Psychiatria Danubina, 2019; Vol. 31, Suppl. 3, pp 509-511 *Conference paper*

EATING DISORDERS: THE ROLE OF CHILDHOOD TRAUMA AND THE EMOTION DYSREGULATION

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SUMMARY

Background: *The present retrospective case-control study is aimed at evaluating the presence of childhood traumatic factors and the difficulty in regulating emotions, within a sample of patients with eating disorders compared to the group of healthy controls.*

Subjects and methods: *We included 65 people assessed for eating disorders, 40 patients and 25 healthy controls, who were given two tests: the Childhood Trauma Questionnaire-Short Form (CTQ-SF) to investigate the presence of traumatic events and the Difficulties in Emotion Regulation Scale (DERS) to assess the emotional regulation.*

Results: *People with eating disorders showed higher average scores, and therefore greater severity than the control group, in all the domains explored, both considering traumatic experiences and emotional dysregulation. The domain emotional neglect showed the closest correlation with eating disorders (average scoring 15.9 vs 9.9 of healthy controls), followed by emotional abuse (12.2 vs 7.8), physical neglect (8.2 vs 6.6), physical abuse (8.3 vs 6.6) and sexual abuse (7.2 vs 5.6). In the same way, the emotional dysregulation was greater among people with eating disorder than healty controls, concerning every items explored by DERS, as clarity (average scoring 14.8 vs 11.4), awareness (17.1 vs 11.7), goals (16.3 vs 12.9), strategy (22.0 vs 14.7), non acceptance (17.4 vs 12.1) and impulse (16.5 vs 11.4).*

Conclusions: *Childhood traumatic experiences and emotional dysregulation result significantly higher in people with eating disorders than healthy controls.*

Key words: *eating disorders - childhood trauma - emotional dysregulation*

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INTRODUCTION

Eating disorders (ED) are a group of heterogeneous clinical conditions, characterized by an altered food intake that results in an impairment of psychological or physical health. The major clinical entities classified within the DSM V are Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED), and Not Otherwise specified Eating Disorder (NOSFED) (APA 2013). ED would be an expression of dysfunctional individual and relational patterns, supported by emotional and behavioral dysregulation (Cimbolli et al. 2017). Moreover, childhood trauma is associated with a high level of emotional dysregulation, dissociation and behavioural problems. Dissociation can be seen as a failed regulatory strategy, used to cope with emotions, which exceed the resistance skills of a person. A "traumatic event" is a stressful event, which is stronger than individual resistance (van der Kolk 1996). The relationship between psychological trauma and eating disorders has been investigated by clinicians and researchers, who observed a higher rate of traumatic history in individuals with eating disorders than the general population (Brewerton 2007). Typical behaviours of eating disorders (for example severe food restriction, binge eating, elimination behaviours) are aimed at escape and avoidance cognitions and emotions related to the trauma, thus promoting maintenance of the eating disorder and symptoms related to trauma. The association between other serious adverse experiences (for example, emotional abuse in childhood) and psychopathology of eating disorders has also been investigated (Trottier & MacDonald 2017). Specifically, child sexual abuse (CSA) could be a strong predictor of development of eating disorders such as bulimia or binge eating symptoms. Patients with ED may often have superimposed symptoms such as anxiety, depression and post-traumatic stress disorder. In particular, some characteristic symptoms of PTSD can also be found in patients with eating disorders. Behaviours such as purging, could be a manifestation of dissociation, to avoid or regulate symptoms resulting from a post-traumatic stress disorder. In other words, the maintenance of atypical eating behaviours could be the expression of a maladaptive response related to a previous trauma. Therefore, physical and sexual abuse in children increases the likelihood of an eating disorder, which can promote the onset of mental disorders (Armor et al. 2016).

SUBJECTS AND METHOD

The present sample consists of sixty-five patients, recruited from the psychiatric hospital clinic and other eating disorders centres in the area, evaluated to investigate the presence of EDs. Specific tests have been administered for eating disorders, such as Eating Attitude Test (EAT), Bulimia Test - Revised (BULIT-R),

Binge Eating Disorder (BES) and, later, Childhood Trauma Questionnaire-Short Form (CTQ-SF) and Difficulties Emotion Regulation Scale (DERS) to investigate the presence of traumatic experiences in childhood and the difficulty in regulating emotions, respectively. CTQ-SF consists of 28 items, exploring five different traumatic domains, such as Emotional abuse, Physical abuse, Sexual abuse, Emotional neglect and Physical neglect. Instead, DERS consists of 36 multiple choice items, containing six evaluation subscales (Non acceptance, Goals, Impulse, Awareness, Strategies, Clarity). The socio-demographic and clinical characteristics of the subjects were then analysed by using descriptive statistical analysis and the average score differences between the affected subjects and the healthy control group by using the Student's t-test, considering significant test results with $p<0.05$.

RESULTS

The sample was composed by sixty-five subjects, nine males and fifty-six females, with an average age of 39.3 years. 40 people were affected by ED and 25 people were not affected. The most frequent ED diagnosis was BED, followed by NOSFED (Table 1).

Table 1. Diagnosis distribuction of Eating Disoerders

	Subjects	Percentage
Binge Eating Disorder (BED)	17	42.5%
Not Otherwise Specified Eating Disorder (NOSFED)	15	37.5%
Anorexia nervosa (AN)	6	15.0%
Bulimia nervosa (BN)	2	5.0%
Total	*40*	*100.0%*

The analysis of average score differences between Eating Disorders (ED) and Healthy Controls (HC) showed more severe childhood traumatic experiences in the first group than in the second one. The difference was statistically significant in the items emotive abuse and emotive neglect (Table 2).

Table 2. CTQ-SF average score differences between Eating Disorders (ED) and Healthy Controls (HC)

	ED	HC	p value
Emotive Abuse	12.2	7.8	$p<0.05$
Physical Abuse	8.3	6.6	
Sexual Abuse	7.2	5.6	
Physical Neglect	8.2	6.6	
Emotive Neglect	15.9	9.9	$p<0.05$

In the same way, difficulties in emotion regulation was significantly greater for patients with Eating Disorders (ED) than Healthy Controls (HC), concerning every item explored by DERS test (Table 3).

Table 3. DERS average score differences between Eating Disorders (ED) and Healthy Controls (HC)

	ED	HC	p value
Summary	104.1	74.6	$p<0.05$
Non acceptance	17.3	12.1	$p<0.05$
Goals	16.3	12.9	$p<0.05$
Impulse	16.4	11.3	$p<0.05$
Awareness	17.1	11.7	$p<0.05$
Strategy	22.0	14.7	$p<0.05$
Clarity	14.9	11.4	$p<0.05$

DISCUSSION

The presence of traumatic childhood experiences was significantly greater in the group of subjects suffering from eating disorders than in the control group; in particular every domain explored by CTQ-SF showed a higher average score in the group of affected subjects. These results appear substantially in agreement with several evidences in the literature. Tagay (2014) showed that in a sample of patients with eating disorders, potential traumatic events were present in almost all cases. Other studies state that the probability of developing an eating disorder is more than three times greater for people who have suffered any kind of child abuse than the general population; BED and BN seem to have a stronger association with childhood traumatic experiences than other EDs (Caslini et al. 2015). There is still limited evidence regarding the individual types of abuse in relation to specific eating disorders, however, AN and BN would seem to be more related to emotional abuse than other types of abuse (Molendijk et al. 2017). Furthermore, several studies confirm that child sexual abuse and child physical abuse, are configured as risk factors for the development of eating disorders (Moulton et al. 2015). Difficulties in regulating emotions are also related to eating disorders (Fox & Power 2009); there is evidence in the literature that disorganized eating behaviours can be configured as attempts to deal with negative emotions (Cooper et al. 2004, Corstorphine et al. 2006). Some evidences have shown that emotional dysregulation can follow traumatic events and become the link between them and eating disorders, resulting in anger, dissociative experiences, impulsiveness and compulsiveness (Burns et al. 2012, Trottier & MacDonald 2017). This study has several limitations, due, for example, to the low sample size and to the analysis of eating disorders as a whole. However, in agreement with several scientific evidences, we can retrospectively state that people suffering from eating disorders show traumatic experiences and emotional dysregulation rates, significantly higher than healthy controls.

CONCLUSIONS

Childhood traumatic events and difficulties in regulating emotions are configured as risk factors for

development of eating disorders. Given the frequency and involvement of increasingly younger patients in eating disorders, it seems necessary to continue studying, more specifically, the relationship between childhood traumatic experiences, emotional dysregulation and eating disorders on larger samples.

Acknowledgements: *None.*

Conflict of interest: *None to declare.*

Contribution of individual authors:

Filippo Brustenghi, Francesca Alice Fiore Mezzetti, Cristina Di Sarno, Cecilia Giulietti & Patrizia Moretti wrote the first draft of the manuscript.

Filippo Brustenghi & Cecilia Giulietti wrote substantial part of the introduction.

Filippo Brustenghi & Francesca Alice Fiore Mezzetti wrote substantial part of methods.

Filippo Brustenghi, Cristina Di Sarno & Cecilia Giulietti wrote substantial part of results.

Filippo Brustenghi & Cecilia Giulietti discussed results.

Patrizia Moretti & Alfonso Tortorella corrected the first draft of the manuscript.

Patrizia Moretti supervised all phases of the study design and writing of the manuscript.

Filippo Brustenghi, Francesca Alice Fiore Mezzetti, Cristina Di Sarno, Cecilia Giulietti & Patrizia Moretti supervised the writing of the manuscript.

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