**Supplemental background: Suicidal risk factors**

Bipolar disorders (BD), as well as major depressive disorder (MDD) severe enough to require hospitalization bear the highest reported rates for attempts and suicides among psychiatric disorders.**1–4** Their standardized mortality ratio (SMR) for suicide can reach 20-times above rates in the general population.**1,4** Importantly, a high proportion of BD patients (perhaps one-third) attempt suicide at least once, often when they are undertreated, in part possibly due to non- or misdiagnosis, with ominously high risk in early years of illness, even before diagnosis and treatment are established.**2–5**

In addition to diagnosis, suicide has been associated with various “risk factors.” Suicide, including with violent methods, is more prevalent among men in most cultures, and in association with psychotic symptoms.**6,7** Suicide attempts in affective disorders have been associated, notably, with previous attempts, female sex, younger age, hopelessness and impulsive-aggressive traits, co-occurring substance use, anxiety and personality disorders, as well as poor personal or clinical support.**6** Current morbid state also is a risk factor for suicides and attempts—most often depression, especially with mixed (hypomanic) features in both BD and MDD,**8–12** and risk rises with time spent in depression.**13,14**

Some studies have found risk for suicide attempts to be greater among patients diagnosed with BD than with unipolar MDD,**15–17** although rates in MDD rise with illness-severity and need for hospitalization.**2** Age can also affect suicidal risks: rates of attempts were highest in BD patients aged 20–24 years, and in MDD patients aged 35–39 years.**17** Compared to BD, MDD patients had greater risk of suicide attempts within the first decade following illness-onset.**17** In addition, meta-analysis found a higher incidence of suicide attempts among BD patients but more completed suicides among MDD patients.**15**

Furthermore, in most cultures men more often have died by suicide than women diagnosed with BD, and BD patients of both sexes have had higher risks than MDD patients.**2,16** Factors such as social isolation, abuse of alcohol and other substances, personality disorders, hostility and aggression have been associated with suicidal behavior in both BD and MDD and have not consistently discriminated between the disorders.**7,18–21** In addition, co-occurring personality disorder, especially of the cluster-C type, has been associated with increased risk of suicide attempts in both BD and MDD.**22,23**

A longitudinal study of MDD patients found that depression-severity, male gender, more previous suicide attempts and more psychiatric hospitalizations were associated with greater suicide risk.**24–27** A systematic review found a greater risk of suicide attempts for women than for men with types I and II BD (BD-I and BD-II).**4** Additionally, suicide attempts in MDD have been associated with lower ratings of quality-of-life and *more* years of education.**28**

Several studies compared rates of suicide attempts during various illness phases in BD and MDD patients. Findings include an association with depressive initial episodes, with multiple or treatment-resistant depressions, hopelessness, and particularly high risks in depressive phases with mixed features in both disorders.**5,8,12,14,29–33** Additional identified risk factors include unemployment, being unmarried or separated, melancholic features of depression, psychiatric hospitalization, and the combination of impulsivity with aggressive behavior.**9,32,34** Co-occurring disorders associated with suicidal behavior have included anxiety and eating disorders, alcohol and drug abuse, personality disorders, and insomnia.**22,35** Family history of suicidal behavior, as well as childhood trauma, emotional abuse, and neglect also have been identified as important predictors of later suicidal behavior.**18,31,35–42** Previous suicide attempt has been especially consistently identified as a risk factor for future attempts or suicides, evidently independent of diagnosis.**7,8,43–45**

Recent comparisons of predictors of lifetime risk of suicide attempt between BD-I and BD-II patients found similar rates in the both subtypes**3,44–46** that were higher in association with co-occurring alcohol and drug abuse, anxiety, and eating disorders.**45** Moreover, suicidal risk in both diagnoses was greater with female sex, a lifetime history of rapid cycling (especially among men), as well as relatively young age at illness-onset, and indicators of an adverse illness course.**45,46**

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