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ORIGINAL ARTICLE

Perceived stigma and discrimination among persons with mood and anxiety disorders: Results from the WHO World Mental Health Survey Portugal

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Abstract
Background and objectives: The stigma attached to mental disorders remains a public health challenge, represents an important barrier to healthcare and widens existing social inequalities.

This study aimed to characterize the association between perceived stigma and mental disorders. The two main objectives were to estimate the association between perceived stigma and 12-month anxiety and mood disorders, and to assess the factors associated with perceived stigma among persons with these mental disorders.

Methods: A nationally representative sample of the Portuguese population was used. Participants were Portuguese-speaking adults, aged 18 or above and residing in permanent dwellings in the country's mainland. The survey was administered by trained lay interviewers using a computer assisted personal interview (CAPI) on a face-to-face setting.

Results: The results showed a two-fold increase in the likelihood of experiencing stigma among individuals with 12-month anxiety and mood disorders, slightly higher in the latter, when compared with individuals without. Among the sub-sample with these mental disorders, participants retired (or others), with psychiatric comorbidity and with co-occurrence of psychiatric and physical disorders had higher odds of reporting perceived stigma.

Conclusions: The findings of this study highlight the need to consider stigma as a public health priority in Portugal and to develop policies to create awareness and promote the social inclusion of persons with mental disorders.

Introduction

Mental disorders represent a substantial proportion of the burden of disease worldwide.[1] Unmet needs for care remain

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a global health challenge, with most individuals not receiving adequate treatment[2,3] and quality of care being routinely worst when compared to physical disorders.[4]

Persons with mental disorders face a twofold problem, the suffering associated to symptoms, and pervasive stigma and discrimination.[5,6] The stigma attached to mental disorders represents a fundamental barrier in the provision of care by negatively influencing help-seeking behaviors and adherence to treatment, and exacerbates the social exclusion faced by persons with mental disorders.[4,5,7—9]

Three interacting levels of stigma have been described in the literature.[10] Social or public stigma encompasses prejudicial attitudes, negative emotional responses and discriminatory attitudes from the general public towards persons with mental disorders[10,11] which tend to be more negative when compared to persons with physical disorders.[12—14] A systematic review and meta-analysis on public attitudes regarding mental illness has found that, despite increases in health literacy and acceptance of psychiatric treatment, the social rejection of persons with mental disorders has remained stable over the last two decades.[15] Structural stigma refers to organizations' policies and procedures that restrict the rights and opportunities among this group.[10] Perceived stigma (or self-stigma) occurs when a person recognizes, internalizes and endorses prejudicial attitudes, leading to negative responses such as decreases in self-esteem and self-efficacy.[16] Feelings of embarrassment, emotional reactions and perceived discrimination are frequently used to characterize perceived stigma.[5,13,17,18] Perceived stigma has been linked to the 'why try' effect where resultant low self-esteem and self-efficacy discourages people with self-stigma from pursuing opportunities that are critical to accomplishing life goals.[19] However, not everyone subjected to stigma falls victim to the 'why try' effect as research has shown that some people are unaffected by stigma while others become motivated to overcome stigma beliefs.[20] This paradox of self-stigma has been attributed to differences in empowerment (perceived mastery, control collaboration, and equity within the environment) among different people.[20]

Along with the level of severity, research has shown a relationship between indicators of low socioeconomic position and the experience of stigma.[5] Accordingly, the discrimination of persons with mental disorders occurs in several domains of life and influences, among others, educational attainment, employment opportunities and full participation in civic life.[21]

Most previous research has evaluated the association between stigma and severe mental disorders,[22—25] and the World Mental Health Survey (WMHS) Initiative has filled an important gap in the literature by evaluating the association with common mental disorders. Using cross-sectional surveys from different countries, the WMHS Initiative studies have established the association between perceived stigma and anxiety and mood disorders,[5,26] and evaluated its consequences, finding considerable decreases in quality of life and limitations in role functioning.[26]

Since individuals' stigma beliefs can be linked back to the society they live in and the cultural group to which they belong,[27] it is important to understand perceived stigma in the Portuguese context. Portugal only recently achieved political stability after the end of the fascist dictatorship 47 years ago, and it still adheres to mostly collectivist values. Cultural values may play significant roles in stigma internalization.[18] The influence of collectivist values on stigma have been well studied among Asians, Native American and Latin American cultures. While the desire to 'save face' is strongly associated with internalization of stigma in Asian cultures,[28] failure to fulfil family obligations was linked to self-stigma among Latinos,[29] who are culturally similar to the Portuguese.

Although mental health has not received much attention in Portugal in the past, deinstitutionalization and mental health service reform have been ongoing since the country's national mental health strategy was launched in 2008. The COVID-19 pandemic in Portugal heightened public awareness and interest in mental health concerns and related topics. Portugal has one of the highest prevalence of mental disorders in Europe, with 22.9% of adults having experienced a 12-month mental disorder,[30] and 65.4% of this proportion reporting no service use despite universal healthcare access.[31] Attitudinal barriers including self-stigma were the most common reasons not to seek mental health care, cited by more than one-third of the respondents.[31]

This represents substantial costs for individuals and society due to disability and productivity loss.[32,33] Tackling the pervasive impact of stigma and discrimination among persons with mental disorders has been recognized as a public health priority.[26] The few studies on the topic in the country have focused on stigma towards people with mental health problems among medical students and mental health professionals.[34—37]

However, little is still known regarding the association between perceived stigma and mood and anxiety disorders in Portugal. This study was carried out in the context of a research protocol on mental health and human rights (the Mental Health Rights study) looking at different dimensions, one of them perceived stigma associated with mental disorders using the national survey database. The present paper has three main objectives: 1) to characterize the association between perceived stigma and anxiety and mood disorders, controlling for individuals' characteristics; 2) to evaluate the demographic, socioeconomic and clinical factors associated with perceived stigma among persons with anxiety and mood disorders; and 3) to establish a basis for comparison with future studies on perceived stigma and common mental disorders.

Materials and methods

Study design

The World Mental Health Survey Initiative was conducted in Portugal in 2008-09. This nationally representative survey was based on a stratified clustered area probability household sample. Participants were Portuguese-speaking adults, aged 18 or above and residing in permanent dwellings in the country's mainland. The survey was administered by trained lay interviewers using a computer assisted personal interview (CAPI) on a face-to-face setting. The response rate obtained (57.3%) was similar to the surveys conducted in Belgium, France, Germany and the Netherlands. No

substitutions from the initially selected households were allowed when the originally sampled household resident could not be interviewed.[38]

Internal sub-sampling was used to reduce respondent burden, by dividing the questionnaire in two parts. Part I included the core diagnostic assessment of mental disorders. All participants meeting the criteria for any mental disorder, together with a probability sample of 25% randomly selected respondents who did not meet criteria for any mental disorder, also completed Part II. Part II assessed the predictors, correlates, and consequences of mental disorders.[38]

A total of 3849 individuals were interviewed. Both modules (Part I and II) were administered to 2060 participants. Weighting procedures were implemented to Part I data to adjust for differential probabilities of selection, between and within households, non-response bias and discrepancies between the sample and the socio-demographic and geographic data distribution from the census population. Part II data were additionally weighted to adjust for the differential sampling of Part I participants into Part II. Further details regarding the study design and fieldwork procedures can be found elsewhere.[30,38]

Informed consent was obtained from the participants prior to the interview and all procedures were approved by the Ethics Committee of the Nova Medical School, Nova University of Lisbon.[30,38] All the data were anonymized and made totally confidential.

Measurements

12-month mental disorders

The presence of any mood or anxiety disorder in the 12-months before the interview was assessed with the version 3.0 of the World Health Organization Composite International Diagnostic Interview (CIDI), a fully structured diagnostic interview[39] that has shown good concordance with the clinician-administered non-patient edition of the Structured Clinical Interview for DSM-IV (SCID) in a clinical reappraisal study.[40]

The diagnoses of 12-month mental disorders followed the American Psychiatric Association's Diagnostic and Statistical Manual Disorders Fourth Edition (DSM-IV) criteria and included anxiety disorders (panic disorder, generalized anxiety disorder, agoraphobia without panic disorder, specific phobia, social phobia, post-traumatic stress disorder, obsessive-compulsive disorder, separation anxiety disorder) and mood disorders (major depressive disorder, dysthymia, bipolar disorder I and II).

Perceived stigma

Perceived stigma was assessed with two questions of the WMHS version of the WHODAS-II, which inquired the participants about experiences of embarrassment and discrimination in the previous 30 days due to their health problems.[5,26] Table 1 presents the items and the response options. These questions were only administered to participants with significant activity limitation, meaning that they reported at least moderate difficulties in two or more items of the following WMHS WHODAS-II domains: cognition, mobility, self-care, and social interaction.[5,26,41] Participants who reported at least "a little" embarrassment or discrimination were considered to have perceived stigma. This approach differs from other studies in the WMHS Initiative, that used the presence of both experiences of embarrassment and discrimination to indicate the presence of perceived stigma,[5,26] due to the low number of individuals that responded to these items.

Demographic, socioeconomic, and clinical factors

In the first model, age, gender, education, presence of any physical disorder and presence of two or more mental disorders were included as covariates to adjust for the possible differences in the experience of perceived stigma across sociodemographic groups and among individuals with chronic physical conditions or psychiatric comorbidity.[5] Education was assessed through the number of years of education as a continuous variable. Physical disorders were assessed with a checklist of chronic disorders established by a physician diagnosis, that has shown good concordance with medical records.[42,43] In addition to these variables, marital status (married or non-marital partnership; separated / divorced / widowed; and single), employment status (working or student; unemployed; retired or others — including homemakers), and income level (low / low-average; high-average / high) were used in the second model as independent variables. Income categories were based on the median of the distribution.[44]

Data analysis

Absolute and relative frequencies, means and standard deviations were used for descriptive analysis. Multiple logistic regression models were fit to the data. The first model assessed the association between perceived stigma and the presence of any 12-month anxiety or mood disorder. The second logistic regression model estimated the association between perceived stigma and demographic, socioeconomic and clinical factors in the sub-sample of respondents with any 12-month anxiety or mood disorder.

Table 1 Questions related to stigma in the WMHS-WHODAS II.

Dimension	Item question	Response items
Embarrassment	How much embarrassment did you experience because of your health problems during the past 30 days?	None / a little /some / a lot / or extreme embarrassment
Discrimination	How much discrimination experiences or unfair treatment did you experience because of your health problems during the past 30 days?	None / a little / some / a lot / or extreme discrimination or unfair treatment

Table 2 Demographic, socioeconomic, and clinical characteristics of the WMHS Portugal sample and sub-sample with any 12-month anxiety or mood disorder.

	Full sample (*n* = 3849) % (*n*)	Sub-sample with any 12-month mood and anxiety disorders % (*n*)
Gender[1]		
Men	48.4 (1632)	28.3 (192)
Women	51.6 (2217)	71.7 (596)
Marital status[1]		
Married/ Non-marital partnership	69.3 (2570)	63.5 (475)
Separated / Divorced / Widowed	10.2 (528)	11.2 (122)
Single	20.6 (751)	25.3 (191)
Employment status [2]		
Working or students	65.1 (1362)	66.2 (470)
Unemployed	6.8 (172)	12.4 (90)
Retired and others	28.1 (526)	21.5 (155)
Income [2]		
Low / Low-average	50.2 (963)	47.9 (330)
High-average / High	49.8 (1097)	52.1 (385)
Any physical disorders [2]		
No	31.3 (547)	18.4 (129)
Yes	68.7 (1513)	81.6 (586)
More than two mental disorders [2]		
No	94.5 (1844)	74.0 (570)
Yes	5.5 (216)	26.0 (218)
	Mean (SD)	**Mean (SD)**
Age [1]	46.38 (16.88)	42.31 (15.84)
Education, years [2]	8.76 (4.79)	9.44 (4.43)

[1] Part I weighting.
[2] Part II weighting.
n values not weighted
SD: standard deviation

All estimates were weighted according to the characteristics of the study design, as previously described. Statistical significance was assessed by 95% confidence intervals (95% CI). Data analysis was conducted using the Statistical Package for the Social Sciences (IBM SPSS Statistics), version 24.0.

Results

Table 2 presents the characteristics of the study sample and of the sub-sample with any 12-month anxiety or mood disorder.

Perceived stigma or discrimination in the previous 30 days was reported by 15.8% (*n* = 437) of the participants. Among respondents with any 12-month anxiety or mood disorder, 31.2% reported perceived stigma or discrimination (*n* = 238). When considering 12-month anxiety and mood disorders separately, perceived stigma or discrimination was reported by 30.8% (*n* = 176) and 37.3% (*n* = 134) of individuals, respectively.

Table 3 indicates that individuals with any 12-month anxiety and mood disorder have approximately 2.5 times higher odds of perceiving stigma than those without these disorders (OR=2.48; 95%CI: 1.77-3.47 and OR=2.67; 95%CI: 1.76-4.05, respectively) after adjusting for individuals' characteristics, namely age, gender, presence of any physical disorder and psychiatric comorbidity.

Table 4 presents the factors associated with perceived stigma and discrimination among the sub-sample of respondents with any 12-month anxiety or mood disorder. The results suggest that, among this group, retired (or others) participants have 2.48 (95%CI: 1.24-4.94) higher odds of reporting perceived stigma or discrimination when compared to those working or students. Both clinical characteristics under study presented a statistically significant association with perceived stigma or discrimination. Participants with any physical disorder and with psychiatric comorbidity presented 2.65 (95%CI: 1.33-5.31) and 1.62 (95%CI: 1.00-2.62) higher odds of reporting perceived stigma, when compared to those without these conditions, respectively.

Discussion

About one-third of the respondents in this study reported perceived stigma. Although the questions about perceived stigma were posed to respondents with significant activity limitation, it gives an idea of the stigma held by the general population in Portugal since perceived stigma is formed from public and structural stigma.[45] While no research on public stigma in the general population are available,

Table 3 Logistic regression models on the association between 12-month mood and anxiety disorders and perceived stigma.

12-month mental disorders	OR (95% CI)
Anxiety Disorders	2.48 (1.77-3.47) ***
Mood Disorders	2.67 (1.76-4.05) ***

Part II weight. OR: odds ratio. CI: Confidence interval.
Model adjusted for age, gender, education, presence of more than two mental disorders and presence of any physical disorder.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

structural stigma is evident in the country's mental health legislation which places restrictions on the rights of persons with mental disorders. A new legislation giving persons with mental disorders additional rights is currently being debated in the country, and it would be interesting to investigate the influence of this legislation on perceived stigma and other stigma constructs.

Two main findings emerge from this study. First, an association was found between 12-month mood and anxiety disorders and perceived stigma or discrimination, regardless of individual sociodemographic and clinical characteristics. Second, the factors associated with perceived stigma or discrimination in the sub-sample of persons with any 12-month mental disorder were also identified, and included being retired (or others), and the comorbidity with psychiatric or physical conditions.

Table 4 Demographic, socioeconomic, and clinical characteristics associated with perceived stigma among participants with any 12-month anxiety or mood disorder (n = 788).

	OR (95% CI)
Age[1]	1.00 (0.98-1.02)
Gender	
Men	Ref.
Women	1.12 (0.69-1.81)
Marital status	
Married/ Non-marital partnership	Ref.
Separated / Divorced / Widowed	1.28 (0.65-2.51)
Single	0.87 (0.46-1.62)
Education[1]	1.00 (0.94-1.06)
Employment status	
Working or students	Ref.
Unemployed	0.92 (0.48-1.87)
Retired and others	2.48 (1.24-4.94) **
Income	
Low / Low-average	1.09 (1.24-4.94)
High-average / High	Ref.
Any physical disorders	
No	Ref.
Yes	2.65 (1.33-5.31) **
More than two mental disorders	
No	Ref.
Yes	1.62 (1.00-2.62) *

Part II weighting.
* $p < 0.05$ ** $p < 0.01$.
[1] Continuous variables.

These findings are in line with previous research in this area. The international results obtained from the WMHS Initiative show that, despite some variation between countries, perceived stigma is frequent and strongly associated with mental disorders worldwide.[5,26] A two-fold increase in the likelihood of reporting perceived stigma was found in participants with depressive and anxiety disorders. This association was even more robust for individuals with comorbid depressive and anxiety disorders,[5] in line with the results obtained in the present study.This finding has important policy implications in terms of interventions to close the treatment gap for the country which has one of the highest prevalence of common mental disorders in Europe as highlighted earlier.

The results are also partly consistent with prior research that establishes an association between perceived stigma and social disadvantage among persons with mental disorders.[46] Stigma has an important influence on the labor market participation of persons with mental disorders, who are more likely to have difficulties finding a job, to require early retirement, and to be on long-term sickness absence.[47–51] Discriminatory attitudes from employers and co-workers are likely to influence both the job opportunities granted to people with mental disorders and their willingness to actively seek work.[14,51] Following this pattern, the results of this study indicate that, among the sub-sample of individuals with any 12-month mental disorders, those retired (or others) were more likely to perceive stigma and discrimination, regardless of other individual characteristics such as age. Apart from the retired respondents being likely older and thus more vulnerable to the double stigma of being older and having a mental health problem,[52] retirement is associated with a decline in self-esteem[53] a known mediating factor linked to internal stigma. Thus, it is not surprising that those who were retired and had a mental health problem had the highest likelihood of internalized stigma. Concerning education, an association between stigma and lower educational attainment among persons with mental disorders has been found in the literature[5,26] but not in this study. However, it has been suggested that persons with mental disorders have reduced educational prospects and are less likely to apply to available opportunities due to the experience of stigma.[26,54] Although the sample size and the cross-sectional nature of the study limits the extent of inferences that can be made regarding this disparity, it is possible some adaptive coping strategies such as secrecy about the mental health condition or withdrawal may have mediated the impact of stigma on educational attainment. It may also be reasonable to hypothesize that the collectivist values of the Portuguese that encourage family support could have been a protective factor against reduced educational attainment. Thus, the cultural values that shape stigma could also be important resources to cope with the impact of the stigma.[18]

The findings are also aligned with studies that have shown an association between the presence of psychiatric comorbidity and the co-occurrence of psychiatric and physical conditions and higher levels of perceived stigma.[5] Having more than two mental disorders was also associated with an increased likelihood of perceived stigma. Considering them as proxies for severity of the mental disorders, this could indicate that more severe cases are related with increased

stigma. These results have important implications, since perceived stigma impacts on help-seeking behaviors, contributing to treatment delay and to a lower use of health services,[3,55,56] which may exacerbate the burden of disability in these complex clinical situations.[57]

The results of this study should be interpreted considering several limitations. First, stigma is a complex construct for which specific scales and standardized measures have been developed.[58,59] In the WMHS Initiative, due to the need to reduce respondent burden, only two questions were used to assess perceived stigma and discrimination, which were applied to individuals with substantial activity limitations in the month prior to the interview.[5,26,41,60] While the dimensions used to assess perceived stigma (experiences of embarrassment and discrimination) have been proposed as good indicators of stigma,[61] comparisons across studies are limited. Additionally, the assessment of perceived stigma in this research differed from other cross-country studies in the WMHS Survey. As previously mentioned, given the characteristics of the Portuguese survey, only a reduced number of participants were asked the stigma related questions. To ensure the necessary number of individuals to perform the multivariate analyses, perceived stigma was considered to occur when a participant reported one of the dimensions of embarrassment or discrimination. This approach differs from that used in the other WMHS studies, which required the presence of both traits.[5,26]

Second, the stigma and discrimination questions were not asked specifically in relation to mental disorders. However, it has been suggested that the perceived stigma in the WMHS can be largely attributed to the presence of mental disorders.[5,26]

Third, perceived stigma was assessed in the month prior to the interview, whereas mental disorders are 12-month based. For episodic conditions, the previous month may not include the time period with the disorder, while using a 12-month diagnosis allows the inclusion of remitted disorders that may have residual adverse effects on perceived stigma. Additionally, perceptions related to stigma can be manifestations of symptoms of mental disorders (e.g., depressive symptoms) or be associated with disorders' severity.[56] However, the effects of stigma have been shown to last after improvement, meaning that the association cannot be attributed solely to the presence of symptoms and their severity.[26]

Fourth, the cross-sectional study design limits causal inference and longitudinal studies are needed to fully understand the temporal relationship between mental disorders, perceived stigma, and individuals' socioeconomic position.

Fifth, assessment of race/ethnicity, an important factor associated with stigma and discrimination, was not included due to legal constraints in Portugal.

Lastly, the results of this study did not account for the possible impact of the economic recession in the experience of stigma and discrimination among persons with mental disorders. Evidence suggests that these periods may intensify the social exclusion of persons with mental disorders due to more competitive labor market conditions and stigmatizing attitudes towards mental illness.[62] For instance, a study among 27 European Union countries has shown an increase in the unemployment gap between persons with and without mental disorders between 2006 and 2010.[62] Additionally, Portuguese data suggests wider social inequalities among persons with and without mental disorders due to experience of financial hardship.[63]

Conclusions

Despite its limitations, this study contributes to the literature by characterizing the association between stigma and mental disorders, using a nationally representative sample of the Portuguese population. Tackling the consequences of stigma among persons with mental disorders, which include an overall decrease in quality of life and social relationships, increased levels of social disadvantage and reduced life opportunities, should be considered a public health priority.[26] Consequently, future research should focus on innovative social marketing anti-stigma campaigns[64] and on the development of policies that address health care providers awareness and that create opportunities at the educational and labour market levels.[26]

Ethical considerations

Informed consent was obtained from the participants and all procedures were approved by the Ethics Committee of the Nova Medical School, Nova University of Lisbon.

All the data were anonymized and made totally confidential.

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Conflict of interests

All the authors declare they have no conflict of interests.

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References

1. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. Global burden of disease attributable to

mental and substance use disorders: findings from the Global burden of disease study. Lancet. 2010;382:1575—86. https://doi.org/10.1016/s0140-6736(13)61611-6.
2. Alonso J, Liu Z, Evans-Lacko S, Sadikova E, Sampson N, Chatterji S, et al. Treatment gap for anxiety disorders is global: results of the World Mental Health Surveys in 21 countries. Depress Anxiety. 2018;35:195—208. https://doi.org/10.1002/da.22711.
3. Thornicroft G, Chatterji S, Evans-Lacko S, Gruber M, Sampson N, Aguilar-Gaxiola S, et al. Undertreatment of people with major depressive disorder in 21 countries. Br J Psychiatry. 2017;210:119—24. https://doi.org/10.1192/bjp.bp.116.188078.
4. Patel V, Saxena S, Lund C, Thornicroft G, Baingana F, Bolton P, et al. The Lancet Commission on global mental health and sustainable development. Lancet. 2018;392:1553—98. https://doi.org/10.1016/S0140-6736(18)31612-X.
5. Alonso J, Buron A, Bruffaerts R, He Y, Posada-Villa J, Lepine J-P, et al. Association of perceived stigma and mood and anxiety disorders: results from the World Mental Health Surveys. Acta Psychiatr Scand. 2008;118:305—14. https://doi.org/10.1111/j.1600-0447.2008.01241.x.
6. Rüsch N, Evans-Lacko S, Clement S, Thornicroft G. Stigma, discrimination, social exclusion, and mental health. Routledge Handbook of Global Public Health. Routledge; 2010. https://doi.org/10.4324/9780203832721.ch38.
7. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. Psychol Med. 2015;45:11—27. https://doi.org/10.1017/S0033291714000129.
8. Sartorius N. Stigma and mental health. Lancet. 2007;370:810—1. https://doi.org/10.1016/S0140-6736(07)61245-8.
9. Thornicroft G. Stigma and discrimination limit access to mental health care. Epidemiol Psichiatr Soc. 2008;17:14—9.
10. Livingston JD, Boyd JE. Correlates and consequences of internalized stigma for people living with mental illness: a systematic review and meta-analysis. Soc Sci Med. 2010;71:2150—61. https://doi.org/10.1016/j.socscimed.2010.09.030.
11. Mak WWS, Poon CYM, Pun LYK, Cheung SF. Meta-analysis of stigma and mental health. Soc Sci Med. 2007;65:245—61. https://doi.org/10.1016/j.socscimed.2007.03.015.
12. Cook JA. Employment barriers for persons with psychiatric disabilities: update of a report for the president's commission. Psychiatr Serv. 2006;57:1391—405. https://doi.org/10.1176/ps.2006.57.10.1391.
13. Rüsch N, Angermeyer MC, Corrigan PW. Mental illness stigma: concepts, consequences, and initiatives to reduce stigma. Eur Psychiatry. 2005;20:529—39. https://doi.org/10.1016/j.eurpsy.2005.04.004.
14. World Health Organization. World Report on Disability 2011. Geneva. 2011. https://doi.org/10.1136/ip.2007.018143.
15. Schomerus G, Schwahn C, Holzinger A, Corrigan PW, Grabe HJ, Carta MG, et al. Evolution of public attitudes about mental illness: A systematic review and meta-analysis. Acta Psychiatr Scand. 2012;125:440—52. https://doi.org/10.1111/j.1600-0447.2012.01826.x.
16. Corrigan PW, Rao D. On the self-stigma of mental illness: stages, disclosure, and strategies for change. Can J Psychiatry. 2012;57:464—9. https://doi.org/10.4324/9781315831817.
17. Van Brakel WH. Measuring health-related stigma—a literature review. Psychol Health Med. 2006;11:307—34. https://doi.org/10.1080/13548500600595160.
18. Ran MS, Hall BJ, Su TT, Prawira B, Breth-Petersen M, Li XH, et al. Stigma of mental illness and cultural factors in Pacific Rim region: a systematic review. BMC Psychiatry. 2021;21:1—16. https://doi.org/10.1186/S12888-020-02991-5/TABLES/3.
19. Corrigan PW, Larson JE, Rüsch N. Self-stigma and the "why try" effect: impact on life goals and evidence-based practices. World Psychiatry. 2009;8:75. https://doi.org/10.1002/J.2051-5545.2009.TB00218.X.
20. Corrigan PW, Watson AC. The paradox of self-stigma and mental illness. Clin. Psychol. Sci. Pract. 2002;9:35—53. https://doi.org/10.1093/CLIPSY.9.1.35.
21. Parcesepe AM, Cabassa LJ. Public stigma of mental illness in the united states: a systematic literature review. Adm Policy Ment Heal Ment Heal Serv Res. 2013;40:384—99. https://doi.org/10.1007/s10488-012-0430-z.
22. Brohan E, Elgie R, Sartorius N, Thornicroft G. GAMIAN-Europe Study Group. Self-stigma, empowerment and perceived discrimination among people with schizophrenia in 14 European countries: The GAMIAN-Europe study. Schizophr Res. 2010;122:232—8. https://doi.org/10.1016/j.schres.2010.02.1065.
23. Corrigan P, Thompson V, Lambert D, Sangster Y, Noel JG, Campbell J. Perceptions of discrimination among persons with serious mental illness. Psychiatr Serv. 2003;54:1105—10. https://doi.org/10.1176/appi.ps.54.8.1105.
24. Mashiach—Eizenberga M, Hasson-Ohayonb I, Yanosc PT, Lysakerd PH, Roee D. Internalized stigma and quality of life among persons with severe mental illness: the mediating roles of self-esteem and hope. Psychiatry Res. 2011;193:118—25. https://doi.org/10.1016/j.jneumeth.2010.08.011.
25. West ML, Yanos PT, Smith SM, Roe D, Lysaker PH. Prevalence of internalized stigma among persons with severe mental illness. Stigma Res Action. 2011;1:3—10. https://doi.org/10.5463/sra.v1i1.9.
26. Alonso J, Buron A, Rojas-Farreras S, de Graaf R, Haro JM, de Girolamo G, et al. Perceived stigma among individuals with common mental disorders. J Affect Disord. 2009;118:180—6. https://doi.org/10.1016/j.jad.2009.02.006.
27. Becker G, Arnold R. Stigma as a social and cultural construct. In: Ainlay SC, Becker G, Coleman LM, eds. The Dilemma of Difference. Perspectives in Social Psychology, Boston, MA: Springer; 1986:39—57.
28. Chiu MYL, Yang X, Wong HT, Li JH. The mediating effect of affective stigma between face concern and general mental health - The case of Chinese caregivers of children with intellectual disability. Res. Dev. Disabil. 2015;36C:437—46. https://doi.org/10.1016/J.RIDD.2014.10.024.
29. Interian A, Martinez IE, Guarnaccia PJ, Vega WA, Escobar JI. A qualitative analysis of the perception of stigma among latinos receiving antidepressants. Psychiatr. Serv. 2015;58:1591—4. https://doi.org/10.1176/PS.2007.58.12.1591/ASSET/IMAGES/LARGE/JC15T1.JPEG.
30. Caldas-de-Almeida JM, Xavier M, Cardoso G, Gonçalves Pereira M, Gusmão R, Corrêa B, et al. Estudo Epidemiológico Nacional de Saúde Mental —1º Relatório [National Mental Health Epidemiological Study - 1st Report]. Faculdade de Ciências Médicas, Universidade Nova de Lisboa; 2013.
31. Silva M, Antunes A, Azeredo-Lopes S, Cardoso G, Xavier M, Saraceno B, et al. Barriers to mental health services utilisation in Portugal-results from the National Mental Health Survey. J Ment Health. 2020;23:1—9. https://doi.org/10.1080/09638237.2020.1739249.
32. Antunes A, Frasquilho D, Azeredo-Lopes S, Neto D, Silva M, Cardoso G, et al. Disability and common mental disorders: results from the World Mental Health Survey Initiative Portugal. Eur Psychiatry. 2018;49:56—61. https://doi.org/10.1016/j.eurpsy.2017.12.004.
33. Cardoso G, Xavier M, Vilagut G, Petukhova M, Alonso J, Kessler RC, et al. Days out of role due to common physical and mental conditions in Portugal: results from the WHO World Mental Health Survey. BJPsych Open. 2017;3:15—21. https://doi.org/10.1192/bjpo.bp.115.002402.
34. Moreira AR, Oura MJ, Santos P. Stigma about mental disease in Portuguese medical students: a cross-sectional study. BMC Med.

Educ. 2021;21:1—8. https://doi.org/10.1186/S12909-021-02714-8/TABLES/3.
35. Silva M, Nascimento S, Pereira T, Lourenço B, Nascimento M, Gonçalves M, et al. Stigma attitudes towards people with mental illness among professionals working in a psychiatric hospital. Rev Port Psiquiatr e Saúde Ment. 2021;7:126—32. https://doi.org/10.51338/rppsm.238.
36. Telles-Correia D, Gama Marques J, Gramaça J, Sampaio D. Stigma and attitudes towards psychiatric patients in portuguese medical students. Acta Med Port. 2015;28:715—9. https://doi.org/10.20344/AMP.6231.
37. Vilar Queirósh R, Santos V, Madeira N. Decrease in stigma towards mental illness in portuguese medical students after a psychiatry course. Acta Med Port. 2021;34:498—506. https://doi.org/10.20344/AMP.13859.
38. Xavier M, Baptista H, Mendes JM, Magalhães P, Caldas-de-Almeida JM. Implementing the World Mental Health Survey Initiative in Portugal - rationale, design and fieldwork procedures. Int J Ment Health Syst. 2013;7:19. https://doi.org/10.1186/1752-4458-7-19.
39. Kessler RC, Üstün TB. The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). Int J Methods Psychiatr Res. 2004;13:93—121.
40. Haro JM, Arbabzadeh-Bouchez S, Brugha TS, De Girolamo G, Guyer ME, Jin R, et al. Concordance of the composite international diagnostic interview version 3.0 (CIDI 3.0) with standardized clinical assessments in the WHO World Mental Health Surveys. Int J Methods Psychiatr Res. 2006;15:167—80. https://doi.org/10.1002/mpr.196.
41. Von Korff M, Crane PK, Alonso J, Vilagut G, Angermeyer MC, Bruffaerts R, et al. Modified WHODAS-II provides valid measure of global disability but filter items increased skewness. J Clin Epidemiol. 2008;61:1132—43. https://doi.org/10.1016/j.jclinepi.2007.12.009.
42. Baker M, Stabile M, Deri C. What do self-reported, objective, measures of health measure? J Hum Resour. 2004;39:1067. https://doi.org/10.2307/3559039.
43. Knight M, Stewart-Brown S, Fletcher L. Estimating health needs: the impact of a checklist of conditions and quality of life measurement on health information derived from community surveys. J Public Health Med. 2001;23:179—86. https://doi.org/10.1093/pubmed/23.3.179.
44. Pinto-Meza A, Moneta MV, Alonso J, Angermeyer MC, Bruffaerts R, Caldas De Almeida JM, et al. Social inequalities in mental health: results from the EU contribution to the World Mental Health Surveys Initiative. Soc Psychiatry Psychiatr Epidemiol. 2013;48:173—81. https://doi.org/10.1007/s00127-012-0536-3.
45. Evans-Lacko S, Brohan E, Mojtabai R, Thornicroft G. Association between public views of mental illness and self-stigma among individuals with mental illness in 14 European countries. Psychol Med. 2012;42:1741—52. https://doi.org/10.1017/S0033291711002558.
46. Lund C, Stansfeld S, DeSilva M. Social determinants of mental health. In: Patel V, Minas H, Cohen A, Prince MJ, eds. Global Mental Health: Principles and Practice, Oxford University Press; 2014:116—36.
47. Antunes A, Frasquilho D, Azeredo-Lopes S, Silva M, Cardoso G, Caldas-De-Almeida JM. The effect of socioeconomic position in the experience of disability among people with mental disorders: findings from the World Mental Health Survey Initiative Portugal. Int J Equity Health. 2018;17:113. https://doi.org/10.1186/s12939-018-0821-1.
48. Knudsen AK, Harvey SB, Mykletun A, Øverland S. Common mental disorders and long-term sickness absence in a general working population. The Hordaland Health Study. Acta Psychiatr Scand. 2013;127:287—97. https://doi.org/10.1111/j.1600-0447.2012.01902.x.
49. Lahelma E, Pietiläinen O, Rahkonen O, Lallukka T. Common mental disorders and cause-specific disability retirement. Occup Environ Med. 2015;72:181—7. https://doi.org/10.1136/oemed-2014-102432.
50. Olesen SC, Butterworth P, Rodgers B. Is poor mental health a risk factor for retirement? Findings from a longitudinal population survey. Soc Psychiatry Psychiatr Epidemiol. 2015;47:735—44. https://doi.org/10.1007/s00127-011-0375-7.
51. Stuart H. Mental illness and employment discrimination. Curr Opin Psychiatry. 2006;19:522—6. https://doi.org/10.1097/01.yco.0000238482.27270.5d.
52. De Mendonça Lima CA, Levav I, Jacobsson L, Rutz W. Stigma and discrimination against older people with mental disorders in Europe. Int J Geriatr Psychiatry. 2003;1:679—82. https://doi.org/10.1002/GPS.877.
53. Mukku SSR, Harbishettar V, Sivakumar PT. Psychological morbidity after job retirement: a review. Asian J Psychiatr. 2018;37:58—63. https://doi.org/10.1016/J.AJP.2018.08.003.
54. Sumanen H, Rahkonen O, Pietilinen O, Lahelma E, Roos E, Lahti J. Educational differences in disability retirement among young employees in Helsinki, Finland. Eur J Public Health. 2016;26(2):318—22. https://doi.org/10.1093/eurpub/ckv226.
55. Alonso J, Codony M, Kovess V, Angermeyer MC, Katz SJ, Haro JM, et al. Population level of unmet need for mental healthcare in Europe. Br. J. Psychiatry. 2007;190:299—306. https://doi.org/10.1192/bjp.bp.106.022004.
56. Gaebel W, Zaske H, Baumann AE. The relationship between mental illness severity and stigma. Acta Psychiatr Scand. 2006;113:41—5. https://doi.org/10.1111/j.1600-0447.2005.00716.x.
57. Scott KM, Bruffaerts R, Tsang A, Ormel J, Alonso J, Angermeyer MC, et al. Depression-anxiety relationships with chronic physical conditions: results from the World Mental Health surveys. J Affect Disord. 2007;103:113—20. https://doi.org/10.1016/j.jad.2007.01.015.
58. Fox AB, Earnshaw VA, Taverna EC, Vogt D, System BH. Conceptualizing and measuring mental illness stigma: the mental illness stigma framework and critical review of measures HHS public access. Stigma Heal. 2018;3:348—76. https://doi.org/10.1037/sah0000104.
59. King M, Dinos S, Shaw J, Watson R, Stevens S, Passetti F, et al. The Stigma Scale: development of a standardised measure of the stigma of mental illness. Br J Psychiatry. 2007;19:248—54.
60. Bowling A. Just one question: If one question works, why ask several? J Epidemiol Community Health. 2005;59:342—5. https://doi.org/10.1136/jech.2004.021204.
61. Link BG, Yang LH, Phelan JC, Collins PY. Measuring mental illness stigma. Schizophr Bull. 2004;30(3):511—41. https://doi.org/10.1093/oxfordjournals.schbul.a007098.
62. Evans-Lacko S, Henderson C, Thornicroft G, McCrone P. Economic evaluation of the anti-stigma social marketing campaign in England 2009-2011. Br J Psychiatry. Suppl. 2013;55:s95—101. https://doi.org/10.1192/bjp.bp.112.113746.
63. Antunes A, Frasquilho D, Azeredo-Lopes S, Silva M, Cardoso G, Caldas-De-Almeida JM. Changes in socioeconomic position among individuals with mental disorders during the economic recession in Portugal: a follow-up of the National Mental Health Survey. Epidemiol Psychiatr Sci. 2019;28:638—43. https://doi.org/10.1017/S2045796018000392.
64. Evans-Lacko S, Knapp M, McCrone P, Thornicroft G, Mojtabai R. The mental health consequences of the recession: economic hardship and employment of people with mental health problems in 27 European countries. PLoS One. 2013;8(7):e69792. https://doi.org/10.1371/journal.pone.0069792.