Economic crisis and mental health in Portugal: Preliminary results of the national mental health survey follow-up


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Ana Antunes
Manuela Silva
National Mental Health Survey (WMHS Initiative)

• Carried out in 2008-2009 in a sample representative of the adult Portuguese population
  In order to estimate:
    o the prevalence and severity of psychiatric disorders
    o Psychiatric and physical comorbidity
    o the use of health services and of psychotropic drugs
    o Prevalence and intensity of disabilities
    o Distribution by socio-demographic and economic variables
    o Risk and protective factors
Prevalence of any mental disorder in the last 12 months in European countries (WMHS Initiative)

Adapted from Wang et al, 2011
### Treatment gap in serious mental disorders (WMHS Initiative)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Proportional treatment of serious 12-month disorders (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>60.9</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>31.0</td>
</tr>
<tr>
<td>France</td>
<td>48.0</td>
</tr>
<tr>
<td>Germany</td>
<td>40.0</td>
</tr>
<tr>
<td>Italy</td>
<td>51.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>50.4</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>72.8</td>
</tr>
<tr>
<td>Portugal</td>
<td><strong>66.4</strong></td>
</tr>
<tr>
<td>Spain</td>
<td>58.7</td>
</tr>
</tbody>
</table>

Adapted from Wang et al, 2010
MH Crisis impact study

• Funded by the EEA Grants;

• To obtain a new understanding of the effects of the economic crisis in Portugal on mental-ill health of the populations, determinants of mental disorders, and use of mental health services;

• To propose new policies, programmes and interventions aimed at the reduction of health inequalities and mental health problems linked with the crisis.
MH Crisis impact study
Methods

• Part I – Follow-up study in 2015 of the national mental health survey:
  o In a probability sub-sample of respondents, over-sampling those with a history of mental disorder
  o Including modules of the CIDI-SC, 30 days symptoms, use of services and psychotropic drugs, work/employment, social support, finances and community involvement

• Part II - In-depth local case-studies, based on focus groups and semi-structured interviews with key actors in primary care services located in regional contexts specially affected by the crisis.
Crisis impact on mental health study
Sample

2008
n=2059

- 29% Not found/ Moved/ Migrated (n=595)

- 21% Refused /not completed (n=432)

- 6% Deceased/ Severely disabled (n=121)

2015
n=911
What changed from 2008 to 2015
Professional Status

Professional status in 2008 and 2015

- Working: 62.3% (2008) vs. 60.6% (2015)
- Looking for job: 4.7% (2008) vs. 5.9% (2015)
- Others: 19.1% (2008) vs. 33.5% (2015)
What changed from 2008 to 2015
Economic situation

Self-reported change in income (last 5 years)

Increased: 14.4%
Equal: 41.9%
Decreased: 43.7%

Reported reasons for change in income

Cuts in salary or Unemployment pension: 54.1%
Changed job: 14.1%
Retirement: 6.3%
Other: 19.8%
What changed from 2008 to 2015
Financial Deprivation

Perceived financial deprivation

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>33.2%</td>
</tr>
<tr>
<td>2015</td>
<td>39%</td>
</tr>
</tbody>
</table>
What changed from 2008 to 2015
Prevalence of mental health problems (K-10)

Mental health problems in 2008 and 2015 (Kessler-10)

- **Mild**: 13.6% (2008) vs. 16.8% (2015)
- **Moderate**: 4.4% (2008) vs. 7.6% (2015)
- **Severe**: 1.8% (2008) vs. 6.8% (2015)
- **Any psychological distress**: 19.8% (2008) vs. 31.2% (2015)

**Legend**:
- □ 2008 [n=562]
- ■ 2015 [n=911]
What changed from 2008 to 2015
Increase of mental health problems (K-10) according to gender

Increase of mental health problems (k-10) from 2008 to 2015

What changed from 2008 to 2015
Increase of mental health problems (K-10) according to age group

Increase of mental health problems (k-10) according to age group from 2008 and 2015

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2008</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>7.7</td>
<td>1.8</td>
</tr>
<tr>
<td>35-49</td>
<td>6.6</td>
<td>3.0</td>
</tr>
<tr>
<td>50-64</td>
<td>12</td>
<td>16.5</td>
</tr>
<tr>
<td>&gt;65</td>
<td>1.2</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Legend: 2008 - gray, 2015 - green
<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideation</td>
<td>2.1%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Plan</td>
<td>0.5%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Attempt</td>
<td>0.3%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

What changed from 2008 to 2015
Suicidal behaviour
## Factors in 2008 associated with mental health problems (K-10) in 2015

**Multivariate analysis**

<table>
<thead>
<tr>
<th>Variables considered in the multivariate model: age; gender; education; presence of any mental disorder or any physical disorder; severity; suicidal ideation; suicidal planning; household income; occupation; marital status; professional status; self-perceived socioeconomic status; financial deprivation; disability</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>OR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>1.74</td>
<td>0.03</td>
</tr>
<tr>
<td>Education (years)</td>
<td>0.91</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Severity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe</td>
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<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>0.54</td>
<td>0.13</td>
</tr>
<tr>
<td>Mild</td>
<td>0.23</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>None</td>
<td>0.24</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Suicidal ideation</td>
<td>3.55</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Disability (WHODAS)</td>
<td>1.03</td>
<td>0.03</td>
</tr>
</tbody>
</table>
Sociodemographic characteristics and mental health problems

Age

Age groups and mental health problems (K-10)

- 18-34: 7.7
- 45-49: 12
- 50-64: 16.5
- ≥65: 18.7

K-10: p<0.05*
Sociodemographic characteristics and mental disorders

Age

Age groups and mental health problems (MDE and GAD)

- MDE: p<0.05*
- GAD: p>0.05
Sociodemographic characteristics and mental health problems

Gender

Gender and mental health problems (K-10)

Men: 9.9
Women: 18.5

K-10: p<0.05*
Sociodemographic characteristics and mental disorders

Gender

Gender and mental health problems (MDE and GAD)

- Men: MDE 3.3, GAD 2.8
- Women: MDE 9.1, GAD 5

MDE: p<0.05*
GAD: p>0.05
Sociodemographic characteristics and mental health problems
Marital Status

Marital status and mental health problems (K-10)

- Single: 8.3
- Married: 14.8
- Divorced, Widow: 18.7

K-10: p<0.05*
Sociodemographic characteristics and mental disorders
Marital Status

Marital status and mental health problems (MDE and GAD)

MDE: p<0.05*
GAD: p<0.05*
Sociodemographic characteristics and mental health problems

Education

Education and mental health problems (K-10)

- No education and primary: 23
- Basic: 12.8
- Secondary: 9.9
- University: 10

K-10: p<0.05*
Sociodemographic characteristics and mental disorders

Education

Education and mental health problems (MDE and GAD)

- No education and primary: 13.4
- Basic: 5.4
- Secondary: 2.2
- University: 2.7

MDE: p<0.05*
GAD: p<0.05*
Sociodemographic characteristics and mental health problems

Professional Status

Professional status and mental health problems (K-10)

- Working: 10.6
- Looking for job: 19.1
- Others: 20.3

K-10: p<0.05*
Sociodemographic characteristics and mental disorders
Professional Status

Professional status and mental health problems (MDE and GAD)

MDE: p<0.05*
GAD: p>0.05
Factors associated with mental health problems during the economic crisis

- Financial Deprivation
- Perceived Social Status
- Social Support
- Community Involvement
- Disability
Factors associated with mental health problems in 2015
Financial deprivation

Financial deprivation and mental health problems (K-10)

- More or enough €: 9.4
- Not enough €: 22

K-10: p<0.05*
Factors associated with mental disorders in 2015
Financial deprivation

Financial deprivation and mental health problems (MDE and GAD)

MDE: p<0.05*
GAD: p<0.05*
Factors associated with mental health problems in 2015
Types of financial deprivation

![Bar chart showing types of financial deprivation and mental health problems (K-10).]

- **Essential goods**
  - Food, water or electricity bills, rent
  - K-10: p<0.05*

- **Debts**
  - House, car or credit card debt
  - K-10: p>0.05

- **Other goods**
  - Clothes or leisure
  - K-10: p>0.05
Factors associated with mental disorders in 2015
Types of financial deprivation

<table>
<thead>
<tr>
<th>Types of financial deprivation and mental health problems (MDE and GAD)</th>
<th>MDE: p&lt;0.05*</th>
<th>GAD: p&lt;0.05*</th>
<th>MDE: p&gt;0.05</th>
<th>GAD: p&gt;0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential goods</td>
<td>9.2</td>
<td>9.3</td>
<td>7.4</td>
<td>9.2</td>
</tr>
<tr>
<td>food, water or electricity bills, rent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>house, car or credit card debt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other goods</td>
<td>7</td>
<td>5.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>clothes or leisure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Factors associated with mental health problems in 201
Perceived Social Position

Median
2008: 5th position
2015: 4th position
Factors associated with mental health problems in 2015
Perceived Social Position

Perceived Social Position and mental health problems (K-10)

- Below median: 21
- Equal or above median: 11.9

K-10: p<0.05*
Factors associated with mental disorders in 2015
Perceived Social Position

Perceived social position and mental health problems (MDE and GAD)

Below median
MDE: 9.1
GAD: 5.1

Equal or above median
MDE: 5.3
GAD: 3.6

MDE: p<0.05*
GAD: p>0.05
Factors associated with mental health problems in 2015
Social Support

Social support and mental health problems (K-10)

Low social support: 17.5
Good social support: 11.5

K-10: p<0.05*
Factors associated with mental disorders in 2015
Social Support

Social support and mental health problems (MDE and GAD)

MDE: p<0.05*
GAD: p>0.05
Factors associated with mental health problems in 2015
Community Involvement

Community Involvement and mental health problems (K-10)

- Low community involvement: 16.1
- Good community involvement: 12.6

K-10: p>0.05
Factors associated with mental disorders in 2015
Community Involvement

Community involvement and mental health problems (MDE and GAD)

Low community involvement
- MDE: 6.2
- GAD: 5.4

Good community involvement
- MDE: 6.4
- GAD: 2.5

MDE: p>0.05
GAD: p<0.05*
Factors associated with mental health problems (K-10) in 2015 Multivariate Analysis

<table>
<thead>
<tr>
<th>Variables considered in the model: age; gender; education; marital status; professional status; financial deprivation; self-rated health; self-rated mental health; self-perceived socioeconomic status; social support; community involvement; financial deprivation score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Men</td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td><strong>Financial deprivation</strong></td>
</tr>
<tr>
<td>Self-rated health</td>
</tr>
<tr>
<td>Self-rated mental health</td>
</tr>
</tbody>
</table>
Factors associated with MDE in 2015
Multivariate Analysis

<table>
<thead>
<tr>
<th>Variables considered in the model: age; gender; education; marital status; professional status; financial deprivation; self-rated health; self-rated mental health; self-perceived socioeconomic status; social support; community involvement; financial deprivation score</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>3.02</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None or Primary</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>0.61</td>
<td>0.18</td>
</tr>
<tr>
<td>Secondary</td>
<td>0.30</td>
<td>0.01</td>
</tr>
<tr>
<td>University</td>
<td>0.43</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>Financial deprivation</strong></td>
<td>2.66</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td><strong>Self-rated mental health</strong></td>
<td>7.56</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>
Factors associated with GAD in 2015
Multivariate Analysis

<table>
<thead>
<tr>
<th>Variables Considered in the Model</th>
<th>OR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married or cohabiting</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Divorced, widow or separated</td>
<td>0.27</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Single</td>
<td>0.7</td>
<td>0.46</td>
</tr>
<tr>
<td>Financial deprivation</td>
<td>2.44</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Self-rated mental health</td>
<td>6.71</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Community involvement</td>
<td>0.44</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Variables considered in the model: age; gender; education; marital status; professional status; financial deprivation; self-rated health; self-rated mental health; self-perceived socioeconomic status; social support; community involvement; financial deprivation score.
Factors associated with mental health problems in 2015
Disability (Sheehan Disability Scale)

Disability and mental health problems (MDE and GAD)

- Work performance: MDE 6.8, GAD 8.1
- Social life: MDE 8.4, GAD 8.1
- Family life: MDE 7.5, GAD 8.6
- Overall disability: MDE 13.3, GAD 16.1

MDE: $p<0.05^*$
GAD: $p<0.05$
All analysis
Factors associated with mental health problems in 2015 Disability (Sheehan Disability Scale)

Days out of role and productivity loss in the previous week

- ≥ 1 day out of role: 28
- ≥ 1 loss of productivity: 13 (MDE), 12.3 (GAD)
- 14.1 (GAD)

MDE: p<0.05*
GAD: p<0.05
All analysis
Services Utilization

• Characterization of services use
• Use of psychotropic medication
• Under-treatment
• Barriers to treatment
Services utilization
Search for help due to mental health problems in the last 5 years

Search for help due to mental health problems

Use of services for mental health problems
Services utilization
Use of provider by type of mental health problem in the last 12 months
## Services utilization
Visits in the last 12 months (mean)

<table>
<thead>
<tr>
<th>Provider</th>
<th>MDE</th>
<th>GAD</th>
<th>K-10&gt;25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrist</td>
<td>4.8</td>
<td>5.4</td>
<td>4.8</td>
</tr>
<tr>
<td>Psychologist</td>
<td>10.9</td>
<td>13.6</td>
<td>9.1</td>
</tr>
<tr>
<td>GP</td>
<td>2.9</td>
<td>3.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>
Services utilization
Use of psychotropic medication by group in 2008 and 2015

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep medication</td>
<td>12.3</td>
<td>16.9</td>
</tr>
<tr>
<td>Antidepressives</td>
<td>8.6</td>
<td>11.0</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>11.5</td>
<td>14.6</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>0.6</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Services utilization
Use of any psychotropic medication in 2008 and 2015

Use of any psychotropic medication in 2008 and 2015
Services utilization
Use of psychotropic medication by gender in 2008 and 2015
Services utilization
Under-treatment of people with major depressive episode (n=94)

Perceived need (n=66) → 63.8%

Received treatment (n=61) → 87.2%

Minimally adequate treatment (n=49) → 75.9%

94 → 45 → 49
Services utilization
Under-treatment of people with generalized anxiety disorder (n=60)

Perceived need (n=43) → Received treatment (n=40) → Minimally adequate treatment (n=33)

- Perceived need: 70.8%
- Received treatment: 78.4%
- Minimally adequate treatment: 83.2%

Total: 60

Relevant institutions and grants logos are present at the bottom of the page.
<table>
<thead>
<tr>
<th>Barriers</th>
<th>Specific barriers</th>
<th>2008</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOW PERCEIVED NEED</strong></td>
<td>The problem went away by itself, and I did not really need help</td>
<td>41.3%</td>
<td>46.9%</td>
</tr>
<tr>
<td><strong>STRUCTURAL BARRIERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial</td>
<td>I could not afford treatment</td>
<td>21.3%</td>
<td>36.5%</td>
</tr>
<tr>
<td></td>
<td>I was concerned about how much money it would cost</td>
<td>20.1%</td>
<td>28.6%</td>
</tr>
<tr>
<td>Service availability</td>
<td>I was unsure about where to go or who to see</td>
<td>12.4%</td>
<td>17.7%</td>
</tr>
<tr>
<td></td>
<td>I could not get an appointment</td>
<td>4.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Transportation</td>
<td>I had problems with things like transportation, childcare, or scheduling that would have made it hard to get to treatment</td>
<td>4.2%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Inconvenient</td>
<td>I thought it would take too much time or be inconvenient</td>
<td>11.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>ATTITUDINAL BARRIERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived ineffectiveness</td>
<td>I didn't think treatment would work</td>
<td>11.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td></td>
<td>I was not satisfied with available services</td>
<td>11.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td></td>
<td>I received treatment before and it did not work</td>
<td>5.9%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Stigma</td>
<td>I was concerned about what others might think if they found out I was in treatment</td>
<td>5.7%</td>
<td>5.4%</td>
</tr>
<tr>
<td></td>
<td>I was scared about being put into a hospital against my will</td>
<td>5.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Denial of help</td>
<td>I wanted to handle the problem on my own</td>
<td>19.0%</td>
<td>27.0%</td>
</tr>
<tr>
<td></td>
<td>I thought the problem would get better by itself</td>
<td>19.8%</td>
<td>22.7%</td>
</tr>
<tr>
<td></td>
<td>The problem didn't bother me very much</td>
<td>5.8%</td>
<td>2.8%</td>
</tr>
</tbody>
</table>
Services utilization
Barriers to treatment in 2008 and 2015

- Low perceived need: 41.3% in 2008, 46.9% in 2015
- Structural barriers: 30.6% in 2008, 43.7% in 2015
- Attitudinal barriers: 30.2% in 2008, 36.5% in 2015
### Services utilization
Factors associated with visits to different providers in the last 12-month

<table>
<thead>
<tr>
<th>Education</th>
<th>Psychiatrist /Psychologist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR</td>
</tr>
<tr>
<td>None or Primary</td>
<td>1</td>
</tr>
<tr>
<td>Basic</td>
<td>0.85</td>
</tr>
<tr>
<td>Secondary</td>
<td>2.77</td>
</tr>
<tr>
<td>University</td>
<td>5.51</td>
</tr>
<tr>
<td>Kessler-10</td>
<td>1.1</td>
</tr>
<tr>
<td>Self-rated mental health</td>
<td>3.06</td>
</tr>
</tbody>
</table>
## Services utilization
Factors associated with visits to different providers in the last 12-month

<table>
<thead>
<tr>
<th>Factors</th>
<th>OR</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>1.96</td>
<td>0.01</td>
</tr>
<tr>
<td>Financial deprivation</td>
<td>0.45</td>
<td>0.03</td>
</tr>
<tr>
<td>Self-rated mental health</td>
<td>6.12</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Financial security</td>
<td>0.46</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>
Conclusions

• There was a significant increase in the prevalence of mental health problems, specially in the group of more severe problems, from 2008 to 2015.
• The risk of having mental distress was particularly higher in women, the elderly, less educated people, individuals with higher perceived financial deprivation, unemployed and retired people, lower social support, and lower community involvement.
• Mental health problems are associated with higher levels of disability and days out of work.
• 27.9% of the individuals sought treatment for mental health problems in the last 5 years
Conclusions (Contin.)

• GPs were the most contacted professionals followed by psychiatrists and psychologists.

• Use of psychotropic drugs was higher in women and increased from 2008 to 2015.

• Low perceived need and structural barriers were the main obstacles for access to care and increased since 2008.

• Despite the financial and staff cuts suffered since 2008, overall, mental health services were able to respond to most of the pressure of the increasing needs of the population.

• Available data, however, revealed significant insufficiencies in terms of accessibility and quality of care.
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