

Research report

Mental pain and its communication in medically serious suicide attempts: An “impossible situation” ☆

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Abstract

Background: The study of near-fatal suicide attempters may provide insight into the minds of suicidal subjects. Our aim is to test the hypothesis that mental pain is a general risk factor for suicidal behavior and communication difficulties are a particular risk factor for medically serious suicidal behavior.

Methods: Thirty five subjects who made medically serious suicide attempts were compared with 67 medically not serious suicide attempters and 71 healthy controls. All were interviewed with the SCID-I and completed questionnaires covering mental pain, communication difficulties and seriousness of suicide attempt.

Result: Variables from the mental pain domain (e.g. depression) predicted the presence of suicidal behavior, and variables from the communication difficulties domain (e.g., self-disclosure) predicted the lethality and seriousness of the suicide attempts.

Limitations: Relatively small number of patients with medically serious suicide attempt and the relatively large number of questionnaires which may to some extent have diminished informant reliability.

Conclusions: Problems with sharing of feelings with others are an important risk factor for near-lethal suicide, over and above the contribution of psychiatric illness and mental pain, including depression and hopelessness.

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1. Introduction

There are inherent obstacles in studying suicide victims according to findings in suicide attempters, who differ from victims in a range of factors. To overcome these obstacles, researchers have attempted to apply alternative terminologies to suicide attempts, as parasuicide

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and deliberate self harm (DSH) (Kreitman, 1977; WHO, 1995) or to gather information on victims post factum (psychological autopsy) (Apter et al., 1993; Hawton et al., 1998). However, these approaches have been found inadequate or methodologically complex and costly. Moreover the lack of a personal interview means that intrinsic psychological characteristics cannot be assessed (Hawton et al., 1998).

A more promising strategy is to study individuals who have made a definite, near-fatal attempt, termed Medically Serious Suicide Attempt — MSSA; this group has been found to resemble completers fairly closely (Hawton, 2001; Beautrais, 2001). Thus the common features of MSSA and completed suicide include; current mood disorder, previous suicide attempts, prior psychiatric treatment, a history of psychiatric admissions, low income, and exposure to recent stressful events those related to legal and work issues. Both completers and MSSA differ from individuals who have made Medically Not Serious Suicide Attempts — MNSSA in showing less previous help seeking behavior and less previous suicide attempts (Shaun and Potter, 2001; Apter et al., 2008).

Data on psychological factors besides psychiatric disorders that can lead to suicide remain sparse. One of these is unbearable mental pain (“psychache”), related to the experience of hopelessness and depression (Shneidman, 1993; Orbach et al., 2003; Beck et al., 1985). Others include problems in help-seeking, social communication and self-disclosure, which appear to play a critical role in suicidal behavior in general and (Horesh et al., 2004) in serious suicidal attempts in particular (Apter et al., 2001).

The aim of this study was to test the hypothesis that the combination of unbearable mental pain and inability to signal distress can lead to a medically serious suicide attempt.

2. Method

2.1. Study sample

The study included 173 subjects (87 women and 86 men) aged 20–85 years, divided into three groups. (1) The research group consisted of 35 consecutive patients admitted to a university-affiliated medical center during 2004–2005 who met the criteria for a medically serious suicide attempt (MSSA), namely, more than 24 h of hospitalization for either treatment in a specialized unit (including the intensive care unit or burn unit), or surgery under general anesthesia (e.g., for tendon repair or stabbing injuries) (Beautrais, 2003). Their mean age was 39.7(SD=15.3) and the female/male ratio was 17/

18. (2) The comparison group consisted of 67 subjects who met the criteria for medically not serious suicide attempt (MNSSA), namely, emergency room or hospital admission for an overdose. Their mean age was 37.3 (Sd=14.0) and the female/male ratio was 36/31. (3) The control group consisted of 71 subjects without a psychiatric diagnosis or history of suicidal behavior. Their mean age was 36.5(Sd=14.0) and the female/male ratio was 34/37. All groups were matched for demographic variables. The two suicide groups were matched for psychiatric diagnosis.

2.2. Interviews and self-rating questionnaires

- ◆ The Structured Clinical Interview for the DSM-IV (SCID-IV; First et al., 1995) was used for diagnosis.
- ◆ The Lethality Rating Scale (LRS; Mann and Malone, 1997) was used to measure the lethality of the suicide attempt. The LRS is a set of interviewer-administered rating scales, including the Medical Damage Rating Scale (MDRS) designed by Beck et al. (1975), which rates the medical severity of a suicide attempt on a scale of 0 (fully conscious and alert) to 8 (death) according to the suicidal method used (shooting, jumping, drug overdose, etc.). Scores are based on the physical examination at hospital admission and review of the patient’s medical record.
- ◆ The Schedule of Life Events (SLE; Levav et al., 1981) is a 70-item self-report questionnaire covering major events experienced by the individual during the 24 months prior to the suicide attempt, including bereavement, loss, financial difficulties, work and study problems, psychical danger, and illness. The subject must check whether or not the event occurred and its impact on a 4-point Likert scale. It was slightly modified in the present study for Israeli conditions (with the addition of events related to terrorism, immigration, and war).

Mental pain was evaluated with three instruments.

- ◆ The Orbach and Mikulincer Mental Pain Scale (OMMP; Orbach et al., 2003) consists of 45 self-rated items divided into nine factors: (1) irreversibility, (2) loss of control, (3) narcissist wounds, (4) emotional flooding, (5) freezing, (6) self-estrangement, (7) confusion, (8) emptiness, and (9) social distancing. Subjects rate each item on a 5-point Likert scale, with higher values reflecting greater mental pain. In our sample, Cronbach alpha coefficients for first eight the OMMP factors ranged between .72 and .89. The social distancing factor was omitted from the data analysis because of its low Cronbach coefficient (.42).

We also used the well known Beck Depression Inventory (BDI; Beck & Steer, 1987) and the Beck Hopelessness Scale (BHS; Beck et al., 1974) to assess the symptoms of depression and the level of hopelessness which the individual experienced over the past month.

Communication difficulties were evaluated with four instruments.

- a) The Jourard Self-Disclosure Questionnaire (SDQ; Jourard, 1971) assesses self-disclosure with regard to five different persons in the subject's life: father, mother, girlfriend, boyfriend and stranger. It covers six areas of self-knowledge: attitudes and positions, interests, study and work, personality, finance, and body. Subjects are asked exactly how much they share these areas in their life with the people closest to them. Each item is rated on a 4-point scale. For the present study, we used a short version of this scale, with 40 items and two target individuals: close person and stranger. The internal reliability (alpha) of the short version was .95.
- b) The Toronto Alexithymia Scale (TAS-20; Bagby et al., 1994a) is a self-report measure covering three factors: difficulty identifying feelings, difficulty describing feelings, and externally oriented thinking. The scale consists of 20 items, each rated on a 5-point Likert scale. Results are presented as the mean item score, with a higher score indicating more alexithymic tendencies.
- c) The seven-item section of the Structured Clinical Interview for DSM-IV Personality Disorders (SCID-II) (Spitzer et al., 1990), which covers the symptoms and behaviors of schizoid personality disorder (SCHIZOID), was used in the present study. Each item is rated on a 3-point scale, with a higher score indicating a stronger schizoid tendency.
- d) We also used the known UCLA Loneliness Scale (ULS; Russel et al., 1980) was designed to detect variations in loneliness in everyday life.

The questionnaires were all administered in a random fashion by clinical psychologist (Y.L) over 2 sessions each lasting 1 h.

2.3. Data analysis

The Statistical Package for the Social Sciences (SPSS, version 15.0 for Windows) was used to create a database for data analyses.

In the first phase, multivariate analysis of variance (MANOVA) was performed to determine group differences on measures of mental pain and communication

difficulties. In the second phase, two dichotomous dummy variables were created for hierarchical regression analysis: the suicidal presence variable (PRESENCE) identified whether the participant had shown suicidal behavior or not; the suicidal seriousness variable (SERIOUSNESS) identified whether the suicidal participants had made a medically serious or non-medically serious suicide attempt, according to the criteria of Beautrais (2003). Three regression analyses were then performed, first using PRESENCE and then SERIOUSNESS or the LRS (Lethality Rating Scale) score as the dependent variable. The demographic and psychiatric variables that were found on MANOVA to be related to the dependent variable were entered into the first equation; variables from the domain of mental pain (OMMP, BDI, BHS) and the SLE were entered into the next equation; and the variables from the domain of communication difficulties (SDQ, TAS, SCHIZOID, ULS) were entered into the third equation. The variance attributable to each of these factors was then calculated.

3. Results

3.1. Participant characteristics

We examine series of demographic characteristics (e.g. Marital status, Living alone, Ethnicity). The only significant difference was the higher socioeconomic status (1–5 scale) of the healthy controls ($M=3.5$, $Sd=0.9$) over the two patient groups ($M=3.3$, $Sd=1.0$). In accordance with the selection process, there were no significant differences between the medically and medically not serious suicide attempters.

We also examine the psychiatric diagnoses in the two suicide attempter groups. The most common diagnoses were affective disorder, schizophrenia, and anxiety disorders. There was no significant difference between the groups in the distribution of diagnoses or in the number of psychiatric hospitalizations (MSSA: $M=4.6$, $Sd=4.3$; MNSSA: $M=3.9$, $Sd=4.1$) or in the numbers of suicide attempts in the past (MSSA: $M=3.7$, $Sd=4.1$; MNSSA: $M=3.9$, $Sd=5.0$).

Comparison of the characteristics of the suicide attempt between the two suicide attempter groups yielded several differences. As expected, the subjects who attempted medically serious suicide spent significantly more time in the general hospital (MSSA: $M=19$, $Sd=30$; MNSSA: $M=1.3$, $Sd=3.7$) and had significantly higher scores on the suicide intent scale (MSSA: $M=21.7$, $Sd=5.2$; MNSSA: $M=12$, $Sd=4.5$) and the LRS (suicide lethality) (MSSA: $M=5.5$, $Sd=1.0$; MNSSA: $M=1.6$, $Sd=1.3$). In general, the medically serious suicide

Table 1

Measures of mental pain and communication difficulties in medically serious and medically not serious suicide attempts and healthy controls ($N=173$)

Measures	Groups			
	MSSA ($n=35$)	MNSSA ($n=67$)	Controls ($n=71$)	$F(2,165)$
OMMP	3.86 ^a (0.80)	3.67 ^a (0.72)	2.74 ^b (0.77)	29.63***
BDI	36.11 ^a (14.28)	30.50 ^b (13.23)	5.72 ^c (6.29)	104.62***
BHS	3.26 ^a (0.92)	3.16 ^a (0.91)	2.15 ^b (0.50)	36.03***
SLE	10.35 ^a (5.47)	10.11 ^a (5.72)	7.88 ^b (3.80)	2.26
SDQ	2.57 ^b (0.42)	2.59 ^b (0.44)	2.02 ^a (0.52)	19.08***
TAS-20	2.14 ^c (0.56)	2.82 ^b (0.55)	3.19 ^a (0.63)	42.38***
SCHIZOID	7.62 ^c (1.93)	9.72 ^b (3.18)	12.23 ^a (3.12)	30.18***
ULS	2.91 ^c (0.64)	2.30 ^b (0.70)	1.67 ^a (0.46)	42.71***

OMMP=Orbach and Mikulincer Mental Pain Scale; BDI=Beck Depression Inventory; BHS=Beck Hopelessness Scale; SLE=Schedule of Life Events; SDQ=Self-Disclosure Questionnaire; TAS-20=Toronto Alexithymia Scale; SCHIZOID=Schizoid tendency (SCID-II); ULS=UCLA Loneliness Scale. ^a, ^b, ^c Significant differences in means on Tukey post hoc test ($p<.05$). *** $p<.001$. Note: all values given as mean, SD.

attempters were more likely to use violent methods (e.g. hanging and jumping), although this difference did not reach statistical significance.

3.2. Group differences

Table 1 compares the scores of the three groups on the mental pain and communication scales (MANOVA). In the domain of mental pain, all variables differentiated the suicide attempters from the healthy control subjects ($p<.001$). Between the two suicide attempter groups, a significant difference was noted only in depression score (BDI), which was higher in the subjects who attempted medically serious suicide ($p<.05$). In the domain of communication difficulties, all variables significantly differentiated suicide attempters from healthy

controls ($p<.05$), and medically serious from medically not serious suicide attempters ($p<.05$).

3.3. Hierarchical regression analysis

When the PRESENCE of suicidal behavior was used in the regression analysis as the outcome variable, the variables from the domain of mental pain had a significant effect and accounted for 48% of the variance. Specifically, the BDI had a B coefficient of 0.60, and the BHS, 0.12; the other independent variables were not significant. The variables from the domain of communication difficulties accounted for only 4% of the variance; significant values were found for the SCHIZOID scale ($B=0.18$) and the TAS-20 ($B=0.16$). The demographic variables of years of education and employment were entered into the first step

Table 2

Findings on multiple regression analysis for SERIOUSNESS of suicidal behavior and the Lethality Rating Scale (LRS) in medically serious and medically not serious suicide attempters ($N=102$)

Regression steps for LRS					Regression Steps for SERIOUSNESS				
Predictor variables	Step I		Step II		Step I		Step II		
	β	t	β	t	β	t	β	t	
Constant		1.39		2.10		2.29*		1.32	
OMMP	.20	.13	.03	.25	-.06	-.43	-.08	-.63	
BDI	.25	1.63	.05	.37	.19	1.24	-.05	-.36	
BHS	-.12	-.86	-.33	-2.62	.02	.15	-.23	-1.80	
SLE	.00	.02	-.01	-.12	.05	.42	.02	.23	
SDQ			-.35*	-3.03			-.19*	-1.61	
TAS-20			-.00	.00			.03	.21	
SCHIZOID			.15	1.21			.17*	.20	
ULS			.30*	2.17			.48***	3.45	
R^2	.05		.34**		.03		.33***		
ΔR^2	.05		.29**		.03		.30***		

OMMP=Orbach and Mikulincer Mental Pain Scale; BDI=Beck Depression Inventory; BHS=Beck Hopelessness Scale; SLE=Schedule of Life Events; SDQ=Self-Disclosure Questionnaire; TAS-20=Toronto Alexithymia Scale; SCHIZOID=Schizoid tendency (SCID-II); ULS=UCLA Loneliness Scale. * $p<.05$, ** $p<.01$, *** $p<.001$.

of the regression because they were found to be related to the dependent variable in a preliminary examination; they accounted for 11% of the variance.

When suicidal SERIOUSNESS or lethality (LRS) was used as the outcome variable, a different pattern of predictors emerged. When the Suicidal SERIOUSNESS was the dependent variable (Table 2), we found that the variables from the domain of mental pain had a non-significant effect and accounted for only 5% of the variance. However, the variables from the domain of communication difficulties accounted for 29% of the variance, yielding a highly significant result ($p < .001$). Specifically, significant B coefficients were found for the SDQ (−0.35) and the ULS (0.30). None of the demographic or psychiatric variables were related to the medical seriousness of the attempt.

We found similar pattern when the LRS was the dependent variable (Table 2). In this regression, variables from the domain of mental pain accounted for only 3% of the variance whereas variables from the domain of communication difficulties accounted for 30% ($p < .001$), with significant B coefficients for the SDQ (−0.19), the SCHIZOID scale (0.17), and the ULS (0.48). None of the demographic or psychiatric variables were found to be related to the lethality of the event.

4. Discussion

The most striking result of this study was that the major factor differentiating subjects who made medically serious suicide attempts from subjects who made medically not serious suicide attempts was difficulty in communication, as reflected by problems in self-disclosure, and also by the related constructs of schizoid traits, alexithymia, and loneliness. These findings were supported by the observation that the variables comprising the construct of mental pain (OMMP, BDI and BHS) distinguished between the suicidal and nonsuicidal groups, but not between the suicidal subjects with medically serious and medically not serious attempts, such that they were not predictive of the lethality of the suicide attempt. Similar results were obtained for stressful life events.

4.1. Role of communication

Sullivan (1953) proposed one of the first theories of psychological development based on interpersonal rather than intrapsychical relationships. Many authors consider the ability of the individual to communicate to others as vital to mental and physical health, competence, self-efficacy, and social adaptation (Jourard, 1964; Greenberg and Stone, 1992). Accordingly, com-

munication difficulties have been related to a wide gamut of psychopathologies, including anxiety, psychiatric illness, low self-esteem, and hostility (Jourard, 1971; Wei et al., 2005).

Theories of the relationship between social communication and suicide date back to Durkheim's (1951) classic concept of anomie, which suggested that persons who feel connected with their community are less likely to take their own life, even in face of great stress. At the same time, Stengel and Cook (1958), Kreitman (1977) and others emphasized the communicative value of low-lethal suicidal behavior. Gilligan and Machoian (2002) coined the phrase "learning the language of suicide" to describe the propensity of adolescent girls to engage in suicidal behaviors.

What happens when a suicidal individual cannot communicate his or her distress to others or use suicide as a vehicle to seek help? On the basis of the results of our study, we propose several possibilities. First, the distressed subject is unable to ask for assistance, and therefore does not receive any. Indeed, it is not unusual for a victim's suicide to come as a complete shock to friends and close relatives, who were completely unaware of the risk (Apter et al., 1993). Second, social communication may play a central role in organizing the intrapsychic response to perceived stress and anguish. Therefore, the person who cannot communicate fails to gain the proper mental perspective on his/her situation (Brown and Heimberg, 2001). Third, the lack of social support and ensuing loneliness aggravate an underlying psychopathology that leads to suicide (Sullivan, 1953; Wei et al., 2003).

Although the variables related to communication problems may be secondary to depression, which is a recognized factor in suicidal behavior, this is an unlikely explanation for our findings, since in our study, neither depression nor hopelessness alone successfully distinguished between the medically serious and medically not serious suicide attempters nor predicted the medical lethality of the suicide attempt. This finding is in line with our earlier study wherein the contribution of communication problems far surpassed that of depression (Apter et al., 2001). Though males are known to be poorer communicators in general, and worse at self-disclosure in particular, than females (Morgan, 2005), we can rule out gender as a confounding factor because the groups were matched for gender on sample selection.

Despite the large body of evidence supporting the role of mental pain, depression, and hopelessness in suicidal behavior and in deliberate self-harm, the involvement of these factors in the severity of the suicide attempt has hardly been investigated, and the few studies

that focused on this issue have yielded contradictory results. For example, Swahn and Potter (2001) reported that medically serious suicide attempts were characterized by less severe depression than medically not serious attempts, whereas Beautrais (2003) found the opposite. Our results seem to suggest that while mental pain is a contributory factor in both types of suicide, by itself, it is not sufficient to lead to a medically serious suicide attempt. The same is true for stressful life events.

4.2. The “impossible situation” and suicide

On the basis of our findings, we propose a model of serious suicidal behavior. Stressful life events induce mental pain in predisposed individuals and lead to suicidal thoughts and actions. If the individual is able to ask for help, either by verbal communication or by action (medically not serious suicide attempt), the process can be interrupted. If the individual is unable to ask for help, the situation becomes “impossible”. The pressure of other factors, such as aggression or anger (not tested for here), can then provoke a medically serious suicide attempt or an actual suicide (Apter et al., 1993). Thus, unrelieved mental pain produces an unbearable state which is potentially life-threatening.

Our findings have implications for general education and active screening for suicide prevention in populations with low rates of self-disclosure, such males (Morgan, 2005) and members of certain Northern European communities (compared to Latin or Hispanic communities). In addition, therapies aimed at improving interpersonal relationships, such as Interpersonal therapy (IPT), may be useful in the management of persons at risk for medically serious suicide attempts. This type of specific intervention would not only allow for prevention of seriousness, which is significantly linked more to difficulties of communication than to mental pain; but could also “open” a way to the treatment of mental pain. Overcoming difficulties of communication will allow the patient not only to speak about himself but also allow the helper to listen and enable the patient to understand that there is a “way out” from the unbearable sensation of being without escape (Baumeister, 1990).

There are limitations to our study which include the small number of subjects (overcome in part by having 2 comparison groups and the relatively large number of questionnaires which may to some extent have diminished informant reliability).

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Conflict of interest

No conflict declared.

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