Prevalence and age of onset of Bipolar disorders in the general population

The prevalence of bipolar disorder is estimated to be relatively small. The most recent, largest, and best designed epidemiological study to date, the National Comorbidity Survey - Replication - NCS-R (Kessler, McGonagle et al. 1994), was based on a representative sample of approximately 9,282 participants across 48 US states that covered the entire US population. The study used lay interviewers who interviewed participants with a structured lay diagnostic interview (CIDI) using DMS-IV criteria and took part in two phases. The first phase examined the prevalence of primary disorders and the second phase examined correlates of these disorders such as work performance and comorbidity.

The study revealed a lifetime prevalence rate of 1.0% for bipolar I, 1.1% for bipolar II, and 2.4% for bipolar threshold (defined as having a lifetime history of 2 sub-threshold hypomanic episodes). These results lead to an overall prevalence of bipolar disorder of 4.4% in the US population. Lifetime prevalence rates of major depressive disorder were a lot higher reaching 16.2%. However, the bipolar disorders were found to be much more persistent than major depressive disorders. Persistence in such epidemiologic studies is calculated by looking at the ratio of past 12 month prevalence to lifetime prevalence. BP-II had the highest persistence (73.2%), with BP-I (63.3%) following second, and BP sub-threshold third (59.5%). Major depressive disorder had the lowest (40.7%) but still high persistence. Therefore bipolar disorders may not be as prevalent as major depression but they appear more persistent and chronic.

Lifetime estimates of bipolar I disorder from previous population studies across the world and Europe appear to be remarkably consistent most converging between 0.82% (Waraich, Goldner et al. 2004; Pini, de Queiroz et al. 2005) and 1% rate (Pini, de Queiroz et al. 2005) for bipolar I disorder. As Pini’s et al., (2005) review of European studies suggests most epidemiological studies are too small and underpowered to detect differences between bipolar I and II and very few studies have taken into account bipolar II and bipolar spectrum disorders.

For bipolar I disorder there is an almost equal prevalence of the disorder across males and females unlike major depressive disorders where there is a higher female to male ratio. Due to the higher prevalence of major depressive disorder in women it is not surprising that there is a slightly higher prevalence of bipolar II disorders in women.

The NCS-R study reported a median age of onset of 18 for bipolar I, 20 for bipolar II, and 22 for sub-syndromal bipolar disorder. Given the nature of the study the estimation of the age of onset was based on retrospective self-report. Pini’s et al., (2005) review suggests that there is
considerable variability in the epidemiological studies in the reported age of onset due to differences in methodology and sample composition. Studies that interview older community samples (18-65) appear to report later ages of onset similar to the NCS-R study. However, a large epidemiological study that used a younger sample (14 – 24 years old), the Early Development Stages of Psychopathology Study (EDSP), (Wittchen et al., 2003) revealed a much younger age of onset. Hypomania had a mean age of onset of 14.8 years, Mania 15.4 years, and Major depression 17.9 years. These findings are consistent with recent research on paediatric bipolar disorder (Biederman, 2006). Hypomania appears to come early in life, and thus mark the onset of at least a form of bipolar spectrum disorder, until the occurrence of a manic or a depressive episode, which would then mark the onset of a bipolar I or a bipolar II disorder respectively.

key references
