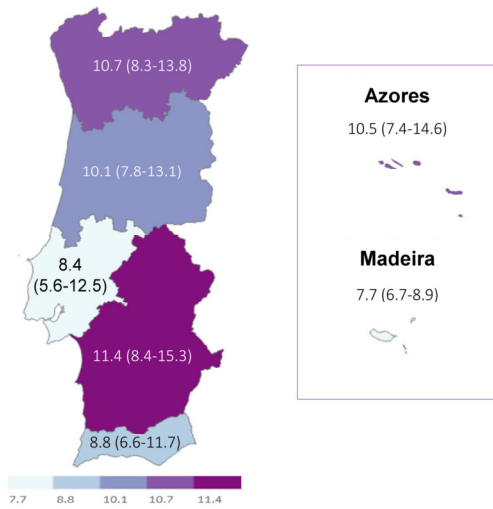


\* Categorized according to the cut-offs used in the National Mental Health Survey (2008/2009)

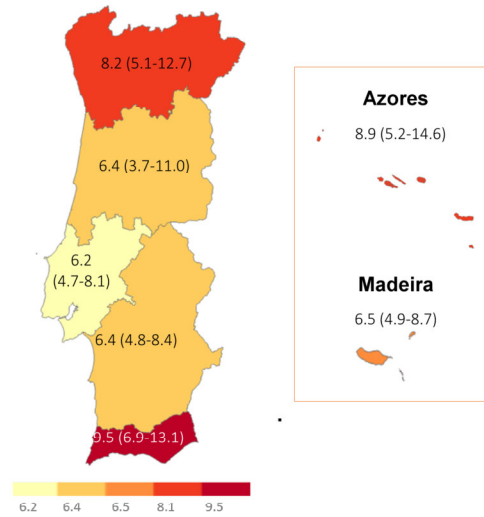
\*\* Students, retired, disabled, housewives or other individuals

# Results

The national prevalence of self-reported depressive disorders was 9.7% (95%CI: 8.2-11.5)



The national prevalence of self-reported anxiety disorders was 7.1% (95%CI: 5.7-8.8)

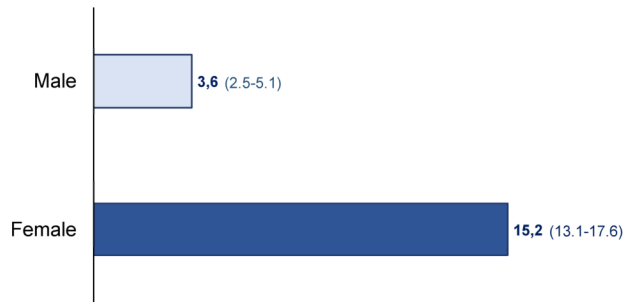


# Results

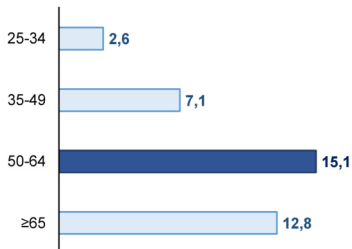
## Self-reported **Depressive** Disorders

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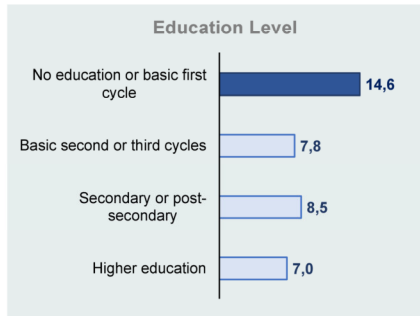
Sex



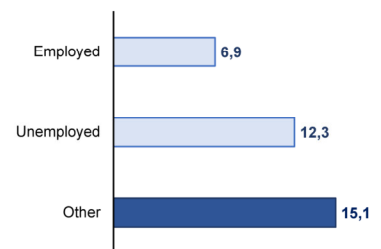
Age Group



Education Level



Employment Status

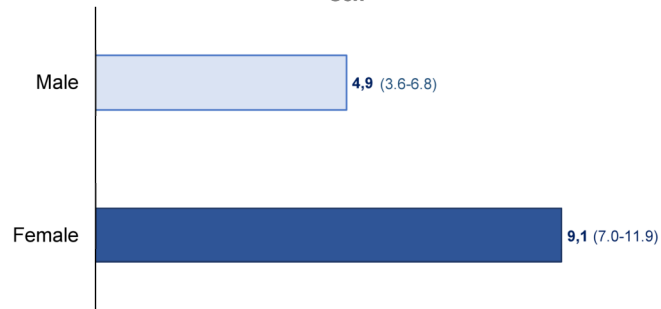


# Results

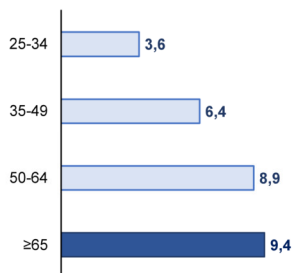
## Self-reported **Depressive** Disorders

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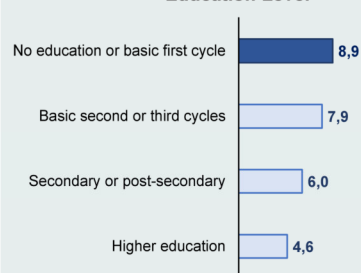
Sex



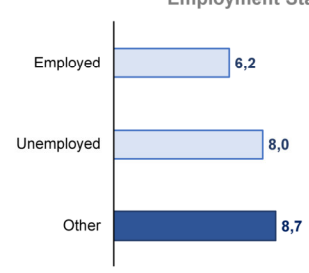
Age Group



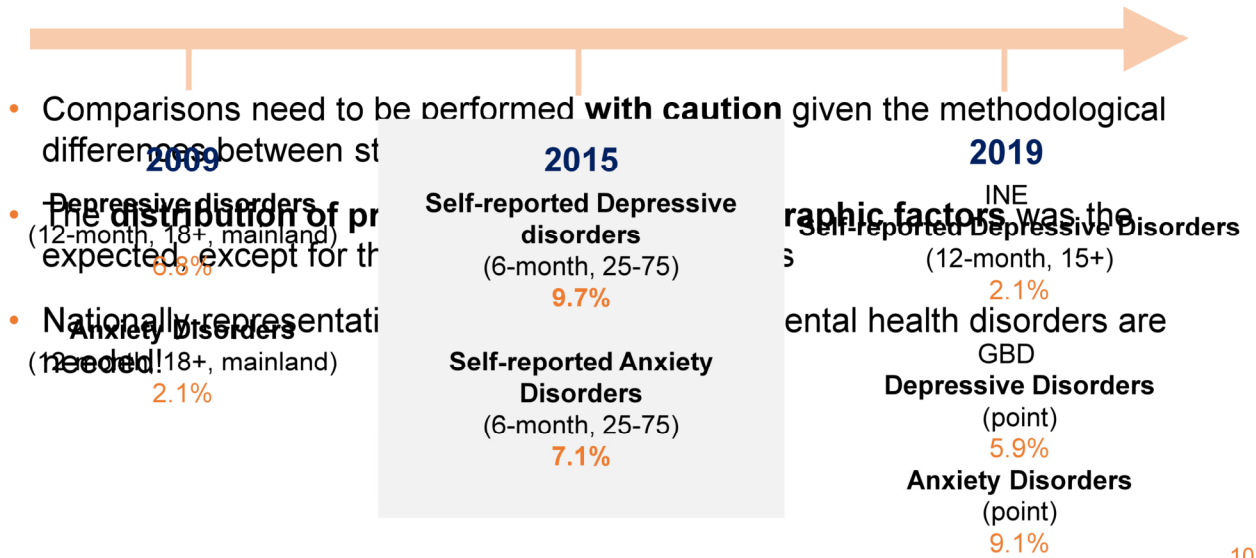
Education Level



Employment Status



# Conclusions





**P6.1. Tem alguma doença ou um problema de saúde que dure há mais de 6 meses ou que se espere que venha a durar mais de 6 meses?**

- Sim
  - Não
  - Não sabe
  - Não responde
- } → Pergunta P7.1

**P6.2. Se sim, especifique que doenças crónicas tem tido?**  
(Leia as opções)

**P6.2.2. Desde que idade tem doença?\***

Qual?	P6.2. Se sim, especifique que doenças crónicas tem tido? (Leia as opções)					P6.2.2. Desde que idade tem doença?*	
Depressão	<input type="radio"/> Sim	<input type="radio"/> Não	<input type="radio"/> NS	<input type="radio"/> NR	<input type="radio"/> NA	<input type="text"/>	<input type="text"/> Anos
Ansiedade crónica	<input type="radio"/> Sim	<input type="radio"/> Não	<input type="radio"/> NS	<input type="radio"/> NR	<input type="radio"/> NA	<input type="text"/>	<input type="text"/> Anos

**P6.2.3. Foi algum médico ou enfermeiro que lhe disse que tem essa doença?**

Depressão	<input type="radio"/> Sim <input type="radio"/> Não <input type="radio"/> NS <input type="radio"/> NR <input type="radio"/> NA	<input type="radio"/> Sim <input type="radio"/> Não <input type="radio"/> NS <input type="radio"/> NR <input type="radio"/> NA
Ansiedade crónica	<input type="radio"/> Sim <input type="radio"/> Não <input type="radio"/> NS <input type="radio"/> NR <input type="radio"/> NA	<input type="radio"/> Sim <input type="radio"/> Não <input type="radio"/> NS <input type="radio"/> NR <input type="radio"/> NA

## Classificação de dados do INSEF: covariáveis e *outcomes*

- Diagnósticos autorreportados
- Limite temporal de 6 meses
- Eventuais vieses de memória e de  
desejabilidade social (p.e.  
alcoolismo)

### Controlo de qualidade no INSEF

Não utilizar como *outcome* o  
diagnóstico autorreportado  
(mas sim a escala MHI-5)

Análise de sensibilidade às  
covariáveis incluídas no modelo  
explicativo e à restrição da  
amostra

Table 3. Prevalence of self-reported depressive disorders, in the population from 25 to 74 years living in Portugal, according to sex, age group, education level and employment status, in Portugal and by health regions, in 2015 (n= 4 894)

	Portugal (95%CI)	%	North (95%CI)	Center (95%CI)	Lisbon and Tagus Valley (95%CI)	Alentejo (95%CI)	%	The Algarve (95%CI)	A.R. Madeira (95%CI)	%	A.R. Azores (95%CI)	%
Sex												
Male	3.0 (2.5-3.1)		2.2 (1.7-2.0)	3.3 (2.8-3.5)	2.4 (1.8-2.4)	4.2 (3.7-4.3)		3.0 (2.5-3.0)			2.1 (1.5-2.0)	3.0 (2.5-3.2)
Female	15.2 (13.1-17.6)		17.5 (14.0-21.7)	14.6 (11.9-17.7)	12.8 (8.9-18.1)	18.3 (14.2-23.4)		14.2 (11.4-17.7)			12.6 (10.8-14.7)	17.4 (12.7-23.5)
Age group												
25-34	2.6 (1.4-4.7)		1.8 (0.5-6.6)	2.1 (0.5-8.0)	3.5 (1.3-9.3)	3.6 (0.9-13.5)		2.4 (0.7-8.1)				5.9 (2.2-10.0)
35-49	7.1 (5.4-8.4)		6.7 (4.4-11.3)	8.7 (6.1-15.4)	6.7 (4.6-10.4)	11.4 (7.7-17.6)		6.1 (4.1-9.3)			7.4 (4.6-11.5)	10.7 (6.1-18.3)
50-64	15.1 (12.4-18.1)		18.2 (14.4-22.8)	13.3 (9.0-19.2)	13.3 (9.2-19.4)	12.7 (8.7-18.1)		12.4 (9.8-15.6)			11.0 (7.1-16.8)	13.2 (9.7-17.8)
≥65	12.8 (9.4-17.3)		13.8 (8.2-22.5)	15.1 (9.9-23.1)	10.1 (5.5-17.7)	16.5 (9.4-27.4)		15.5 (7.9-29.1)			12.2 (8.8-16.6)	16.1 (8.5-24.4)
Education level*												
No education or basic first cycle	14.6 (11.8-18.0)		14.6 (10.3-20.0)	13.9 (9.0-20.5)	14.1 (9.2-21.0)	13.7 (8.5-21.2)		15.1 (11.7-20.2)			11.4 (7.1-17.0)	15.0 (11.4-19.8)
Basic second or third cycles	7.8 (6.1-9.8)		9.3 (6.6-13.1)	7.5 (4.6-12.0)	5.7 (3.0-10.5)	10.9 (8.3-14.2)		6.9 (4.0-10.3)			8.2 (6.2-10.7)	8.7 (4.6-15.9)
Secondary or post-secondary	8.5 (6.2-11.7)		10.5 (8.8-13.0)	7.2 (3.9-12.9)	8.0 (4.1-15.3)	9.5 (4.8-17.8)		5.3 (2.5-11.1)			5.3 (3.1-10.2)	8.4 (3.2-13.4)
Higher education	7.0 (4.9-9.8)		9.5 (5.9-15.4)	8.8 (5.0-14.9)	9.9 (5.2-17.1)	12.3 (8.3-18.2)		7.1 (4.9-9.8)			4.0 (0.4-8.3)	7.9 (4.0-13.0)
Employment status*												
Employed	6.9 (5.4-8.5)		8.2 (5.5-12.0)	7.5 (4.0-9.4)	5.5 (3.6-8.4)	8.0 (5.8-10.8)		5.3 (2.7-10.2)			4.3 (2.9-5.7)	7.1 (4.9-10.0)
Unemployed	12.3 (8.6-17.2)		13.7 (8.6-19.8)	13.2 (8.2-22.4)	12.1 (8.2-20.5)	18.0 (12.2-25.7)		12.7 (8.6-18.8)			10.1 (6.6-15.0)	11.5 (6.3-20.2)
Other†	15.1 (12.3-18.5)		15.9 (11.3-21.9)	14.0 (8.9-21.3)	14.3 (8.7-22.5)	16.8 (10.6-25.7)		16.4 (9.6-26.6)			14.3 (10.2-19.5)	18.8 (11.9-28.4)

A.R. Madeira - Autonomous Region of Madeira, A.R. Azores - Autonomous Region of the Azores, 95%CI - 95% confidence interval.

\* 1 missing in education level, 4 missing in employment status.

† Other without professional activity: students, retired people, disabled, housewives, other.

Table 4. Prevalence of self-reported anxiety disorders, in the population from 25 to 74 years living in Portugal, according to sex, age group, education level and employment status, in Portugal and by health regions, in 2015 (n= 4 892)

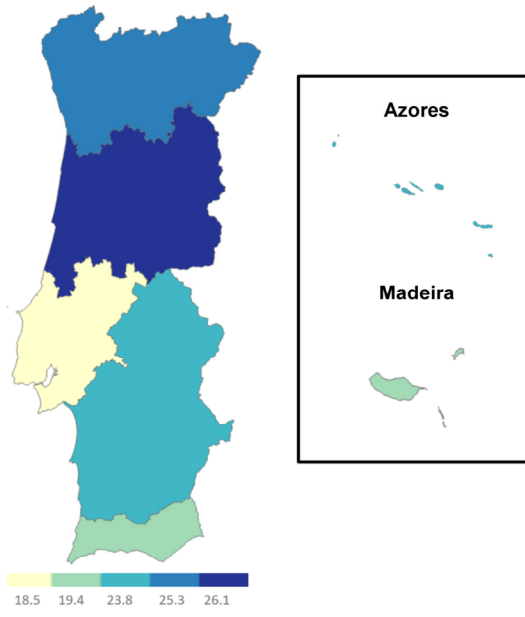
	Portugal (95%CI)	%	North (95%CI)	Center (95%CI)	Lisbon and Tagus Valley (95%CI)	Alentejo (95%CI)	%	The Algarve (95%CI)	A.R. Madeira (95%CI)	%	A.R. Azores (95%CI)	%
Sex												
Male	4.3 (3.8-4.8)		6.0 (3.0-10.0)	4.7 (2.8-8.2)	4.2 (2.8-8.8)	3.4 (1.9-6.3)		5.7 (3.0-10.8)			2.1 (0.7-6.3)	5.1 (2.3-10.0)
Female	9.1 (7.0-11.9)		10.1 (5.0-17.5)	8.0 (4.4-14.3)	7.9 (5.5-11.2)	9.3 (6.9-12.5)		11.1 (8.8-17.2)			10.1 (6.9-11.9)	12.5 (7.3-20.0)
Age group												
25-34	3.4 (1.6-7.6)		4.4 (1.0-18.4)	2.1 (0.5-8.0)	2.7 (0.7-9.4)	5.3 (1.6-16.0)		7.0 (2.9-15.8)			2.8 (0.8-8.3)	3.6 (1.2-10.1)
35-49	6.4 (5.0-8.1)		8.5 (5.0-12.6)	4.8 (2.7-8.4)	5.0 (3.0-8.2)	6.5 (4.0-10.4)		5.9 (3.1-10.7)			4.3 (2.8-6.3)	10.3 (6.8-15.7)
50-64	8.4 (6.1-11.5)		8.4 (4.9-14.0)	9.1 (4.7-17.4)	7.7 (4.5-13.7)	7.1 (4.5-11.8)		10.4 (7.7-14.4)			10.7 (7.1-16.4)	10.7 (7.1-16.4)
≥65	9.4 (6.5-13.3)		10.1 (5.2-22.1)	8.0 (3.6-16.0)	9.8 (6.1-15.0)	5.1 (2.6-9.7)		9.1 (5.0-16.2)			9.2 (5.3-15.0)	10.7 (6.4-17.4)
Education level*												
No education or basic first cycle	8.0 (5.3-13.2)		8.3 (4.1-19.0)	6.6 (3.1-13.4)	10.9 (6.0-19.0)	6.5 (4.1-10.0)		13.2 (8.3-20.4)			7.4 (4.7-11.7)	13.1 (7.1-23.1)
Basic second or third cycles	7.9 (6.3-9.9)		10.0 (7.3-14.0)	7.7 (4.0-14.1)	5.7 (3.4-9.4)	4.7 (2.5-8.6)		10.0 (6.7-14.6)			9.5 (5.7-15.3)	8.0 (3.3-18.1)
Secondary or post-secondary	6.0 (4.3-8.2)		7.9 (4.7-13.0)	4.7 (2.5-8.5)	4.6 (2.1-9.8)	9.6 (6.2-14.8)		7.6 (5.1-12.8)			4.2 (2.6-6.6)	4.4 (1.9-9.8)
Higher education	4.0 (2.7-7.7)		4.5 (1.4-13.5)	6.0 (2.6-13.1)	4.1 (1.6-10.3)	4.2 (1.3-12.8)		6.2 (3.0-12.7)			2.2 (0.9-9.4)	7.3 (4.3-12.0)
Employment status*												
Employed	6.2 (4.7-8.2)		8.0 (5.6-13.7)	5.5 (3.0-9.6)	4.1 (2.3-7.2)	5.7 (3.6-8.9)		6.4 (4.4-9.1)			5.5 (4.0-7.5)	7.4 (3.8-14.0)
Unemployed	8.0 (5.0-12.6)		6.0 (2.4-14.8)	9.1 (4.7-16.9)	8.1 (3.9-20.4)	7.0 (3.1-18.5)		10.3 (5.5-20.8)			6.2 (2.0-17.3)	8.8 (3.8-19.9)
Other†	8.7 (6.2-12.0)		7.4 (3.4-14.8)	7.4 (3.1-13.6)	10.0 (5.9-17.3)	7.4 (3.9-9.2)		13.4 (8.2-21.0)			9.3 (5.3-15.7)	12.6 (6.8-21.1)

A.R. Madeira - Autonomous Region of Madeira, A.R. Azores - Autonomous Region of the Azores, 95%CI - 95% confidence interval.

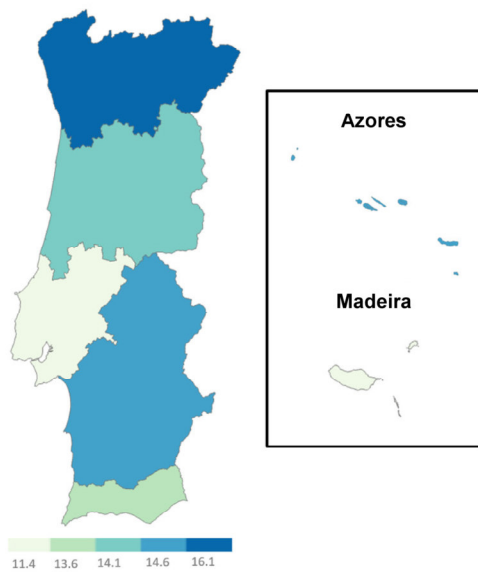
\* 1 missing in education level, 3 missing in employment status.

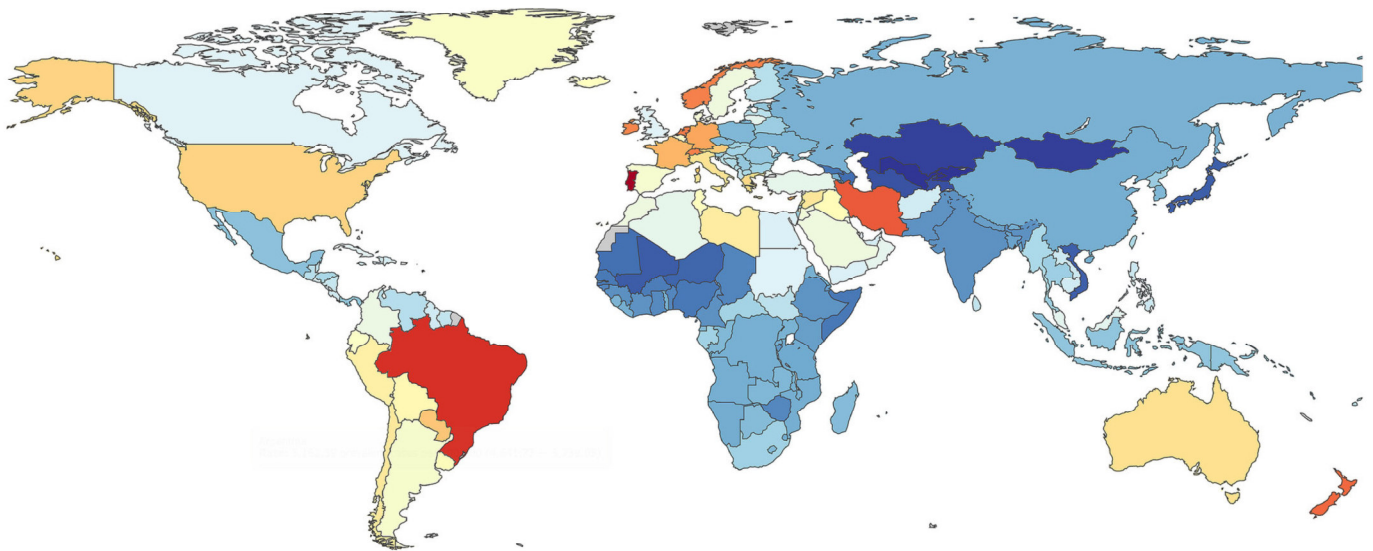
† Other without professional activity: students, retired people, disabled, housewives, other.

Psychological Distress (%) (MHIS score < 52)

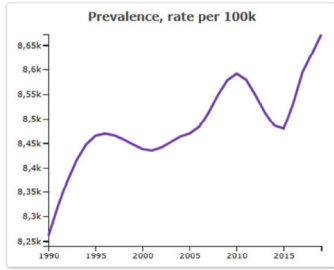


Probable diagnosis of CMD (%) (restrictive to DMC\_dx)



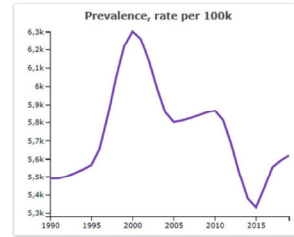


Global distribution of anxiety disorders. Legend: Colors indicate prevalence rates per 100,000 population (all ages) in 2019. Color shades represent the range of prevalence rates of anxiety disorders, in decreasing order, from dark red (8,600 cases per 100,000), orange, yellow, light blue, and dark blue hues (2,000 cases per 100,000)  
Javaid, S.F., Hashim, I.J., Hashim, M.J. et al. *Epidemiology of anxiety disorders: global burden and sociodemographic associations. Middle East Curr Psychiatry* **30**, 44 (2023). <https://doi.org/10.1186/s43045-023-00315-3>



Legend

■ Portugal, Both sexes, All ages, Anxiety disorders



Legend

■ Portugal, Both sexes, All ages, Depressive disorders