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ORIGINAL ARTICLE

Different roles of resilience in depressive patients with history of suicide attempt and no history of suicide attempt

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Objective: Suicidal ideation is modulated by several risk and protective factors. The aim of this study was to evaluate differences between patients with a history of suicide attempt and those with no such history, with special attention to depression, interpersonal sensitivity, humiliation, and resilience.
Methods: One hundred consecutively admitted patients with an index depressive episode were recruited. The Brief Symptom Inventory, Humiliation Inventory, and Resilience Scale for Adult were administered.
Results: Scores for humiliation, interpersonal sensitivity, and depression were higher in subjects with history of suicide attempt, while higher scores for resilience were observed in the group with no such history. Different patterns of relationships among the variables of interest were found in the two groups. Resilience dimensions such as social resources and familial cohesion were strongly and negatively correlated with humiliation, interpersonal sensitivity, and depression in subjects with a past suicide attempt.
Conclusions: Resilience factors can modulate and reduce the impact of suicide risk. Assessing risk and protective factors could enhance the ability to intervene appropriately.

Keywords: Suicide; humiliation; interpersonal sensitivity; depression; resilience

Introduction

Suicide is a significant public health issue involving a series of pathways from ideation to planning and, finally, to attempting suicide.[1] The lifetime prevalence of suicidal ideation has been reported as approximately 9%.[2] This phenomenon may represent a response to stressful events modulated by sociodemographic, clinical, and other risk factors, as well as by protective factors.[3]

Depression has been clearly established as the strongest psychopathological predictor of suicidal ideation,[4] although other such factors could play a meaningful role. Among these, humiliation has received growing attention in the last decade.[5-7] Humiliation is a feeling of undeserved degradation or devaluation in a social context, in which the individual is unable to respond to the situation because of a power asymmetry between the "humiliator" and "humiliatee."[8] Often confused with shame and anger, humiliation differs from the former because humiliation is perceived as undeserved,[9] and from the latter because it involves feelings of powerlessness.[10]

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Humiliation has been studied in connection to suicide; in particular, past humiliation events may increase hopelessness in adulthood, a crucial suicide risk factor.[11]

Interpersonal sensitivity has been proposed as a symptom related to depression[12] and likely related to the feeling of humiliation.[13] Collazzoni et al.[14] found a high correlation between humiliation and interpersonal sensitivity; furthermore, it seems to be a risk factor for suicidal behavior.[15,16]

The assessment of factors protective against suicide is a critical issue.[17,18] Recently, there has been growing interest in the concept of "resilience to suicidality," which can be understood as a psychological construct – such as a perceived ability of the individual to overcome difficulties, a set of positive beliefs, or a set of personal, familial, or social resources – that can buffer the individual from suicide in presence of risk factors or stressors.[19-22]

Previous studies have considered the relations between humiliation, interpersonal sensitivity, and resilience in depressed patients,[14,23] and reported a buffering role of resilience; however, to the best of our knowledge, these variables have not been previously studied in subjects with suicidal ideation.

The aim of this study was to evaluate the relationship between selected risk factors (humiliation, interpersonal sensitivity, and depression) and a protective factor (specifically, resilience) in samples with and without history of

suicide. Furthermore, clinical differences between the two groups were assessed.

Methods

Participants

One hundred consecutively admitted depressed patients with an index depressive episode (49 males, mean age 42.14±9.7; 51 females, mean age 40.5±11.21), recruited from an Italian psychiatry unit, took part in this study. All had a primary diagnosis of depression (depressive episode, ICD-10 code F32) established by senior psychiatrists (AR). The sample was quite homogeneous because all subjects were admitted for a severe depressive episode, with a Brief Symptom Inventory (BSI) score for depression subscale > 2.[24] Patients with primary diagnoses other than mood disorder and those with bipolar disorders were excluded.

On the basis of a clinical interview, the sample was split into two groups: subjects with a history of suicide attempt and those with no such history. Of the 100 included subjects, 52 had a history of suicide attempts.

The Ethics Committee of the university in which the study was conducted approved all recruitment and assessment procedures. Eligible subjects provided written informed consent after receiving a complete description of the study and being given the opportunity to ask questions. All subjects then completed self-report questionnaires. In all cases, a researcher sat with each person and assisted if required (e.g., in reading/understanding the scoring of questions).

Measures

Clinical assessment

The BSI, a 53-item questionnaire covering nine symptom dimensions, was used to assess psychiatric symptoms. A priori, we selected the measures of Interpersonal Sensitivity and Depression for use in this study.[25]

Humiliation

The Humiliation Inventory was administered to evaluate this factor. It consists of 32 items assessing two humiliation dimensions: 20 items assessing Fear of Humiliation and 12 items assessing Cumulative Humiliation. A total Humiliation score can be computed to measure the cumulative impact of humiliation and fear of humiliation.[24] Only the total score was considered for analysis.

Resilience

The Resilience Scale for Adult (RSA), which consists of 33 items measuring six resiliency dimensions and yielding a total score, was used. The six assessed dimensions are: 1) perception of self, 2) perception of the future, 3) social competence, 4) structured style, 5) family cohesion, and 6) social resources.[26,27] Four of these dimensions (perception of self, perception of the future, structured style, and social competence) assess individual resilience; the family cohesion dimension assesses family-based resilience resources, while the social resources dimension assesses the resources provided by the subject's social networks.[28] All these dimensions were considered in the study.

Statistical analysis

Student's *t*-test for independent samples and Pearson's r with Bonferroni correction were used for multiple correlations, while the Fisher r-to-z transformation was used for comparison between two correlation coefficients. Effect size was assessed by Cohen's *d*, with $d > 0.5$ interpreted as a medium effect size and $d > 0.8$ as a large effect size.[29]

A logistic regression analysis was conducted to determine which variables predicted positive/negative history of suicide attempt as dependent variable. A forward procedure with likelihood ratio was used.

Results

Table 1 shows the coefficients of correlation among the variables. A different correlation pattern between the two groups emerged. Correlations were stronger in patients with history of suicide attempt than in those without; in particular, significantly different correlation coefficients were found between family cohesion and humiliation (r = -0.70), interpersonal sensitivity (r = -0.55), and depression (r = -0.56); and be tween social resources and humiliation (r = -0.51), interpersonal sensitivity (r = -0.50), and depression (r = -0.53) (Fisher r-to-z transformation from z = 2.14 to z = 3.04, p range < 0.05 to < 0.01). As a whole, the suicidal group had stronger, negative correlations between protective and dysfunctional factors.

Comparison between the groups with vs. without history of suicide attempt showed significant differences. Humiliation, interpersonal sensitivity, and depression scores were higher in subjects with a history of suicidality, while resilience scores were higher in those with no such history (Table 2). All variables differed significantly with medium to large effect sizes.

On stepwise logistic regression analysis, the Hosmer-Lemeshow chi-square test ($\chi^2 = 3.85$; degrees of freedom = 8; p = 0.87) did not endorse a significant difference between observed and predicted cell frequencies, indicating an overall good fit. The classification table of observed vs. predicted cases shows that 70.2% of predicted cases were assigned to the correct category (66.7% for the suicidal and 73.9% for the non-suicidal group). Analysis also revealed that interpersonal sensitivity entered only in the final equation (B = -0.76; standard error = 0.20; Wald = 13.81, $p < 0.0005$; exponentiated $\beta = 0.46$).

Discussion

To the best of our knowledge, this was the first study to investigate the role of humiliation and the connection between humiliation and other psychological factors in subjects with vs. without a history of suicidality. The results show differences for measures of humiliation, interpersonal sensitivity, depression, and resilience between suicidal vs. non-suicidal patients; furthermore, different patterns of association between family cohesion

Table 1 Correlations between the variables assessed: humiliation and resilience dimensions

	1	2	3	4	5	6	7	8	9
1 Humiliation total score	…							0.63	
2 Perception of self		…	0.55		0.52				
3 Perception of future		0.61	…						
4 Structured style				…	0.50				
5 Social competence		0.53			…				
6 Social resources	**-0.51***	**0.61**†				…	0.76		
7 Family cohesion	**-0.70**‡	0.52				0.73	…		
8 Interpersonal sensitivity	0.69	-0.53				**-0.50**§	**-0.55**‖	…	0.73
9 Depression	0.59	-0.55	-0.49			**-0.53**¶	**-0.56****	0.73	…

Bold font indicates statistical significance.
After type 1 error correction, only r values with $p < 0.0005$ are reported. Above diagonal: correlations of group without history of suicide attempt; below diagonal: correlations of group with history of suicide attempt.
Fisher r-to-z transformation: z assesses the significance of the difference between two correlation coefficients of subjects with vs. without history of suicide attempt.
* $z = -2.47$ ($p < 0.05$); † $z = 2.14$ ($p < 0.05$); ‡ $z = -3.1$ ($p < 0.01$); § $z = -2.79$ ($p < 0.01$); ¶ $z = -2.65$ ($p < 0.01$); ‖ $z = -3.04$ ($p < 0.01$); ** $z = -2.28$ ($p < 0.05$).

Table 2 Comparison of clinical variables between groups with vs. without history of suicide attempt

	Suicide attempt (n=52)	No suicide attempt (n=48)	*d*
Humiliation	2.97 (1.09)	2.39 (1.08)*	0.53
Interpersonal sensitivity	2.37 (1.17)	1.35 (1.01)*	0.93
Depression	2.91 (1.23)	1.93 (1.13)*	0.82
Perception of self	2.60 (0.89)	3.03 (0.92)†	0.47
Perception of future	2.63 (0.84)	2.90 (0.86)	0.31
Structured style	3.03 (0.97)	3.44 (0.98)	0.42
Social competence	3.12 (0.79)	3.22 (0.75)	0.12
Social resources	3.14 (1.18)	3.55 (1)	0.37
Family cohesion	2.85 (1.15)	3.4 (1.10)†	0.48

Data presented as mean (standard deviation).
Student's *t*-test: * $p < 0.01$; † $p < 0.05$.
$d > 0.5$, medium effect size; $d > 0.8$, large effect size.

and social resources vs. humiliation, interpersonal sensitivity, and depression have been found.

Relatively little research has focused on the relationship between suicide and humiliation, although some studies have highlighted it as an important risk factor. Humiliation is a core emotion of the experience of being bullied, which could lead to entrapment, hopelessness, depression, and suicidal behavior.[14] Adults who report bullying in childhood are more than twice as likely as other adults to attempt suicide later in life.[11]

Depression has clearly been reported as a strong psychopathological predictor of suicidal ideation.[4,30] Depression could play a mediating role in the relationship between feelings of defeat/humiliation and suicide attempt,[11] and these feelings can be reactivated by the recurrence of depression.[31,32]

Significant differences in Interpersonal sensitivity were found between the suicide and non-suicide groups in this study. This is consistent with previous findings that suggest interpersonal sensitivity as a personal risk factor for suicidal behavior.[15,17]

In this study, higher levels of resilience were found in the non-suicidal group. The role of protective factors and resilience to suicide has been reported in several studies.[33-35] Interestingly, two resilience dimensions – social resources and family cohesion – were involved in the different patterns of between-group correlations. Among suicidal patients, stress adversity, humiliation, and depression may be especially impairing to social resources and family cohesion; alternatively, fewer social resources and less family cohesion may render people more vulnerable to suicidal intentions.

These are the so-called "external resilience factors" in the sense reported by Friborg et al.,[28] i.e., those completely focused on external resources.[28] In particular, they may be defined as the personal perception that one's social and familial relationships are resources during a time of crisis. The family cohesion concept of the RSA describes the perception of having a good and well-organized family that is able to support one's personal needs during crises. Meanwhile, the social resources domain describes the perception of how one's friendships may help one face the adversities of life and how one may serve as a resource for others in similar situations. Family support plays an important role in preventing suicidal behavior,[35] and lower levels of perceived social support and social resources have been reported by persons with a history of self-injuries.[36] Negative correlations between risk and protective factors were seen in the group of subjects with history of suicide attempt. This correlation pattern and the between-group differences are consistent with the hypothesis of a "resilience failure," in which resilience mechanisms fail to buffer depression, interpersonal sensitivity, and humiliation, eventually predisposing to suicide ideation.[21]

All the correlations between risk and protection factors were negative in the suicidal subjects. This correlation pattern and the between-group differences are consistent with a "failure of resilience" in subjects with a history of suicide,

in which resilience mechanisms fail to buffer against depression, interpersonal sensitivity, and humiliation, eventually favoring suicide ideation. On the other hand, there were no significant negative correlations in the non-suicidal group: this suggests that resilience, acting as a trait, can reduce symptom severity. These data are also confirmed by the significant differences between the correlation patterns of the two groups. Specifically, resilience could act as a "compensatory" factor in this group,[37] but not as a protective factor, because there were no correlations with risk factors. The suicidal and non-suicidal correlation patterns likely describe these models ("compensatory" and "protective") within the buffering hypothesis of resilience. These variants of the buffering hypothesis should be explored further.[2,19]

The present study considered not only the different roles of resilience, but also its relationships to risk factors in clinical populations. To the best of the authors' knowledge, few studies have considered the different roles of resilience as buffering factors against suicidal ideation.[38]

The cross-sectional nature of this study may have limited our conclusions, and further investigations are needed to better analyze the role of psychopathological risk factors in suicide attempt.

Our findings suggest that resilience factors can modulate and reduce suicidal risk; in this context, assessment of both risk and protective factors could enhance the ability to intervene appropriately.[18] Suicide prevention strategies should aim to develop the psychological skills known to buffer the impact of risk factors and enhance resilience.[1,22]

Disclosure

The authors report no conflicts of interest.

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