Social inequalities in mental health and in unmet need for mental health care in Europe

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.

Report #3 provides data on the association of social inequalities with mental health disorders and with unmet needs for mental health care. Our goal was to identify the social groups who more frequently suffer from common mental disorders and from unmet needs for mental health care. Here we present a brief summary of the results, which are described in detail in the report on mental health inequalities.

More information about the EU-WMH project and the mental health reports can be found here: www.eu-wmh.org
Social inequalities in mental health is the generic term used to designate systematic, avoidable and unfair differences and disparities in the mental health state of individuals and groups. For instance, differences in mental health that can be attributed to disparities in individual income, employment, occupation, or education would be considered social inequalities. Differential socio-demographic characteristics are recognized as important determinants of mental health, with impact both on the initiation and course of psychopathology and in the access and effectiveness of health care.

Social inequalities in unmet need for mental health care refers to the differential access to needed health services related to socio-demographic characteristics of the individuals or groups. Interpretation of such differences is complicated, since definitions of services, use of services, access to care, and unmet need are extremely variable. While some studies consider medical appointments, others refer to drug prescriptions or hospital admissions. In this report we focus on visits to psychiatrists, other mental health providers or general practitioners due to mental health status.

FINDINGS FROM THE REVIEW OF THE SCIENTIFIC LITERATURE

We reviewed scientific publications published in English or Spanish indexed in PubMed with no date limit. The main topics reviewed were social inequalities in mental health and in unmet need for mental health care.

As a result of this narrative review, we identified major factors that are associated with inequalities in mental health and in the degree that mental health needs are met. These factors include: Income, Employment/Occupation, Education, Region/Country, Migration, Age, and Gender.

Income

Income has proved to be an important determinant of individuals’ mental health. Several studies highlight that low-income levels are associated to a higher frequency of mental disorders (psychosis, depression, anxiety).

Previous research regarding unmet need for mental health care and income has shown contradictory results. In some countries lower levels of income are associated to more unmet needs for mental health care (e.g. Brazil, Denmark, USA), while in others no association has been found (e.g., Australia, Chile, USA).

Employment and Occupation

Several studies suggest that unemployment, underemployment or economical inactivity have negative effects on individuals’ mental health. The prevalence of mental disorders is higher among those unemployed or underemployed. Among occupational categories, the least advantaged ones (office and manual workers) are associated with higher frequencies of mental disorders.
Literature about unmet need for mental health care and employment status is controversial. While there is evidence suggesting that those who are employed use health services more frequently, there is evidence suggesting that the unemployed are the ones who make less use of health services.

**Education**

Lower education or less years of education are associated with higher prevalence rates of mental disorders. For example, fewer years of schooling have been associated to higher frequency of any psychosis, more depression, more social phobia and higher risk for alcohol dependence.

Having more years of education seems to be associated with lower unmet needs for mental health care. Individuals with higher levels of education seem to seek health services more often and to seek more specialized care instead of primary care. For example, in the Netherlands, a longitudinal one-year follow-up study showed that people with more education were less likely to use primary care for their mental health problems, but more likely to use mental health care.

**Region and country**

Literature about inequalities related to region of residence (rural versus urban) is scarce and diverse. Some studies compared northern and southern regions, while others compared rural settings with urban settings. In general, it seems that the distribution of mental disorders varies across regions and settings, with individuals in urban settings being more commonly affected by mental disorders.
Migration
According to our literature review, research published on this topic is scarce and available data come mainly from the USA, which has a very different migration profile from the European one. Therefore, we cannot derive conclusions regarding inequalities in mental health. More research is needed.

We found a study from Switzerland analyzing the relationship between social inequalities and unmet needs for mental health care. This study showed that immigrants had fewer psychiatric hospitalizations compared to natives, but more emergency and compulsory admissions. During inpatient treatment, immigrants received less psychotherapy, they spent shorter periods as inpatients and their rate of readmission was lower.

Age
The literature reviewed indicated that older age seems to be related to an augmented prevalence of common mental disorders. Also, it has been suggested that depression is more severe and more likely to require hospital admission for those aged over 65. Nevertheless, the literature regarding inequalities in mental health related to age is scarce and more investigation is needed in this topic to make robust conclusions.

Young adults were more likely to be treated for mental health claims, and among those with mental disorders, older age was associated with more use of pharmacotherapy and less use of psychologists and other health professionals.

FINDINGS FROM THE EU-WMH SURVEYS
Social inequalities in mental health and in unmet need for mental health care were addressed considering data from 10 European countries participating in the World Mental Health Surveys Initiative. In brief, the WMH Surveys Initiative aimed to assess the prevalence of common mental disorders, their correlates and their relationship with services use. Respondents underwent a face-to-face, computer-assisted personal interview, conducted by trained interviewers. A total of 37,289 adult individuals of the general population of 10 EU-countries (Belgium, Bulgaria, France, Germany, Italy, the Netherlands, Northern Ireland, Portugal, Romania and Spain) were evaluated.

Income
We did not find an association between income and the presence of mental disorders. Despite some coincidences, our results contradict the enormous amount of literature pointing out that income is related to inequalities in mental health. At this point it is important to remember that the income measure we used corresponded to the per capita income (calculated dividing household income by the number of individuals of the household). This measure did not take into account income distribution in the community. That is, it did not consider individuals income relative to others in his or her group. It is well known that societies with greater income inequalities produce worse mental health among their citizens. Therefore, perhaps the reason why we did not find an association between income and mental disorders is because we did not consider income inequalities within societies or among countries. Future work should take this into account.

Consistently with previous studies, we found that in Europe income was not related to unmet needs for mental health care.
Employment and Occupation

We found that being unemployed or disabled was a risk factor for presenting 12-month mental disorders (mood disorders: OR=2.40; 95% CI 1.98-2.9; anxiety disorders: OR=1.89; 95% CI 1.55-2.29; alcohol-related disorders: OR=1.71; 95% CI 1.14-2.56). Similarly, studies from France, Brazil and the UK supported the hypothesis that the prevalence of mental disorders is higher among unemployed, underemployed or those economically inactive. We also found that unemployed or disabled participants were at higher risk for anxiety and mood disorders. This is consistent with previous data supporting the hypothesis that unemployment impairs mental health, augmenting the risk for anxiety and depression. Additionally, we found that unemployment augments the risk for alcohol-related disorders.

We did not find an association between employment and unmet need for mental health care. We found that, among those with alcohol-related disorders, those with elementary occupations were at higher risk for presenting unmet needs for mental health care than those with high prestige occupations (OR=5.20; 95% CI 2.18-12.42). Considering our data and previous studies with contradicting findings, we believe that more research is needed in the field of employment/occupation and unmet need for mental health care.

Education

We found an association between no education or incomplete primary studies and the presence of mood disorders (OR=1.37; 95% CI 1.07-1.75). However, we failed to find an association between lower levels of education and anxiety, alcohol-related disorders and any 12-month mental disorder. The reason for this contradiction could reside in the methodology used in the surveys to assess mental disorders. The evaluation of mental disorders using structured interviews such as the CIDI 3.0 could have led to higher detection of mental disorders among individuals with higher educational levels – it is well known that structured interviews and questionnaires are affected by educational level. Thus, many individuals with lower educational level would have been undetected despite having an anxiety or an alcohol-related disorder. This could have affected the prevalence of mental disorders in the less educated groups and therefore the detection of inequalities related to education.

We did not find any association between education and unmet needs for mental health care. However, the different studies that we reviewed considered different categories of education. While some studies divided education into year intervals with wider and narrower intervals, others considered education degrees or periods such as college, high school, primary, secondary, etc. Moreover, education degrees or periods vary greatly across countries and it is often hard to really understand what each degree implies. Therefore, conclusions regarding unmet need for mental health care and education should be taken with caution, and possible associations or failed associations may derive from the categories considered (i.e. in the same study associations considering wider categories could be null and could be positive with narrower ones).

Region and country

We found that those living in small areas (less than 10,000 inhabitants) showed lower risk for presenting mood disorders (OR=0.72; 95% CI 0.59-0.89). In the same way, the odds of having a depressive episode were raised in urban settings (>100,000 inhabitants) compared with rural or semi-rural ones (less than 10,000 or between 10,000 and 99,000 inhabitants). However, while it has been suggested an association between living in urban areas and mental disorders or between generalized anxiety disorder or phobia and urban settings, we found no association between region and anxiety, alcohol-related and any 12-month mental disorders.

We found differences in the risk for presenting mental
disorders across the participating countries. Those from Northern Ireland showed an increased risk for presenting mood, anxiety, alcohol-related and any 12-month mental disorder. Those from Portugal showed an increased risk for presenting mood, anxiety and any 12-month mental disorder. Additionally, those from Belgium were at higher risk for presenting alcohol-related disorders.

We found an association between urbanicity (living in areas with less than 10,000: OR=2.47; 95% CI 1.52-4.02 or between 10,000 and 99,999 inhabitants: OR=2.19; 95% CI 1.43-3.35) and unmet needs for mental health care among those with alcohol-related disorders.

When considering countries, we found that Bulgaria was the country with the most unmet needs for mental health care. This country showed increased risks for the non-use of health services for individuals with mood, anxiety, alcohol-related and any 12-month mental disorder. Participants from Romania with mood and any 12-month mental disorder were also at higher risk for presenting unmet needs for mental health treatment. Additionally, participants from Germany with anxiety disorders and from Spain with alcohol-related disorders showed higher risk for presenting unmet needs for health care.

**Migration**

Unfortunately we did not have data regarding the prevalence of mental disorders or unmet need for mental health care and migration. Considering that the literature review revealed a lack of information about this topic in Europe, research is urgently needed.

**Age**

We found an association between older age (65+) and a decreased risk for presenting mood (OR=0.70; 95% CI 0.53-0.92), anxiety (OR=0.61; 95% CI 0.45-0.82), alcohol-related (OR=0.09; 95% CI 0.04-0.24) and any 12-month mental disorder (OR=0.62; 95% CI 0.49-0.80). Also, those aged 35-49 (OR=0.67; 95% CI 0.47-0.95) and 50-64 (0.50; 95% CI 0.33-0.77) were at lower risk for presenting alcohol-related disorders. This contradicts previous findings suggesting that older age is related to an augmented prevalence of common mental disorders. We believe that the literature regarding inequalities in mental health related to age is scarce, so more investigation is needed in this topic to make robust conclusions.

We did not find any association between age and the non-use of mental health services. While several of the studies reviewed compared old aged groups (e.g. 65-74 vs. 75+) or considered older individuals (75+), our data considered individuals from 18 to 65 years old, leaving out individuals over 65 years old. Additionally, our metric was visits to mental health professionals or general practitioners. We did not consider measures of treatment prescription, drug use or treatment quality. Thus, the variety of metrics and populations considered across studies could have an impact on the conclusions.