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EDITORIAL

Burden of Mental Disorders based on the World Mental Health Surveys

Coined in a landmark study,¹ the concept of Global Burden of Disease (GBD) has greatly contributed to visualize the importance of mental disorders in the community. The number of Disability Adjusted Life Years (DALYs) lost because of specific health conditions, e.g., the combination of premature mortality and disability attributable to the condition, identified unipolar major depression as the fourth cause of such global burden worldwide (3.7%) in 1990. Updated projections for the year 2030 estimated that unipolar major depression will be the leading cause of the total disability worldwide. Other mental and behavioral disorders, such as alcohol disorders, will be burdensome across the globe.

Initiated a decade later, the WHO World Mental Health (WMH) surveys are the largest on-going cross-national series of community epidemiological surveys of mental disorders ever carried out, with over 150,000 respondents surveyed across 28 different countries. WMH represents an important contribution for the knowledge on global burden of mental disorders. It estimates the prevalence of mental disorders using the most updated instrument for its measurement in community surveys; the Composite International Diagnostic Interview (CIDI). It evaluates the disability associated with mental (and non-mental) disorders in general population samples worldwide.

Results show that mental disorders are quite common in all the studied countries. The lifetime prevalence estimates of any DSM-IV/CIDI disorder ranges (interquartile range across countries) from 18.1%-36.1%. A lifetime mental disorder was found among more than one-third of respondents in five countries (Colombia, France, New Zealand, Ukraine, United States), more than one-fourth in six countries (Belgium, Germany, Lebanon, Mexico, Netherlands, South Africa), and more than one-sixth in other four (Israel, Italy, Japan, Spain). The remaining two countries, China (13.2%) and Nigeria (12.0%), had considerably lower prevalence estimates that are likely to be downwardly biased.² Major Depressive Disorder is especially prevalent and disabling worldwide.³ An important finding of the WMH surveys is the higher projected risk of mental disorders in younger cohorts. Assessing whether

this is an accurate estimate is crucial to inform about the burden of mental disorders in the years to come.

Burden of mental disorders

To address the burden of mental disorders, the WMH surveys have focused on several dimensions: life course impact, productivity and role functioning, and overall health status. Analyses have taken into account the age of onset of the mental disorders and compared higher, middle and lower economic countries. The impact is estimated both at the individual level (average impact on a person with a disorder), and at the population level (community impact after averaging all persons with the disorders and all others without). All these analysis have been recently compiled in a forthcoming volume.⁴

Early impulse control and substance use disorders are associated with lower chances of completing regular education, while mood and some anxiety disorders like have an effect in secondary schooling (e.g., before university). Age of first marriage is also affected by premarital mental disorders, mood, and anxiety disorders being associated with marriage at later ages and with younger age at first divorce. Specific phobia, major depression and alcohol abuse are associated with the largest population attributable risk proportions for both later marriage and earlier divorce. A specific WMH sub-study allowed addressing marital physical violence, which was reported by one or both spouses in 20% of the couples in our surveys. Husbands' externalizing disorders increases by 70% the chances of marital violence. The population attributable risk for marital violence related to premarital mental disorders was estimated in 17.2%, e.g., one of every six couples. The estimate on couples who experience marital violence could be avoided if we eliminated mental disorders before marriage.

Individuals with a Serious Mental Illness (SMI), as defined by either meeting criteria for bipolar I disorder or by having any other 12-month diagnosis with evidence of serious role impairment, earned an average one-third less than median

earnings. These losses are equivalent to 0.3 -0.8% of total national earnings. Both increased probabilities of having no earnings and having reduced earnings (among those with earnings) are important components of these losses. In addition, respondents with mental disorders with age of completing education reduced spouse earnings, as well as presented greater disability, lower probability of employment, marriage, and having a spouse employed.

WMH respondents attributed higher disability to mental disorders than to the commonly occurring physical disorders included in the surveys. This pattern holds for all disorders and also for treated disorders. Disaggregation shows that the higher disability of mental than physical disorders is limited to disability in social and personal role functioning, whereas disability in productive role functioning is generally comparable for mental and physical disorders. Disability measured by the WHODAS-II, an instrument with 8 dimensions, is higher among respondents with mental disorders as compared to physical disorders. All individual dimensions of the WHODAS-II, as well as respondents with mental disorders, had significantly higher scores than those physically healthy. The 19 conditions assessed in the WMH surveys (10 physical, 9 mental) would be responsible for 71.5% of the population attributable risk proportion (PARP) of all disability (mental disorders, for 24.7%).

Finally, major depressive episode, only after neurological conditions and insomnia, is the most impacting condition on perceived health, although adjustment for comorbidity reduced condition specific estimates with substantial between-condition variation. This suggests that part of the burden of some mental disorders, and depression in particular, is due to their likelihood to coexist with other disorders (both mental and physical).

Research challenges

The WMH surveys underscore considerable international differences in the prevalence of common mental disorders worldwide.⁵ By using strictly comparable methods and having considerable attention to cultural issues, WMH surveys suggest that variation in prevalence of mental disorders is much more closely associated to contextual variables in the participating countries (such as education level or inequalities) than to methodological issues (such as survey methods or response rates). It should be disentangled whether international variation in prevalence of mental disorders is due to cultural and other factors that question the equivalence and/or relevance of current definitions of mental disorders. Nevertheless, more worrisome are the differences found in the access to health services among those with mental disorders. Lower income countries are in clear disadvantage.⁶ In sharp contrast to the abovementioned variation, the association of mental disorders with life course disadvantages, disability and low perceived health are remarkably similar across countries with different economic development level (higher, middle or lower, according to the World Bank classification).

The WMH Consortium has stimulated the active interaction of a large community of researchers worldwide. Some research projects have been developed as a fruit of this

interaction. Studies focusing on adolescents have been carried out in some countries. In other sites, DNA samples have been collected at the time of the interview and will be subsequently analyzed to try to contribute to the study of genome variation and mental disorders, as well as the gene by environment interaction. Methodological studies for refining instruments that can be used in different settings are being planned, such as the general population and the health services. No doubt the WMH surveys will contribute to the improvement of our knowledge of the burden of mental disorders worldwide. But there are still many research challenges that need to be addressed to size this important problem.

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Disclosures

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* Modest

** Significant

*** Significant: Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author.

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