The burden of mental disorders in the European Union

#1

This report is based on the research work developed by the **EU contribution to the World Mental Health Surveys Initiative (EU-WMH)** consortium in a project co-financed by the **EU Commission Executive Agency for Health and Consumers (EAHC 2008-1308)** with the goal of estimating the frequency, distribution and consequences of mental disorders in Europe. To achieve it, the consortium first performed comprehensive **scientific literature reviews**. Subsequently they analyzed in depth data collected in **health surveys** of the adult general adult population (37,289 individuals) of 10 EU-countries (i.e., Belgium, Bulgaria, France, Germany, Italy, the Netherlands, Northern Ireland, Portugal, Romania and Spain). The collection and analysis of these surveys was performed through their active participation in the World Mental Health (WMH) Surveys Initiative, lead by the WHO and Harvard University.

The **EU-WMH** has delivered three major reports:

1. The Burden of Mental Disorders in the European Union;
2. A Gender Perspective on Mental Health;
3. Inequalities in Mental Health and in Unmet Need for Mental Health Care.

The specific aims of **report #1** are to estimate the prevalence of mental disorders in the ten EU-countries, examining whether persons with mental disorders are more likely to experience losses of productivity and earnings in the workplace and whether this variation is associated with specific socio-demographic factors. Here we present a brief summary of the results, which are described in detail in the report on the burden of mental disorders in the European Union.

More information about
the EU-WMH project and the mental health
reports can be found here:
www.eu-wmh.org

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THE EU CONTRIBUTION TO
THE WMH SURVEYS INITIATIVE

Executive
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KEY FINDINGS

- About 32 million people in the 10 participating countries of the European Union have experienced a mental disorder in the past year, of which more than 22 million experienced an anxiety disorder, more than 12 million a mood disorder and almost 3 million an alcohol use disorder.
- Mental disorders are a major burden for society and are associated with significant losses of productive human capital, both in the general and in the working population.
- There are substantial costs associated with mental disorders, such as substantially higher presenteeism and absenteeism or significantly reduced earnings among those with a mental disorder.
- There is a considerable association between the presence of serious mental illness and lower monthly earnings.
- Lowering the impact of common and disabling conditions, such as post-traumatic stress disorder, generalized anxiety, or depression may have major returns in terms of population health, productivity and quality of life.
- The high prevalence and substantial burden of mental disorders shed a light on the importance of prioritizing social and mental health care policies and resource allocation for prevention and treatment strategies.

FINDINGS FROM THE LITERATURE REVIEW

A comprehensive literature search was performed on the scientific literature on burden published between 1990 and 2010. Using a total of 122 scientific publications, we were capable of producing a summary of the scientific state-of-the-art on the burden of mental disorders, consisting of (a) the identification of different aspects of the concept of 'burden of mental disorders' and (b) estimates of direct and indirect costs associated with mental disorders in both the general population and in the workplace.

The burden of mental disorders in the general population

Mental disorders are common: lifetime prevalence in Europe is estimated at one fourth of the general population. Mental health problems cut across age, gender, social strata, and countries.

Mental disorders have a large impact on individuals affected and on society. The burden of mental disorders can be subdivided into four major areas:

Loss of quality of life

Those with mental disorders consistently report lower quality of life on physical, social and emotional domains.

Stigma associated with mental disorders

Mental illness still carries strong social stigma. Stigma may delay seeking care and lead to decline in quality of life, to lower education and to a higher proportion of work loss days.

Unemployment

Unemployment rates are significantly higher among those with mental disorders, particularly among severely ill patients. This occurs through "social underachievement"

(the association between early-onset mental disorders, impairment on educational attainment and a resulting lower adult socio-economic status) and "social decline" (loss of employment and, subsequently, prolonged periods of unemployment following the onset of a mental disorder and difficulties re-entering the labor market after full or partial remission).

Direct and indirect costs, the monetary burdens of mental disorders

The total economic costs of mental disorders may be direct, including expenses of treatment, and indirect, including the effects of mental disorders on work productivity, monthly income, educational attainment or occupational choices. *The US National Advisory Mental Health Council* estimated the 1990 total cost for any mental disorder at $148 billion, two thirds being indirect and one third direct, depression and anxiety disorders accounting each for about 30% of the total cost. Studies suggest that alcohol abuse may be the single most burdensome health problem in the United States, with reported monetary costs at least twice as high as costs for either depression or anxiety.

The burden of mental disorders in the workplace

The impact of mental disorders can be measured by assessing its effects on full disability, on partial disability, and on monthly income. Full disability (absenteeism) is the number of days, per month or per year, that individuals were absent from work and unable to perform usual activities. Partial disability (presenteeism) is the number of days in which individuals worked in spite of ill health and in which they had either to cut down on what they did ("quantity cut-down days"), to cut back on quality of what they did ("quality cut-back days"), or had extreme effort to perform as usual ("extreme effort days").

Depressive disorders

In a review, major depression was the second most common disorder in the workplace, with prevalence estimates between 4% and 7%, twice as prevalent among women and more prevalent among middle-aged workers (40 to 45 years).

Depression is a major cause of lost work days worldwide. Studies found that the average productivity loss of employees with depression was between 5% and 20%, compared to 2 to 4% for non-depressed employees. Persons with depression are more likely to be unemployed and, when working, to earn up to 25% less than their healthy counterparts. Early-onset depression (under the age of 21) has been significantly associated with lower expected future earnings.

Anxiety disorders

The *ESEMeD* project found that any 12-month anxiety disorder had a mean of 7.2 days with significant work loss per month, compared to 2.1 work loss days in respondents without disorder. Specific phobia was the most common disorder in the workforce, with estimates around 3 to 5%.

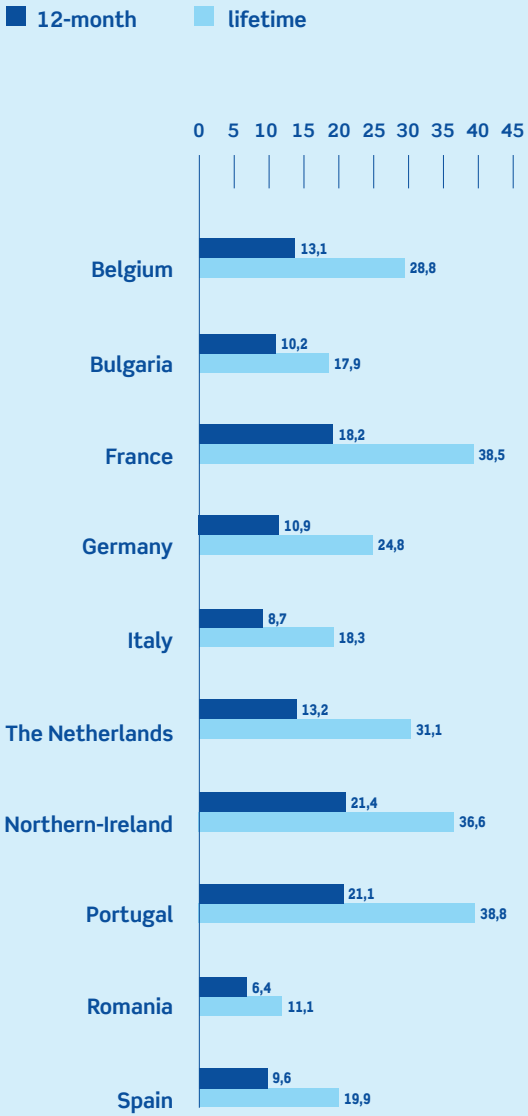
Anxiety disorders are associated with a reduction of about a third of monthly earnings, both at the bottom and higher position in the earnings distribution for women and only at the bottom of the earnings distribution for men.

Alcohol disorders

Relatively few data exist on prevalence of alcohol disorders among workers, with estimates between 2 and 29%.

Alcohol disorders may have a negative impact on earnings through decreasing work productivity, but also by increasing error rates and conflicts on the work floor, changing motivation and delaying the time of graduation. Surprisingly, quite a few studies report a positive association between the use of alcohol and earnings, mainly immediately after the onset of the use of alcohol.

MENTAL DISORDERS IN THE EUROPEAN UNION, PER COUNTRY



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THE EU-WMH SURVEYS

The data were based on a set of cross-sectional face-to-face general population household interviews conducted in the ten European countries of the WHO World Mental Health Surveys (N=37,289). Mental disorders (following criteria of the DSM-IV) were assessed, as well as information on their impact on absenteeism, presenteeism, and monthly income. We ran statistical models that enabled us to produce estimates of burden of mental disorders at both the individual and the societal level

The prevalence of mental disorders in the 10 EU-WMH countries

Mental disorders are quite common in the 10 European Union countries studied. **The lifetime prevalence of any mental disorder was 25.6%.** Major depression and specific phobia were the most common disorders, with estimated lifetime prevalence rates of 12.4% and 7.4%, respectively, followed by alcohol abuse (4.4%) and post-traumatic stress disorder (3.4%). **The 12-month prevalence of any mental disorder was 13.2%.** Major depression and specific phobia were the most common 12-month mental disorders, with estimates of prevalence of 4.6 and 5.5%, respectively. The next most common disorders were post-traumatic stress disorder and social phobia (both 1.7%). Only 1.1% of the respondents reported a 12-month history of alcohol abuse disorder.

However, meeting criteria for a mental disorder does not necessarily imply that the disorder meets criteria for severity. **The estimated 12-month prevalence of any serious mental disorder was 3.3%**, implying that about 25% of those respondents with a mental disorder could be classified as serious.

Projected lifetime risk of mental disorders at age 75 was 34.9% for any mental disorder, meaning that more than one third of the respondents will eventually have met the criteria for a mental disorder at the age of 75.

There are considerable inter-country differences in both 12-month and lifetime estimates of mental disorders. **Regarding 12-month estimates, Northern Ireland, and Portugal have the highest rates of mental disorders** (more than 20% of the general population), followed by France. The Netherlands, Belgium and Germany have prevalence rates ranging from 10 to 15% and Bulgaria, Spain, Italy and Romania have rates from 5 to 10%.

Regarding the prevalence estimates of lifetime mental disorders, Portugal, France, Northern Ireland, and the Netherlands have lifetime rates higher than 30%. Italy, Bulgaria and Romania have the lowest rates of lifetime disorders.

The burden of mental disorders in the 10 EU-WMH countries

Absenteeism in the general population

The proportion of respondents reporting any day with absenteeism in the previous month was estimated at 10.5% of the general population, highest among the oldest age groups (above 50) and not dependent upon gender.

The median number of absenteeism days is 1.2 per month (or about 14 days per year). Lowest rates were found in Bulgaria and France (0.9 days per month or 11 days per year) and highest rates were found in the Netherlands (1.8 days per month or 22 days per year) and Northern Ireland (2.4 days per month or 29 days per year).

Respondents with any mental disorder reported about 3.1 absenteeism days per month, compared to 1 day per month among those without a disorder. Within the mental disorders, highest mean days of absenteeism were reported by respondents with panic and post-traumatic stress disorders (5.5 and 5.7 days per month, respectively, or 66 and 68 days per year) and lowest by respondents with alcohol abuse disorder (2.1 absenteeism days per month). Mood disorders generate the highest number of absenteeism days in 7 out of the 10 countries and anxiety disorders are more associated with absenteeism days in the other three countries (the Netherlands, Northern Ireland and France).

Absenteeism among working respondents

The proportion of workers reporting any absenteeism in the previous month was estimated at 8.8% of the working population, highest among the oldest cohort (above 64) and not dependent upon gender.

The mean overall estimate of absenteeism days per month was 0.8 (or almost 10 days per year), varying from 0.3 days per month (or about 4 days per year) in Bulgaria to up to 1.6 days per month (or 19 days per year) in Northern Ireland.

Employed respondents with any mental disorder reported a higher number of absenteeism days compared to those without (2.0 versus 0.7). Post-traumatic stress disorder (3.5 days per month or 42 days per year) and panic disorder (2.8 days per month or 34 days per year) were the two disorders that yielded the highest absenteeism among workers. In 6 out of the 10 countries, mood disorders generate the highest number of absenteeism days. In France, the Netherlands and Northern Ireland, anxiety disorders were associated with the highest number of absenteeism days and in Bulgaria alcohol disorders generate the highest absenteeism.

Presenteeism in the general population

19.3% of the total sample reported any presenteeism days in the previous month (mostly cut-down quantity days), higher among women and in the oldest age groups.

The mean number of presenteeism days per month was 1.7, with a range between 1.0 (quality cut-back days) and 2.1 (quantity cut-down days). Respondents from France and Bulgaria reported the highest number of quantity cut-down days (3.9 and 3.5, respectively) and respondents from Northern Ireland reported the highest number of quality cut-back and extreme effort days (1.4 and 1.5 per month).

Respondents with any mental disorder reported 2.4 (extreme effort) and 3.4 (quantity cut-down) days per month, compared to 0.5 and 1.9 among those without mental disorder. Two disorders systematically yielded the highest number of presenteeism days per month: dysthymia and post-traumatic stress disorder.

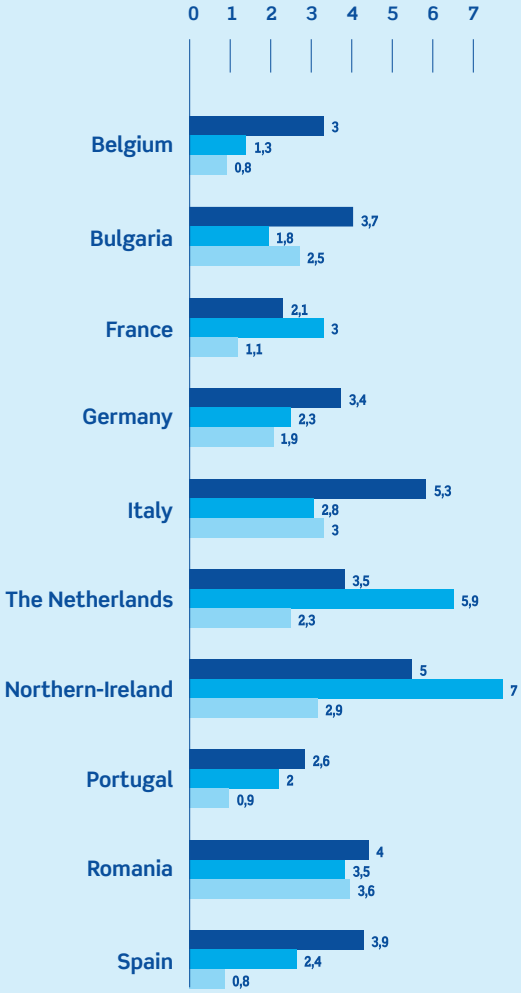
Work presenteeism

17.8% of the total employed sample reported any presenteeism days in the previous month, with slightly more extreme effort days among women and not dependent upon age.

The mean number of presenteeism days per month among employed respondents was 2.3, with a range between 0.6 (quality cut-back and extreme effort days) and 1.7 (quantity cut-down days). Respondents from France (3.2 days per month or 38 days per year), Belgium and the Netherlands (both 2.8 days per month or about 34 days per year) declared the highest number of quantity cut-down days and

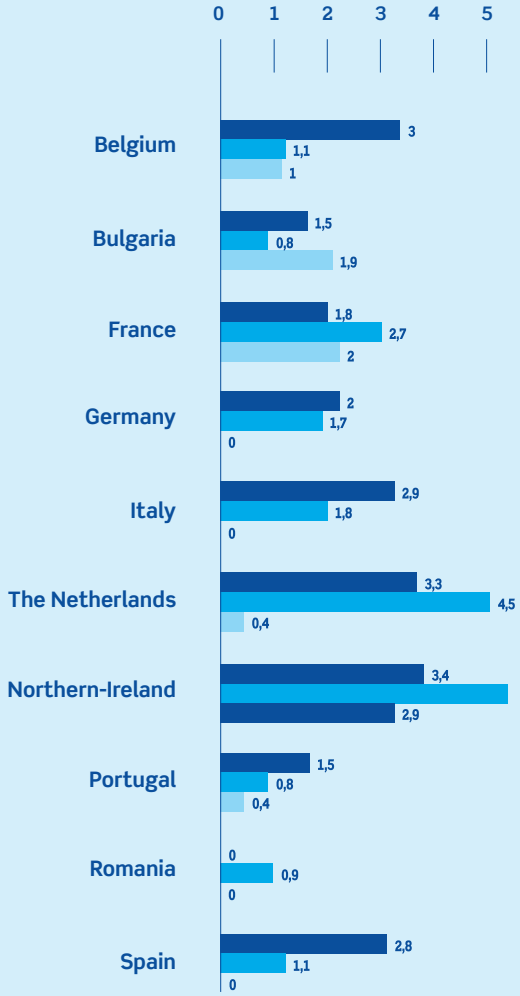
MEAN NUMBER OF ABSENTEEISM DAYS PER MONTH REPORTED BY RESPONDENTS IN THE EU-WMH PROJECT,

PER MENTAL DISORDER GROUP AND COUNTRY



MEAN NUMBER OF ABSENTEEISM DAYS PER MONTH REPORTED BY WORKING RESPONDENTS IN THE EU-WMH PROJECT,

PER MENTAL DISORDER GROUP AND COUNTRY



any mood disorder any anxiety disorder any alcohol disorder

respondents from the Netherlands and Northern Ireland reported the highest mean number of quality cut-back and extreme effort days.

Mood and anxiety disorders were associated with more reported presenteeism days. Dysthymia yielded the highest number of quantity cut-down days (4.0 days per month); major depression and post-traumatic stress disorder yielded the highest number of quality cut-back days (both 2.4 days per month).

Monthly earnings

59.2% of the respondents reported to have monthly earnings, with a range between 47.3% (in Romania) and 69.5% (in France). Males and respondents between 35 and 49 years old were more likely to report monthly earnings. Among respondents who declared monthly earnings, the largest proportion of male respondents reported earnings in the high-average range, whereas the largest proportion of female respondents declared earnings in the low-average range of monthly income.

Having a mental disorder did not have any impact on the proportion of respondents that declared earnings (60.4 of those with a mental disorder versus 59.5% of those with no mental disorder). Respondents without mental disorders were most likely to declare earnings in the high-average income category. Respondents with mood or anxiety disorders were more likely to be in the low-average income quartile. **Serious mental illness was associated with a reduction in earnings equal to 29% of the median within-country earnings in the ten EU-WMH countries.**

PROPORTION OF THE RESPONDENTS WITH MONTHLY EARNINGS IN THE EU-WMH PROJECT