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Suicide attempts and clinical severity of eating disorders: An exploratory study

Intentos de suicidio y la severidad de los desórdenes alimentarios: Un estudio exploratorio

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El presente estudio examina si existen diferencias en la alimentación desordenada y estudios clínicos en los pacientes con desórdenes alimentarios que han presentado intentos de suicidio y aquellos que no han intentado suicidio. 144 pacientes con desórdenes alimentarios (65 con anorexia nerviosa y 78 con bulimia nerviosa) completaron el inventario de desórdenes alimentarios (EDI; Garner, Omstead & Polivy, 1983), el Checklist de Síntomas – 90 – Revisado (SCL-90; Derrogatis, 1977) y un cuestionario para evaluar conductas alimentarias y actitudes, información acerca del suicidio y otros síntomas relacionados (PQB y TIB, Cost B6, 1994). Los pacientes con trastornos alimentarios que han tenido intentos de suicidio se diferencian de sus pares con respecto a la historia de su peso, promedio de ingesta compulsiva, utilización del vómito como medida de control del peso, uso de alcohol y psicotrópicos, patrones menstruales, actitud hacia el sexo, y en algunas de las subescalas del EDI y el SCL-90. Los resultados del presente estudio muestran que los intentos de suicidio se relacionan con algunos índices históricos de síntomas y severidad diagnóstica en ambos grupos de desórdenes alimentarios.

Palabras claves: Desórdenes alimentarios, anorexia nerviosa, bulimia nerviosa, intentos de suicidio.

The present study examines whether eating disorders patients with suicide attempts present differences in disordered eating and clinical traits compared to those without suicide attempts. A total of 144 patients with eating disorders (65 anorexia nervosa and 79 bulimia nervosa) completed the Eating Disorders Inventory (EDI; Garner, Omstead & Polivy, 1983), the Symptom Checklist –90– Revised (SCL-90; Derrogatis, 1977), and a questionnaire to assess eating behaviors and attitudes, information regarding suicide behaviors and other related traits (PQB and TIB (Machado & Soares, 2000); Cost B6 (Machado & Soares, 2000). Eating disorder patients with suicide attempts differed from there peers regarding to the weight history, mean of binge-purge attacks, use of vomiting to weight control, use of alcohol and psycho tropics, menstrual pattern, sexual attitude, and in some EDI and SCL-90 subscales. The findings of the current study show that suicide attempts are related to some indices of symptom history and severity for both diagnostic groups of eating disorders.

Keywords: Eating disorders, anorexia nervosa, bulimia nervosa, suicide attempts.

Introduction

Suicidal behavior incorporates a wide variety of acts, ranging from suicidal gestures to self-harm, attempted suicide or actual suicide. Frequency of suicide behavior tends to be rare before age 14, increasing during puberty and adolescence, reaching a peak around age 23 and remains constant until old age (Shaffer, Garland, Goula, Fisher & Trautman, 1988). Understandably, suicidal behaviors of adolescents and young adults generate a great deal of concern among public health officials, mental health practitioners, educators and the public at large.

Suicidal behavior was shown to be associated with psychological disorders like depression, substance abuse, eating disorders, posttraumatic stress disorder, personality disorders, and early onset of the first anxiety or depressive disorder (Warshaw, Massion, O, Peterson & Pratt 1995). Bulik, Sullivan, & Joyce (1999) concluded that suicide attempts are equally common in women with eating disorders and women with depression. Hentze and Engel (1991) reported a mortality rate of 23.8% in anorexia nervosa in 13.5 years follow-up study with 105 patients. Five of the 25 deaths were due to suicide, and the remaining patients died of anorexia-related medical complications.

Suicide attempts and suicidal behavior in eating disorders are commonly associated with emotional instability, interpersonal problems, self-damaging and impulsive behaviors, including alcohol and drug abuse, cognitive rigidity and perfectionism, body dissatisfaction, low self-esteem and feelings of chronic emptiness. The purpose of suicide seems to be and an escape and a cessation of an unbearable psychological pain.

In addition, those patients that attempt suicide tend to share characteristics that set them apart from those who don't attempt it. For example, Yamaguchi, Kobayashi, Tachikawa,

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Sato, Hori, Suzuki & Shiraishi (2000) showed that ED patients with suicide attempts had a more prevalent history of child abuse, affective instability, unstable self-image, avoidance of abandonment, maladaptive perfectionism, personality disorder, and mood disorder; however, the authors didn't find differences in symptomatological factors or the severity of the eating disorder.

Favaro and Santonastaso (1996) found that 13% of 495 out patients with ED reported at least 1 suicide attempt and 29% reported current suicidal ideation, and 26% of attempters reported multiple attempts. A history of suicide attempt was more prevalent among binge-eating/purging anorectics and among purging bulimics than in the other subgroups. Anorexia nervosa suicide attempters were older, had longer duration of illness, weighted less, had a more often used drugs and/or alcohol and tended to be more obsessive than non-attempters. In cases with bulimia nervosa, suicide attempters presented with more psychiatric symptoms and had more frequently been sexually abused.

The purpose of the current study was to: (1) evaluate the presence of suicide attempts in a clinical population with ED; (2) evaluate the severity of the clinical symptoms related to eating disorders; and, (3) evaluate severity of clinical symptoms associated with mental disorders. In this study we consider suicide attempts intentional and nonfatal behaviors resulting in risk for death.

Method

Participants

Participants were patients diagnosed with an eating disorder that sought help in one of the specialized treatment units at a Portuguese central hospital. Inclusion criteria was presence of anorexia nervosa (AN) or bulimia nervosa (BN), according with DSM-IV criteria (APA, 1994); exclusion criteria was comorbidity with other axis I disorders and personality disorders. We collected data from 144 female patients diagnosed with ED (DSM-IV). Sixty-five (45.1%) patients were diagnosed with anorexia nervosa, 42 (64.6%) restrictive subtype and 23 (35.4%) bingeing-purging subtype. Anorectic patients' age ranged from 13 – 25 years old (X=16.8; SD=13.4). Seventy-nine (54.9%) patients had a diagnosis of bulimia nervosa, 59 (74.7%) purging subtype and 20 (25.3%) non-purging subtype, their age ranged from 14 – 32 years old (X=21.5; SD=4.3).

Instruments

Therapist-interview at the beginning of treatment (Cost B6, c.f., Machado & Soares, 2000): a structured interview designed to assess eating behaviors and attitudes, essential clinical data and other relevant information to the development course of ED;

Patient-Questionnaire at the beginning of treatment (Cost B6, c.f., Machado & Soares, 2000): a self-report questionnaire to gather demographic information, eating pattern, history of the disorder including suicide attempts and other relevant information to the development course of eating disorders;

Eating Disorder Inventory (EDI; Garner, Olmsted & Polivy, 1983): Self report measure with 64 items in a six point format with 8 sub-scales: 3 to evaluate attitudes and behaviors concerning eating, weight and shape: (1) drive for thinness, (2) bulimia and (3) body dissatisfaction, and five subscales related to more general organizing constructs or psychological traits clinically relevant to ED: (1) ineffectiveness, (2) perfectionism, (3) interpersonal distrust, (4) interoceptive awareness and (5) maturity fears.

Symptom Checklist–90-R (SCL-90; Derrogatis, 1977): Self-report inventory in a five-point scale of distress, 9 primary symptom dimensions: (1) Somatization, (2) obsessive-compulsive, (3) interpersonal sensitivity, (4) depression, (5) anxiety, (6) hostility, (7) phobic anxiety, (8) paranoid ideation and (9) psychoticism and 3 global indices of distress: (1) global severity index, (2) positive symptom distress index and (3) positive symptom total.

Procedure

All patients completed the assessment measures at an intake interview. Clinical interviews were carried by the therapist assigned to each case, usually a psychiatrist, or a research assistant, a clinical psychology graduate student, trained in the procedure.

Results

Table 1 shows the frequency of suicide attempts in both groups of eating disorder patients, as well as the method chosen. A total of 12 (18.5%) anorectic and 25 (31.6%) bulimic patients reported history of suicide attempts, being medication overdose the most common behavior.

Table 2 presents the results of each patient group on the Symptom Checklist (SCL-90-R), and table 3 shows the results of the same groups on the Eating Disorder Inventory (EDI)

Results showed that anorectic patients with a history of suicide attempts scored significantly higher in Bulimia EDI subscale ($t_{5.28} = -2.42$, $p<0.10$) and in the depression SCL-90 subscale($t_{20.92} = -3.94$, $p<0.01$), than those who did not attempt suicide. Bulimic patients with a history of suicide attempts scored higher in Drive for Thinness ($t_{55.59} = 4.15$, $p<0.01$) than no-suicide attempters.

Finally, table 4 presents the frequency of impulsive behaviors sometimes associated with eating disorders.

Results showed that anorectic patients with a history of suicide attempts more frequently engage in self induced vomiting than their peers without a history of suicide attempts

Table 1: Frequency of suicide attempts in ED patients.

	AN (N=65)	BN (N=79)	Total (N=144)
Suicide attempts	12 (18.5%)*	25 (31.6%)*	37 (25.7%)*
Medication overdose	4 (6.2%)	15 (19%)	19 (11.7%)
Poison	0	1 (1.3%)	1 (0.6%)
Cut with knife	3 (4.6%)	0	3 (1.9%)

* The differences in total results are due to the non-respondents.

Table 2: Means and standard deviations of the SCL-90 scales for both groups of patients with ED (anorexia and bulimia nervosa) with and without suicide attempts.

	Anorexia nervosa		Bulimia nervosa	
SCL-90 subscale	With suicide attempts	Without suicide attempts	With suicide attempts	Without suicide attempts
Somatization	2.28 (0.59)	1.36 (0.68)	1.68 (0.92)	1.85 (0.80)
Obsessive-compulsive	2.16 (0.60)	1.68 (0.75)	2.18 (0.65)	1.88 (0.80)
Interpersonal sensitivity	2.25 (0.69)	2.00 (0.79)	2.41 (0.69)	1.92 (0.93)
Depression	2.47 (0.38)*	1.76 (0.78)	2.25 (0.70)	1.96 (0.73)
Anxiety	2.16 (0.49)	1.45 (0.83)	2.07 (0.58)	1.79 (0.72)
Hostility	2.10 (0.93)	1.66 (0.97)	2.10 (0.88)	1.51 (0.76)
Phobia	1.36 (0.71)	0.74 (0.61)	1.21 (0.73)	0.82 (0.67)
Paranoid Ideation	2.10 (0.57)	1.38 (0.69)	1.87 (0.66)	1.50 (0.83)
Psychoticism	1.59 (0.40)	1.32 (0.65)	1.57 (0.75)	1.39 (0.71)
Add	16.38 (4.47)	12.44 (5.58)	16.17 (5.85)	14.07 (5.42)
GSI	2.17 (0.53)	1.53 (0.64)	1.98 (0.54)	1.72 (0.65)
Total	194.00 (45.96)	14.17 (59.56)	176.41 (48.72)	154.72 (58.64)

*p<0.05

Table 3: Means and standard deviations of the EDI scales for both groups of patients with ED (anorexia and bulimia nervosa) with and without suicide attempts.

	Anorexia nervosa		Bulimia nervosa	
EDI subscale	With suicide attempts	Without suicide attempts	With suicide attempts	Without suicide attempts
Drive for thinness	17.57(6.47)	11.57 (7.57)	20.33 (2.91)*	5.48 (6.00)
Interpersonal distrust	7.00 (5.40)	5.52 (3.76)	6.78 (5.07)	5.56 (4.75)
Perfectionism	7.48 (2.99)	5.48 (3.60)	7.87 (4.15)	5.83 (4.06)
Bulimia	8.17 (6.62)**	1.55 (2.90)	13.44 (4.71)	1.68 (5.83)
Maturity fears	7.14 (5.98)	8.21 (5.17)	8.43 (4.96)	5.18 (4.33)
Interoceptive awareness	12.14 (7.31)	8.61 (6.37)	11.70 (4.50)	9.26 (5.58)
Body dissatisfaction	8.57 (6.55)	10.67 (7.00)	19.67 (6.35)	13.5 (8.08)
Ineffectiveness	10.14 (8.88)	7.86 (6.48)	16.17 (7.67)	9.23 (7.14)
Total	75.20 (23.70)	58.56 (31.96)	104.37 (21.49)	4.34 (29.14)

*p<0.001
**p<0.005

(Fisher's exact test, p<0.01); and that bulimics without a history of suicide attempts were more likely to abuse alcohol than non suicide attempters (Fisher's exact test, p<0.05).

Discussion

In the current study we found a relatively high prevalence of history of suicide attempts in both diagnostic groups of eating disorders. We found a higher prevalence of suicide attempts in bulimia nervosa group than in the

Table 4: Frequency of reported impulsive behaviors in eating disorder patients with (WSA) and without (WoSA) history of suicide attempts.

	Anorexia Nervosa N= 65		Bulimia Nervosa N= 79	
	WSA	WoSA	WSA	WoSA
Vomit				
yes	6*	6	23	45
no	6	45	2	9
Laxatives				
yes	2	44	4	13
no	10	50	21	41
Binges				
yes	6	11	24	51
no	6	40	1	3
Alcohol abuse				
yes	1	4	0	8**
no	11	47	25	46
Drug abuse				
yes	0	0	1	2
no	12	51	24	52

*p<0.01; ** p<0.05

anorectic. Both groups of eating disorder patients with suicide attempts presented a more chaotic eating pattern (i.e., more binge eating/purge attacks) that may reflect a larger spectrum of impulsivity.

The anorexia nervosa group with suicide attempts also had a significantly highest result in the EDI bulimia subscale that supports the tendency to think about and to engage in episodes of uncontrollable overeating, differentiating the bulimic and restricting subtypes.

On the other hand, the bulimic subgroup with suicide attempts had a significantly highest result in the drive for thinness EDI subscale, revealing a most excessive concern with dieting, preoccupation with weight and fear of weight gain.

Results show that the presence suicide attempts in eating disorders patients might be an indicator for the severity of the patient's general psychopathology. Bulimia patients with suicide attempts revealed more concern with weight and diet, and also more desire to loose weight, and anorectic patients with these behaviors showed more symptoms of depression and bulimia than their peers without suicide attempts.

In summary, our study shows that history of suicide attempts behavior is frequent amongst eating disorder patients that are treated in specialized clinical centers. Our findings also suggest this behavior in eating disorders might be related not only to highest degrees of eating psychopathology but also general psychopathology, which puts these patients in an increased risk for suicide attempts. Suicide attempts seemed to be related to highest degrees of severity in both anorexia and bulimia nervosa.

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