

Cross-National Epidemiology of Mood Disorders: An Update

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ABSTRACT

Mood disorders are among the most common mental disorders around the world, and account for a large amount of disability. The Global Burden of Disease Study estimated that unipolar and bipolar depression are the first and sixth leading causes of disability, accounting for nearly 15% of the total years lived with disability worldwide (Murray & Lopez, 1996). Large-scale epidemiologic studies of psychiatric disorders in the community are only two decades old, and systematic assessment methods allow cross-national comparisons. This presentation will review available epidemiological data from the past two decades on major depression and bipolar disorder in adults from around the world.

Epidemiologic data for this presentation come from various sources. The first is a group of studies conducted in the 1980's coordinated by the Cross-National Collaborative Group (Weissman et al., 1996) in 10 countries: Canada, the U.S., Puerto Rico, France, Italy, West Germany, Lebanon, Taiwan, Korea, and New Zealand. The study in the U.S. was the Epidemiological Catchment Area Study (ECA; Regier et al., 1993). In all 10 countries, psychiatric disorders were assessed with the Diagnostic Interview Schedule for DSM-III (*DIS*). Countries had variable sample sizes (range: 481 to 18,571) and respectable response rates (range: 63% to 100%). The second source of data is a group of studies conducted in the 1990's by the International Consortium of Psychiatric Epidemiology (ICPE; Andrade et al., 2002). The countries studied included Canada, the U.S., Brazil, Chile, the Czech Republic, Germany, Japan, Mexico, the Netherlands, and Turkey. The U.S. study was the National Comorbidity Survey (NCS; Kessler et al., 1994). Different versions of the Composite International Diagnostic Interview (*CIDI*) were used in all 10 countries. Sample sizes were respectable (range: 1,029 to 7,076), as

were response rates (range: 57% to 90%). Other data sources include various studies conducted in the 1980's and 1990's in Brazil, Hong Kong, Hungary, Iceland, the Netherlands, and Norway. These studies provided lifetime rates of bipolar disorder using a variety of diagnostic measures which were not necessarily comparable across studies.

Lifetime rates of major depression in the Cross-National Study (Weissman et al., 1996) showed great variability (1.5% in Taiwan to 19.0% in Beirut), with Asian countries showing the lowest rates. The very high rate in Beirut may be less reliable because of the relatively small sample size. In all 10 countries, women had higher rates of depression than men, and mean age of onset was consistently in the 25- to 35-year-old range (median: 29 years). In the ICPE Surveys (Andrade et al., 2002), lifetime rates of major depression also showed great variability (3.0% in Japan to 16.9% in the U.S.). The median age of onset in most countries was early to mid-20's, and gender-specific rates for all countries have not yet been published. When viewed together, results from the Cross-National Study and the ICPE are fairly consistent, despite an apparent rise in U.S. rates (5.2% vs. 16.9%), which has been widely attributed to methodological differences between the ECA Study and the NCS. Risk factors for major depression are consistent across countries during both decades: female gender, younger age, and unmarried status.

Lifetime rates of bipolar disorder in the Cross-National Study showed little variability (range: 0.3% to 1.5%), but were consistently lower in Asian countries. There were no consistent gender differences in rates, and median age of onset was approximately 20 years. The lifetime rate of bipolar disorder in the NCS was 1.7%. When viewed together, results from the Cross-National Study, the NCS, and the various other studies of bipolar disorder, are more or less consistent. Excluding the Asian countries and Iceland, rates generally varied from 0.5% (West Germany) to 1.5%. (It should be noted that only one subject in the West Germany sample had bipolar disorder, and that the

higher rate in the Netherlands, 2%, may be due to the broader definition of bipolar disorder.) The reasons for lower rates in Taiwan (0.3%), Korea (0.4%), Hong Kong (0.15%), and Iceland (0.2%) are not well understood. Across studies, there are no consistent gender differences in rates, and onset tends to be in the late teens or early 20's. The only consistently found risk factor is marital status, with those separated or divorced at higher risk.

Studies of bipolar spectrum disorders, which include mania, hypomania, and cyclothymia, show higher rates than for narrowly defined bipolar disorder. In the six available studies—conducted in the U.S., Hungary, Germany, and Zurich—lifetime rates of bipolar spectrum disorder ranged from 3.0% to 6.5%. These studies highlight some of the difficulties ascertaining bipolar-type symptoms. The rates cited above may be underestimates, in part because respondents may find it difficult to distinguish hypomania from normal “highs.”

In summary, cross-national studies conducted during the last two decades have begun to provide a detailed picture of major depression and bipolar disorder around the world. Major depression is a relatively common disorder with a median onset in the mid- to late-20's, and despite high variability in rates around the world, those who are female, younger, and unmarried are consistently at increased risk. Bipolar disorder is a less common disorder with much less variability in rates around the world, with a median onset around the age of 20, earlier than for major depression. Although risk factors for bipolar disorder are difficult to determine because of the low base rate, marital separation or divorce is associated with a greater risk of bipolar disorder. Whether marital status is best seen as a cause or an effect of bipolar disorder is not well understood.

Several epidemiological developments are on the horizon. Studies from a broader range of countries around the world, including developing countries, will soon be

published. Also forthcoming are more rigorous studies of mood disorders in children and adolescents. These studies may provide more details about the onset of these disorders, particularly bipolar disorder, which might show early signs that have not been systematically assessed in studies to date.

References

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