Published in final edited form as:
Crisis. 2009 ; 30(4): 171–173. doi:10.1027/0227-5910.30.4.171.

Can Novel Nosological Strategies Aid in the Identification of Risk for Suicidal Behavior?

Maria A. Oquendo and **Dianne Currier**
Division of Molecular Imaging & Neuropathology/Department of Psychiatry, Columbia University, New York, NY, USA

Suicide is the most serious complication of psychiatric disorders and accounts for more that 30,000 deaths annually in the United States. It is among the leading causes of death in young people (15–34 years), although the highest rates are in fact found in old and very old males (70–84 years 29.2/100,000, 85+ years 43.4/100.000 (National Center for Injury Prevention and Control, 2009). Nonfatal suicidal behavior also causes considerable morbidity. According to epidemiological data from 2003 estimates there were 500/100,000 suicide attempts per year, thus resulting in a ratio of approximately 50:1 attempts to suicides (Kessler, Berglund, Borges, Nock, & Wang, 2005). The overall US suicide rate has not altered dramatically since 1955, ranging from 10.2 in 1955 to 11.14 in 2006. Thus, prevention of suicide and suicidal behavior is still clearly a major un-met public health challenge. One barrier to meeting that challenge have been the shortcomings at the clinical level in identifying individuals at risk for suicide and nonfatal suicide attempt and undertaking appropriate interventions. Because the majority of suicides (Cavanagh, Carson, Sharpe, & Lawrie, 2003) and nonfatal attempts (Nock, Hwang, Sampson, & Kessler, in press) occur in the context of a psychiatric disorder, a major contributor to this shortcoming, we have argued, stems from the way in which suicidal behavior is conceptualized in the current DSM-IV nosology and thus operationalized in clinical practice.

In the current DSM-IV diagnostic nosology, suicidal behavior is considered a *symptom* – and that only in the context of Major Depressive Episode (MDE) or of Borderline Personality Disorder (BPD). However, suicidal behavior occurs in the context of many other psychiatric disorders, including psychotic disorders, anxiety disorders, personality disorders, and alcohol and substance use disorders. Risk is further elevated when disorders co-occur.

During assessment, clinicians evaluate the principal diagnosis responsible for the chief complaint, and overview questions identify comorbid conditions. Most clinicians also make safety assessments during initial evaluation. However, if no evidence for MDE or BPD is present and/or there is no current suicidal ideation, inquiry regarding past suicidal behavior may not be made. Thus, reliance on current diagnostic algorithms can lead clinicians to overlook past suicidal ideation or behavior in other disorders where it may not occur in the context of depression, for example, in posttraumatic stress disorder, where patients may contemplate suicide as an escape from their flashbacks; or in alcohol use disorders, where disinhibition during intoxication may precipitate action on suicidal thoughts. Moreover,

Maria A. Oquendo, Division of Molecular Imaging and Neuropathology, Department of Psychiatry, Columbia University, 1051 Riverside Drive, Unit 42, New York 10032, USA, Tel. +1 212 543-5835, Fax +1 212 543-6017, mao4@columbia.edu.
Maria A. Oquendo obtained her MD at Columbia University, New York, NY, USA. She is currently Professor of Clinical Psychiatry in the Division of Molecular Imaging and Neuropathology, Department of Psychiatry at Columbia University.
Dianne Currier obtained her PhD at Monash University, Australia. She is currently a senior staff associate in the Division of Molecular Imaging and Neuropathology, Department of Psychiatry at Columbia University.

even if MDE or BPD are present, the Mental Status Examination focuses on the *present* condition, such that patients denying current suicide-related thoughts or behaviors may never be asked about past suicidal acts. This may also lead to an underestimation of suicide risk as suicide-related thoughts wax and wane, and may be absent during an interview, while a history of suicidal behavior is the most reliably replicated risk factor for future suicidal acts (Oquendo, Currier, & Mann, 2006).

Suicidal behavior meets diagnostic validity criteria (Robins & Guze, 1970) to the same extent as most of the psychiatric conditions clinicians treat (Oquendo, Baca-Garcia, Mann, & Giner, 2008). On this basis we have recommended that suicidal behavior be considered a separate DSM diagnostic category and documented on a sixth axis (Oquendo et al., 2008). A separate diagnostic category would provide a framework for the categorization and systematic documentation of the entire spectrum of suicide-related behaviors such as those elaborated in the Columbia Suicide Severity Rating Scale (C-SSRS) (Posner, Oquendo, Gould, Stanley, & Davies, 2007). This allows an assessment of the type, intent, planning, and severity of suicidal thoughts and acts, as well eliciting information on past behaviors, the latter being a central component of risk assessment.

In clinical terms, the practical consequence of establishing suicidal behavior as a separate category on a sixth axis is that – beyond limited inquiry regarding MDE and BPD – suicidal behavior would be systematically assessed and identified. Patients with nonsuicidal self-injury, or with a history of a suicide attempt, aborted attempt, or interrupted attempt, would be flagged on this axis so that appropriate risk-reduction strategies could be included in their treatment planning. For this reason, establishing a sixth DSM axis for suicidal behavior is preferable to other proposed approaches such as adding an additional modifying digit to primary DSM-IV diagnosis to indicate severity and recurrence. There is some nosological merit to this approach. However, it is impractical in a clinical context as the numbering system of DSM diagnoses is arcane and little used other than for insurance claims, and here too buries this critical piece of clinical information as an adjunct of diagnosis.

Proposing the establishment of a separate diagnostic entity for suicidal behavior raises the larger question of the appropriateness of suicidal behavior as a *diagnostic symptom* in Major Depression and Borderline Personality Disorder. For example, although at higher risk for suicidal behaviors, the majority of depressed individuals do not experience suicidal ideation or engage in suicidal behaviors (Bolton, Belik, Enns, Cox, & Sareen, 2008; Rihmer & Kiss, 2002). Even among those with Major Depression, 98% to 85% die of causes other than suicide (Bostwick & Pankratz, 2000; Guze & Robins, 1970). This, together with the occurrence of suicidal thinking and behavior in the context of many other psychiatric disorders, suggests a lack of diagnostic specificity for suicidal behavior with respect to MDE. That is not to say that suicidal ideation and behavior are not important features associated with MDE; there is, in fact, evidence that suicidal ideation, while it can vary from episode to episode in MDE, is more strongly recurrent than other symptoms, which have been shown to vary considerably from one episode to the next (Lewinsohn, Pettit, Joiner, & Seeley, 2003; Oquendo, Barrera, Ellis, Burke, Grunebaum et al., 2004). In a group of 69 MDD patients, 86% who experienced suicidal ideation in the index episode also experienced it at the next episode, and 79% of those who did not experience suicidal ideation in the index episode also did not experience it in the next one (Williams, Crane, Barnhofer, Van der Does, & Segal, 2006). Although there were changes in severity across episodes, the presence or absence of ideation was consistent, with only 20% of subjects shifting group.

This suggests that suicidal ideation may be a specific negative cognitive response to the low mood and loss of interest crucial/core to major depression, but largely restricted to individuals with that cognitive bias. Studies of rumination and automatic thinking support

the notion that these cognitive orientations are in fact *traits*. As such, the presence of suicidal ideation and behavior in the context of MDE could be considered analogous to the commonly observed recrudescence of alcohol abuse or dependence in the context of worsening depression: As a depressive episode emerges, comorbidities manifest in a more pronounced fashion.

Rates of suicidal behavior in Borderline Personality Disorder are high, with approximately 84% reporting an attempt, gesture, or threat (Black, Blum, Pfohl, & Hale, 2004). This high prevalence would appear to support the inclusion of suicidality as a diagnostic criteria for the disorder. However, given that BPD is frequently comorbid with other psychiatric disorders, and that comorbid major depression greatly increases the risk of suicide attempt and death in BPD (see Black et al., 2004 for a review), questions remain regarding the diagnostic specificity of suicidality for BPD. Rather, it may be that that suicidality as a distinct syndrome or behavioral/cognitive trait is highly co-morbid with BPD.

Disaggregating suicidal behavior from the diagnoses of MDE and BPD by establishing a separate DSM axis – and removing it as a diagnostic symptom for MDE – would greatly increase both the awareness of treating clinicians and their ability to detect risk for suicidal behavior. This change could be buttressed operationally with the use of generalized assessment instruments such as the C-SSRS. Together these proposals would likely lead to improved identification of high-risk individuals and begin to reduce the morbidity and mortality due to suicidal behavior in the population that is most at-risk: those with past suicidal behavior.

References

Black DW, Blum N, Pfohl B, Hale N. Suicidal behavior in borderline personality disorder: Prevalence, risk factors, prediction, and prevention. Journal of Personality Disorder. 2004; 18:226–239.

Bolton JM, Belik SL, Enns MW, Cox BJ, Sareen J. Exploring the correlates of suicide attempts among individuals with major depressive disorder: Findings from the national epidemiologic survey on alcohol and related conditions. Journal of Clinical Psychiatry. 2008; 69:1139–1149. [PubMed: 18517287]

Bostwick JM, Pankratz VS. Affective disorders and suicide risk: A reexamination. American Journal of Psychiatry. 2000; 157:1925–1932. [PubMed: 11097952]

Cavanagh JT, Carson AJ, Sharpe M, Lawrie SM. Psychological autopsy studies of suicide: A systematic review. Psychological Medicine. 2003; 33:395–405. [PubMed: 12701661]

Guze SB, Robins E. Suicide and primary affective disorders. British Journal of Psychiatry. 1970; 117:437–438. [PubMed: 5481206]

Kessler RC, Berglund P, Borges G, Nock M, Wang PS. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. Journal of the American Medical Association. 2005; 293:2487–2495. [PubMed: 15914749]

Lewinsohn PM, Pettit JW, Joiner TE Jr, Seeley JR. The symptomatic expression of major depressive disorder in adolescents and young adults. Journal of Abnormal Psychology. 2003; 112:244–252. [PubMed: 12784834]

National Center for Injury Prevention and Control; Center for Disease Control. CDC. Web-based Injury Statistics Query and Reporting System (WISQARS™). 2009. Retrieved June 16 2009 from http://www.cdc.gov/ncipc/wisqars/

Nock MK, Hwang I, Sampson NA, Kessler RC. Mental disorders, comorbidity and suicidal behavior: Results from the National Comorbidity Survey Replication. Molecular Psychiatry. (in press).

Oquendo MA, Baca-Garcia E, Mann JJ, Giner J. Issues for DSM-V: Suicidal behavior as a separate diagnosis on a separate axis. American Journal of Psychiatry. 2008; 165:1383–1384. [PubMed: 18981069]

Oquendo MA, Barrera A, Ellis SP, Burke AK, Grunebaum M, Endicott J, et al. Instability of symptoms in recurrent major depression: A prospective study. American Journal of Psychiatry. 2004; 161:255–261. [PubMed: 14754774]

Oquendo MA, Currier D, Mann JJ. Prospective studies of suicidal behavior in major depressive and bipolar disorders: What is the evidence for predictive risk factors? Acta Psychiatrica Scandinavica. 2006; 114:151–158. [PubMed: 16889585]

Posner K, Oquendo MA, Gould M, Stanley B, Davies M. Columbia Classification Algorithm of Suicide Assessment (C-CASA): Classification of suicidal events in the FDA's pediatric suicidal risk analysis of antidepressants. American Journal of Psychiatry. 2007; 164:1035–1043. [PubMed: 17606655]

Rihmer Z, Kiss K. Bipolar disorders and suicidal behavior. Bipolar Disorders. 2002; 4(Suppl 1):21–25. [PubMed: 12479671]

Robins E, Guze SB. Establishment of diagnostic validity in psychiatric illness: Its application to schizophrenia. American Journal of Psychiatry. 1970; 126:983–987. [PubMed: 5409569]

Williams JM, Crane C, Barnhofer T, Van der Does AJ, Segal ZV. Recurrence of suicidal ideation across depressive episodes. Journal of Affective Disorders. 2006; 91:189–194. [PubMed: 16488023]