GLOBAL PERSPECTIVES ON MENTAL–PHYSICAL COMORBIDITY IN THE WHO WORLD MENTAL HEALTH SURVEYS

The World Mental Health Surveys were established by the World Health Organization in 2000 to provide valuable information for physicians and health policy planners. These surveys have shed light on the prevalence, correlates, burden, and treatment of mental disorders in countries throughout the world. This volume focuses on the epidemiology of coexisting physical and mental illness around the world. This book includes surveys from 17 discrete countries on 6 continents, covering epidemiology, risk factors, consequences, and implications for research, clinical work, and policy. Many physical and mental illnesses share a relationship with one another and often occur simultaneously. Clinicians from the disciplines of both psychiatry and medicine are increasingly faced with both challenges on a daily basis, making this an ideal book for a wide range of health professionals. This is the first book devoted to this topic on such a wide-ranging scale.

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Foreword

This important book offers the reader a feast of new findings about common mental disorders and their relationship to physical ill health. For the first time, data on physical ill health, mental disorders, and associated disability have been carefully collected in a probability sample of the normal population drawn from 6 continents and 17 different countries. Inevitably, assessments of physical disorders had to be by self-report, as it was not possible to conduct standardized clinical examinations or to obtain medical records data from large samples in diverse countries.

The emphasis of the book is not on cross-national differences, but interesting findings are reported in comparisons between 10 developed and 7 developing countries. The message here is that the similarities are far more impressive than the differences. However, the age-standardized prevalence of chronic physical disease is somewhat higher (26.6% vs. 21.8%) in the developed countries, which might be related to greater survival in the developed countries. The other difference is in rates for asthma and chronic obstructive pulmonary disease, where rates are higher in developed countries, and heart disease, where the reverse is true.

The authors confirm that rates for either anxiety or depression (“anxious depression”) are increased in all self-reported chronic physical diseases consistently across countries, as well as among persons with medically unexplained physical symptoms. But it should be emphasized that only a minority of those with chronic physical disorders were found to meet diagnostic criteria for a depressive or anxiety disorder. However, those with both anxiety and depression were more likely to have physical disorders than those with either depression or anxiety on their own. This may, of course, just reflect the greater severity of those with symptoms of both types.

The relationship of anxiety and depression in the general population is a close one. Jacob et al. (1998) analyzed data from confirmatory factor analysis of psychiatric research interviews given to subjects in four different countries and reported that a single-factor solution provided only a marginally less good solution than one with two highly correlated factors of anxiety and depression. Krueger et al. (2003) reported similar findings in general health care settings in 14 different countries. Here, a two-factor model with emotional and externalizing disorders provided the best fit for the data, a three-factor model with depression and anxiety on one “anxious misery” factor, and neurasthenia, somatization, and hypochondriasis loading on a “somatization factor” provided a reasonably good fit as well, although correlations between the various factors were substantial – around +0.70. Odds ratios for comorbidity between major depression and generalized anxiety disorder were 6.9, 8.2, and 6.4, respectively, in the Dunedin study (Moffitt et al. 2006), the U.S. National Comorbidity Survey, and the U.S. NCS – Replication Survey. As the duration requirement for symptoms of generalized anxiety is reduced, rates for this disorder rise and so do levels of comorbidity (Kessler et al. 2005, 2006). The case can...
therefore be made for conceptualizing a group of disorders – called variously internalizing or emotional disorders that include anxiety, depression, and somatized forms of emotional distress.

The high comorbidity between them is because the genetic causes are largely the same (Kendler et al. 1992), and early environmental disadvantages are also extremely similar (Goldberg 2008, in press). It therefore seems economical to refer to “anxious depression” rather than to assume that there is “comorbidity” between two essentially different disorders.

The features of physical disorders that are associated with either depression or anxiety are shown to include social role disability, pain, and stigma. The investigators make an important distinction between anxious depression without physical illness and anxious depression accompanying physical illness. The former is shown to decrease monotonically with increasing age, while the latter peaks in the middle years and declines thereafter. One wonders whether this last finding might be related to changes in circulating sex hormones. In contrast, physical disorders without anxious depression increase steadily with increasing age, as we would expect them to do.

Why should general physicians heed the information contained in this volume? Partly because depression is a risk factor in non-compliance with medical treatment; it has been found that depressed patients were three times as likely to be noncompliant with treatment recommendations as nondepressed patients (Di Matteo, Lepper, & Croghan 2000). Depression also predicts more reported symptoms of diabetes than either glycemic control or complications of diabetes (Ludman et al. 2004), and treatment of depression in cases of multiple sclerosis reduces both fatigue and functional outcomes (Mohr, Hart, & Vella 2007). Treatment for depression may also reduce physical symptoms in those with only diffuse, ill-defined symptoms (Kroenke 2007). Other studies reviewed, however, have failed to find positive effects on physical health status of treating depression in the physically ill, although reductions in psychological symptoms and disability have been consistently observed.

The investigators also consider why some individuals develop comorbidity, while others do not. It is possible that they share common etiology rather than one directly causing the other (Anda et al. 2006). For example, a common genetic vulnerability may underlie both depression and heart disease. Poor fetal growth resulting in low birth weight and maternal smoking are also mentioned as possible shared causes, in addition to adversities in early life that may predispose individuals to both physical and psychological disorder (Arnow 2004). Hypothalamic–pituitary–adrenal axis (HPA) dysfunction is also implicated in the etiology of both groups of disorders, and overlaps with immune axis dysfunctions (Chrousos & Kino 2007). Stress may decrease the responsivity of the HPA axis and thus lead to increased proinflammatory cytokines (Wright 2005), or HPA axis activation may trigger a counterregulatory response in white blood cells, making them more resistant to cortisol (Miller, Cohen, & Ritchey 2002).

The authors go on to argue that cumulative effects of adverse early life experience and later experience of stressful life events and adverse social conditions may account for these “comorbid” outcomes, but these arguments are not based on data presented in the present volume. In the chapters on diabetes, heart disease, arthritis, and asthma, however, they report that increasing numbers of adverse early life events do indeed increase the risk of developing these disorders, just as they are known to increase the risk of anxious depression. It is argued that these associations may be independent of one another, and may be acting on different individuals.
The investigators also present interesting findings on chronic pain. This is shown to be a major problem across the world, with the majority of cases occurring in persons who do not have co-occurring anxious depression. Female rates are higher than male rates, and prevalence increases with age. Among those with both disorders, females were more likely to have associated anxious depression than males. In the case of both frequent and severe headache and adult-onset spinal pain, hazard ratios for childhood sexual or physical abuse, parental mental disorder, and family violence are all raised, while ratios for economic adversity, parental death, or divorce are not.

As might be expected, a huge cross-sectional population survey carried out in many different countries leaves many loose ends. While females generally have higher rates than males for anxious depression, in both Nigeria and Beijing they did not. Since the WHO study (Ustun & Sartorius 1995) also showed an absence of a gender inequality in Nigeria, it would seem important to investigate the reason for this finding, although the most striking finding is that prevalence rates are very low in each gender.

These are some of the findings that interested me as I looked through the book, but others will find different things that appeal to them. The book is likely to provide a standard reference for some years to come and an invaluable resource to dip into.

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REFERENCES


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