Moral Objections to Suicide: Can They Counteract Suicidality in Patients With Cluster B Psychopathology?

Kanita Dervic, M.D.; Maria A. Oquendo, M.D.;
Dianne Currier, Ph.D.; Michael F. Grunebaum, M.D.;
Ainsley K. Burke, Ph.D.; and J. John Mann, M.D.

Objective: Patients with cluster B personality disorder (CBPD) are particularly prone to suicidal behavior, yet possible protective mechanisms are not often studied. The present study investigated a possible protective role of moral objections to suicide (MOS) against suicidal behavior in patients with CBPD and current depression. The effect of MOS was then examined in relation to other mechanisms affecting suicide risk including trait aggressivity and the presence of effective coping strategies.

Method: 147 depressed patients with comorbid CBPD (DSM-III-R) were compared with 210 depressed patients without CBPD in terms of their history of suicide attempts and clinical and demographic characteristics. The relationship of MOS to suicide attempt was examined by logistic regression controlling for demographic and clinical differences between the groups as well as presence of comorbid CBPD. Data were collected from 1990 to 2003.

Results: Subjects with comorbid CBPD had fewer MOS and reported more previous suicide attempts. In logistic regression, fewer MOS/religious beliefs, lower coping potential, and higher aggression level were associated with suicide attempt. A CBPD diagnosis did not affect the relationship between MOS and suicide attempts.

Conclusions: The results of this study suggest that the presence of MOS/religious beliefs may have a protective effect against suicidal behavior in depressed patients with comorbid CBPD and may be a target for therapeutic intervention.

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Cluster B personality disorders (CBPDs) (borderline, narcissistic, histrionic, and antisocial) are reported to have an increased suicide risk.[1–5] Indeed, suicidal individuals with these disorders appear to have several distinguishing features that warrant study as a distinct group.[5] Patients with CBPD are generally prone to affective disorders,[6,7] which may also increase their risk for suicidal acts. In a study of adolescents, Links et al.[8] report that patients with antisocial and borderline personality disorder are at risk for suicidal behavior when depressed, whereas patients with narcissistic personality disorder are also at suicidal risk when not depressed.

Published studies reporting effective prevention and treatment modalities for suicidal behavior in patients with CBPD are sparse. However, 2 approaches appear to be effective and have found wide usage in the clinical practice, particularly for borderline personality disorder: reduction of aggression level[9] and acquisition of coping skills and strategies.[10–12] Identifying protective factors that may be reinforced in at-risk individuals may also be of utility in the treatment of suicidal individuals.

Linehan et al.[13] reported that, in a clinical sample, individuals who endorse few moral concerns about suicide are more likely to have a history of parasuicide. Moreover, moral objections to suicide (MOS) appear to protect against suicidal behavior in depressed patients.[14] The MOS subscale of the Reasons for Living Inventory[13] consists of 4 statements that consider moral and religious objections to suicide. This subscale includes questions that reflect traditional religious beliefs: "I believe only God has right to end a life," "My religious beliefs forbid it," "I am afraid of going to hell," and "I consider it morally wrong." We hypothesized that (1) depressed subjects with comorbid CBPD would report fewer MOS than depressed patients without CBPD and (2) MOS would be inversely associated with suicidal behavior in patients with comorbid CBPD. In addition, we compared the possible protective effect of MOS with the effects of 2 other factors influencing risk for suicidal behavior: aggression level and presence of coping strategies and skills. To our knowledge, this is the first clinical study investigating possible

protective effect of moral objection to suicide against suicidality in comorbid CBPD patients.

METHOD

Subjects

Three hundred fifty-seven inpatients who met DSM-III-R criteria[15] for a current major depressive episode entered the study within 3 days of admission. The mean (± SD) age of the sample was 37.6 (± 13.2) years, 59.4% were female, and 78.8% were white. Subjects were recruited at the New York State Psychiatric Institute, New York, and Western Psychiatric Institute and Clinic, Pittsburgh, Pa. Exclusion criteria included current substance or alcohol abuse, neurologic illness, or other active medical conditions. All subjects gave written informed consent for the study as required by the Institutional Review Board. Data from subjects included in this study have been reported previously.[14] Data were collected from 1990 to 2003.

Instruments

DSM-III-R Axis I psychiatric disorders were diagnosed based on the Structured Clinical Interview for DSM-III-R[16] and confirmed by a consensus conference led by experienced M.D.- or Ph.D.-level research clinicians. The presence or absence of personality disorders was determined by assessing Axis II personality pathology with the Structured Clinical Interview for DSM-III-R Personality Disorders.[17] Psychiatric symptoms were assessed with the Brief Psychiatric Rating Scale,[18] the Global Assessment Scale (excluding the suicide item),[19] the 17-item Hamilton Rating Scale for Depression,[20] the Beck Depression Inventory,[21] and the Beck Hopelessness Scale.[22] Lifetime aggression was measured using the Brown-Goodwin Aggression Inventory,[23] hostility using the Buss-Durkee Hostility Inventory,[24] and impulsivity using the Barratt Impulsivity Scale.[25] Stressful life events were assessed using the St. Paul-Ramsey Life Experience Scale (A. E. Lumry, unpublished, 1978), which rates the severity of individual stressors from 1 (none) to 7 (catastrophic) in 6 categories ranging from marital to occupational and gives a final global measure of stressors.[28] The Reasons for Living Inventory (RFLI),[13] which consists of 6 subscales: survival and coping beliefs (SCB), responsibility to family, child-related concerns, fear of suicide, fear of social disapproval, and MOS, was administered to assess protective factors. The SCB subscale, which consists of 24 items that assess coping potential (e.g., "I believe I can find solution to my problems," "I believe I can learn to adjust or cope with my problems," "I have the courage to face life," "I am too stable to kill myself") as well as positive attitudes toward the future and life, was used to assess coping strategies. Lifetime history of suicide attempts was obtained using the Columbia Suicide History Form.[26] A suicide attempt was defined as a self-destructive act with at least some intent to end one's life. The highest level of suicidal ideation in the 2 weeks prior to baseline assessment was measured using the Scale for Suicidal Ideation.[27]

Statistical Methods

To identify group differences in clinical and demographic characteristics that may confound an association between MOS and suicidal behavior, we compared subjects with and without comorbid CBPD in terms of demographic and clinical variables using χ^2 statistics for categorical variables and the Student t test for continuous variables. Logistic and linear regressions with multiple predictors entered simultaneously were then conducted for the purposes of data reduction and hypotheses testing. Three regressions were conducted for data reduction, with suicide attempt as the dependent variable and (1) all demographic variables that differed significantly in univariate analyses between CBPD and non-CBPD subjects as independent variables; (2) aggression/impulsivity variables as independent variables, because they are highly correlated; and (3) all the clinical variables that differed in the 2 groups, as well as significant variables from the 2 prior data reduction regressions as independent variables. A final model was constructed to test the hypothesis that MOS are protective against suicidal behavior, with suicide attempt as the dependent variable and MOS as the independent variable, controlling for CBPD and those demographic and clinical factors that were significant in the data reduction regressions. We also tested this model with an interaction term of MOS × CBPD to determine if the effect of MOS on suicide attempt differed depending on whether the patient had CBPD or not.

A similar procedure was undertaken for suicidal ideation, resulting in a final linear regression with suicidal ideation as the dependent variable and MOS as the independent variable, controlling for CBPD and demographic and clinical factors that were significant in the data reduction regressions.

RESULTS

Clinical and Demographic Characteristics of Subjects With and Without Comorbid CBPD

Two hundred ninety-four (N = 294) subjects (82.4%) had a diagnosis of major depressive disorder, and 63 (17.6%) had a bipolar disorder (currently depressed) diagnosis. One hundred eighty-seven (N = 187) subjects (52.4%) reported a lifetime history of suicide attempt. One hundred forty-seven (N = 147) subjects (41.2%) had a diagnosis of CBPD. Subjects with CBPD were younger than those without CBPD (mean ± SD = 33.3 ± 9.3 years vs. 40.6 ± 14.6 years, t = 5.7, df = 350, p < .001), less likely to be married (13.6% vs. 33.8%, χ^2 = 18.5, df = 1,

Table 1. Clinical Characteristics of Subjects With and Without Comorbid Cluster B Personality Disorder (CBPD)[a]

Characteristic	CBPD, N = 147 (41.2%)	No CBPD, N = 210 (58.8%)	Statistical Test	p Value
Lifetime suicide attempt, N (%)	106 (72.6)	81 (39.3)	$\chi^2 = 38.0$, df = 1	< .001
Suicidal ideation, mean ± SD	16.6 ± 10.8 (N = 140)	11.5 ± 10.3 (N = 190)	t = 4.3, df = 328	< .001
Beck Depression Inventory, mean ± SD	29.8 ± 10.8 (N = 123)	27.6 ± 11.2 (N = 176)	t = 1.6, df = 297	.103
HAM-D-17, mean ± SD	19.6 ± 5.1 (N = 144)	20.5 ± 6.4 (N = 207)	t = −1.5, df = 342.3	.134
Beck Hopelessness Scale, mean ± SD	13.3 ± 5.1 (N = 130)	11.1 ± 5.8 (N = 178)	t = 3.4, df = 306	.001
Brief Psychiatric Rating Scale, mean ± SD	35.9 ± 7.2 (N = 136)	35.4 ± 7.6 (N = 193)	t = 0.59, df = 327	.555
Global Assessment Scale,[b] mean ± SD	45.7 ± 10.2 (N = 99)	44.4 ± 10.4 (N = 153)	t = 0.96, df = 250	.335
Barratt Impulsivity Scale, mean ± SD	58.3 ± 17.7 (N = 112)	49.0 ± 15.8 (N = 165)	t = 4.5, df = 275	< .001
Buss-Durkee Hostility Inventory, mean ± SD	42.3 ± 12.1 (N = 120)	32.2 ± 10.7 (N = 163)	t = 7.3, df = 281	< .001
Brown-Goodwin Aggression Inventory, mean ± SD	21.5 ± 5.7 (N = 137)	16.1 ± 4.5 (N = 184)	t = 9.4, df = 319	< .001
Past combined substance and alcohol abuse, N (%)	42 (28.6)	21 (10.1)	$\chi^2 = 19.9$, df = 1	< .001
Childhood abuse, N (%)	55 (49.1)	62 (36.3)	$\chi^2 = 4.6$, df = 1	.032
St. Paul-Ramsey Scale (adverse life events), mean ± SD	4.2 ± 1.0 (N = 122)	3.8 ± 1.1 (N = 167)	t = 3.1, df = 287	.002
Reasons for Living Inventory score, mean ± SD				
Total	138.8 ± 39.9 (N = 103)	165.4 ± 45.3 (N = 146)	t = −4.7, df = 247	.004
Survival and coping beliefs	69.1 ± 25.8 (N = 103)	84.1 ± 29.2 (N = 145)	t = −4.1, df = 246	< .001
MOS/religious beliefs	9.5 ± 6.4 (N = 103)	12.0 ± 6.7 (N = 146)	t = −2.9, df = 225.9	.004

[a]Percentages reflect the fact that there are some missing data for these variables.
[b]The Global Assessment Scale did not include the suicide item.
Abbreviations: HAM-D-17 = 17-item Hamilton Rating Scale for Depression, MOS = moral objections to suicide.

p < .001), less likely to have children (40.1% vs. 59.5%, $\chi^2 = 13.1$, df = 1, p < .001), and less likely to report religious affiliation (76.8% vs. 85.4%, $\chi^2 = 4.1$, df = 1, p = .041) without significant differences in specific religious denomination ($\chi^2 = 7.1$, df = 4, p = .126). The 2 groups did not differ on gender ($\chi^2 = 0.002$, df = 1, p = .967), race ($\chi^2 = 1.1$, df = 1, p < .293), income (t = 0.29, df = 286, p = .772), or education (t = −0.326, df = 333, p = .774).

Table 1 presents details of clinical characteristics of subjects with and without comorbid CBPD. Subjects with CBPD had more lifetime suicide attempts and higher levels of suicidal ideation than subjects without CBPD. Furthermore, subjects with CBPD showed more hopelessness, impulsivity, lifetime aggression, and hostility as well as more past combined substance and alcohol abuse than subjects without CBPD. Subjects with CBPD were more likely to report childhood abuse and a greater number of undesirable life events. Fewer total reasons for living, SCB, and MOS were found in subjects with CBPD compared to subjects without CBPD. There were no significant differences in self-reported depression, clinically-rated depression, global psychopathology, or global functioning (Global Assessment Scale without suicide).

Relationship Between Suicide Attempt and MOS

Data reduction logistic regression analysis, with suicide attempt as the dependent variable, revealed that, of the demographic variables, younger age (OR = 0.964, 95% CI = 0.94 to 0.98, p < .001) and lack of religious affiliation (OR = 0.512, 95% CI = 0.27 to 0.94, p = .033) were independently associated with suicide attempt, and marital and parental status were not. Of the aggression-impulsivity trait–related variables subjected to logistic

Table 2. Logistic Regressions With Suicide Attempt as Dependent Variable

Variable	OR	95% CI	p
Age	0.97	0.95 to 1.0	.082
Religious affiliation	0.85	0.41 to 1.7	.688
CBPD	1.7	0.88 to 3.2	.110
Aggression (BGAI)	1.07	1.01 to 1.14	.016
Survival and coping beliefs (RFLI)	0.98	0.97 to 0.99	.037
MOS/religious beliefs (RFLI)	0.92	0.88 to 0.97	.002

Abbreviations: BGAI = Brown-Goodwin Aggression Inventory, CBPD = cluster B personality disorder, MOS = moral objections to suicide, RFLI = Reasons for Living Inventory.

regression, higher aggression level was independently associated with suicide attempt (OR = 1.1, 95% CI = 1.03 to 1.16, p = .003), and impulsivity and hostility were not. Age, religious affiliation, and aggression were then included with other significant clinical variables in logistic regression with suicide attempt as a dependent variable. In that model, MOS (OR = 0.92, 95% CI = 0.87 to 0.92, p = .003), aggression (OR = 1.07, 95% CI = 1.01 to 1.14, p = .023), and SCB (OR = 0.98, 95% CI = 0.96 to 0.99, p = .028) were significantly independently associated with suicide attempts. Hopelessness, adverse life events, past combined substance and alcohol abuse, and history of childhood abuse were not significant.

Table 2 presents results of the final logistic regression model, with suicide attempt as the dependent variable and MOS as the independent variable, controlling for age, religious affiliation, SCB, aggression, and CBPD. Moral objections to suicide, SCB, and aggression were independently associated with suicide attempt, whereas CBPD, age, and religious affiliation were not. The interaction term MOS × CBPD was not significant (OR = 0.93, 95% CI = 0.85 to 1.03, p = .183), suggesting that MOS pro-

tected against suicide attempt to the same extent in those with or without comorbid CBPD.

Relationship Between Suicidal Ideation and MOS

In terms of demographic variables, linear regression showed that suicidal ideation was significantly correlated with younger age (β = –0.182, t = –3.0, p = .003) and not marital or parental status or religious affiliation. When the aggression-trait–related variables were subjected to linear regression, aggression (β = 0.196, t = 2.6, p = .008) and hostility (β = 0.164, t = 2.0, p = .040) remained significantly associated with suicidal ideation, whereas impulsivity did not. Age, aggression, and hostility scores were then included with other significant clinical variables in a linear regression with suicidal ideation as a dependent variable. Suicidal ideation was significantly associated with lower SCB scores (β = –0.367, t = –3.7, p < .001) and higher aggression levels (β = 0.208, t = 2.3, p < .023). There was no association with MOS, hopelessness, adverse life events, childhood abuse, past combined alcohol and substance abuse, or hostility. A final linear regression model with suicidal ideation as the dependent variable and age, aggression, SCB, and CBPD as independent variables showed that younger age (β = –0.125, t = –2.06, p = .040), higher aggression level (β = 0.178, t = 2.6, p = .008), and lower SCB score (β = –0.331, t = –5.5, p < .001) were significantly associated with suicidal ideation, whereas CBPD was not (β = 0.095, t = 1.4, p = .158).

DISCUSSION

The major finding of this study is that MOS appear to have a protective effect against suicide attempts. This relationship was apparent in depressed subjects both with and without CBPD. However, in this sample, patients with comorbid CBPD have fewer MOS and reported more past suicide attempts than those without comorbid CBPD. These findings suggest that MOS may offer another avenue for therapeutic intervention in CBPD, as the possible protective role of MOS in our study appears to diminish risk for suicidality, as do lower aggression level[9,11,28,29] and better coping strategies and skills[12]—2 targets of dialectical-behavioral therapy.

Linehan et al.[13] proposed that a suicidal individual could be taught to attach importance to positive beliefs and that clinicians could focus on persuasively discussing the evidence for those positive beliefs not endorsed as important by the client. Of note, in our study, fewer MOS were associated with greater likelihood of previous suicide attempts independently of CBPD, suggestive of a broader protective effect of MOS/religious beliefs against suicidal behavior.[14]

That patients with CBPD have fewer MOS, which may represent religious beliefs,[13] compared to patients without CBPD, is intriguing. Reports on values in subjects with CBPD are sparse. Narcissistic and borderline personality disorder, for example, had been initially studied mostly by psychoanalytic researchers. In the past, these types of investigations gave less attention to moral conflicts and religious feelings.[30] Recently, Kernberg[31] suggested exploring the extent to which religiosity, as a mature desire for a transpersonal system of morality and ethical values, is available to patients. For patients with CBPD, it could be that specific traits, such as the grandiosity of narcissistic personality disorder[32] or the sense of entitlement and propensity for rule-breaking of antisocial personality disorder,[33] make it difficult to adhere to moral tenets that require commitment to clear rules.

Suicidal ideation in patients with CBPD in this study was not associated with MOS, but with younger age, higher lifetime aggression level, and lower coping potential. Seemingly, MOS do not preclude the appearance of suicidal thoughts in patients with CBPD, yet they appear to have an inhibitory effect on actual suicidal behavior. It is still unclear which factors impel a person with suicidal ideation to attempt suicide.[34] However, fewer MOS or religious beliefs may be one such possible factor.

The possible protective role of MOS/religious beliefs against suicidal behavior may prove useful in the assessment and treatment of suicidal individuals with borderline, narcissistic, histrionic, and antisocial personality disorders. Clinically, it is critical to recognize resources for psychological well-being and potential for change. However, this aspect of mental life is often neglected in clinical practice,[35] as generations of psychiatrists have labeled religious feelings as neurotic, obsessive, and dependent characteristics.[30] Yet, in one clinical case-control study, Pfeifer and Waelty[36] found that the primary factor explaining neurotic functioning in religious patients is not their religious commitment but their underlying psychopathology. Moreover, discussion of religious issues is often initiated by many patients at some point during treatment.[37] Indeed, a recent study from McCord et al.[38] revealed that over 85% of surveyed patients in a family practice wanted to discuss their own spiritual beliefs with their physicians in expectance of greater understanding, compassion, and hope. Of interest, in a neuroimaging study, Borg et al.[39] reported an association between serotonergic function and self-transcendence—a personality trait covering religious behavior and attitudes—whereas no similar association for other personality traits was found.

In this context, it is necessary to note that the MOS subscale consists of 3 statements reflecting religious beliefs but also contains 1 statement that refers solely to moral attitude ("I consider it morally wrong"). Indeed, one of the main moral issues regarding suicide is whether suicide is morally permissible.[40] Therefore, although the MOS subscale was reported[41] to assess the same beliefs as

the Spiritual Well-Being Scale,[42] insofar as it contains a statement about the morality of suicidal acts, it would imply that discussion of morality and values could also be included in context of prevention of suicidal acts. However, appropriate caution is warranted. There are claims about a general moral dissent[43] and often confusing values[44] in pluralistic modern societies as well as their failure to provide a moral framework.[45] On the other hand, tolerance, rather than condemnation, of suicide seems to be increasing.[46] More importantly, a study in a community sample about the morality of suicide showed that individuals who are more depressed and suicidal view suicide as less morally wrong.[47] Therefore, it is possible that religiosity, as a participation in an organized system of religious beliefs, rituals, and practices,[48] could provide more enduring support to the value of living.

In this context, attention to a patient's moral and religious values in clinical work in terms of their potential for prevention of suicidal behavior[14] may be warranted. Maintenance of a balanced stance while discussing patients' beliefs and values while avoiding the imposition of the clinician's values on patients is key.[49]

Limitations of the Study

This study has several limitations. It included patient-reported MOS/religious beliefs but did not assess personal religious practice or intrinsic religiosity. Evaluation of the effects of MOS was based on total RFLI subscale scores and not individual items; a future study making a finer grained assessment of MOS would be instructive. Similarly, measures of coping potential and skills were restricted to the survival and coping beliefs subscale of the RFLI. For some rating scales, data are incomplete, as patients occasionally refused to answer all question or fill out self-reports. Although we included individuals with past substance abuse, these findings cannot be generalized to patients with current substance abuse, a common comorbidity with both major depression and CBPDs. Finally, this is a retrospective study. Prospective clinical studies with a parallel assessment of the effects of 3 possible protective mechanisms against suicidal behavior (MOS/religious beliefs, lower aggression levels, and coping potential and skills) are needed.

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