



La comorbilità affettiva nei Disturbi dell'Alimentazione

Giovanni Abbate Daga

Università degli Studi di Torino

Dipartimento di Neuroscienze

SC Centro Esperto regionale DCA

AOU Città della Salute e della Scienza

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**UNIVERSITÀ
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Outline

Comorbilità disturbi dell'alimentazione e disturbi dell'umore

Caratteristiche cliniche dei disturbi dell'umore nei disturbi dell'alimentazione

Patogenesi

Trattamento

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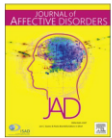
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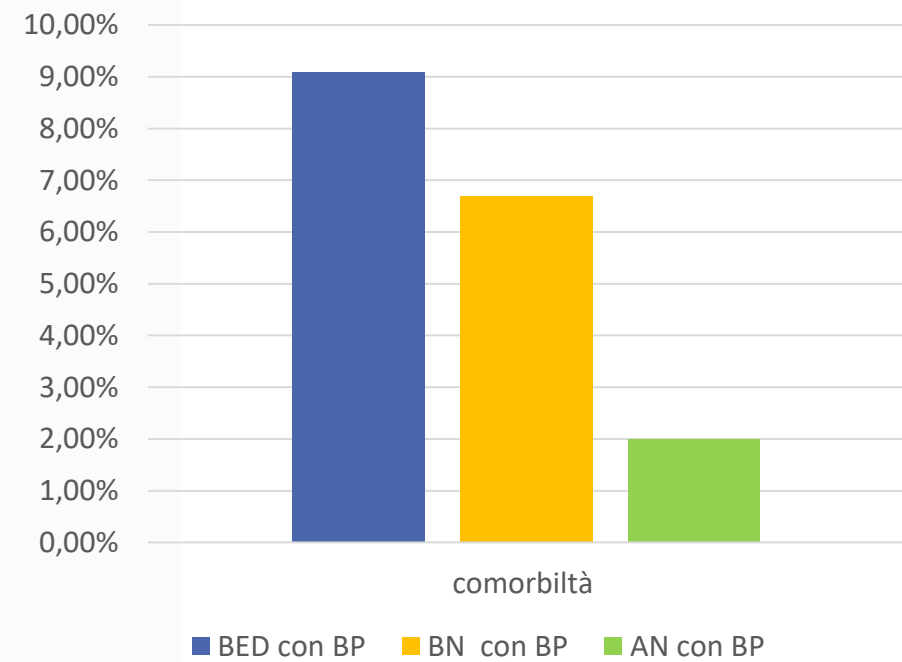
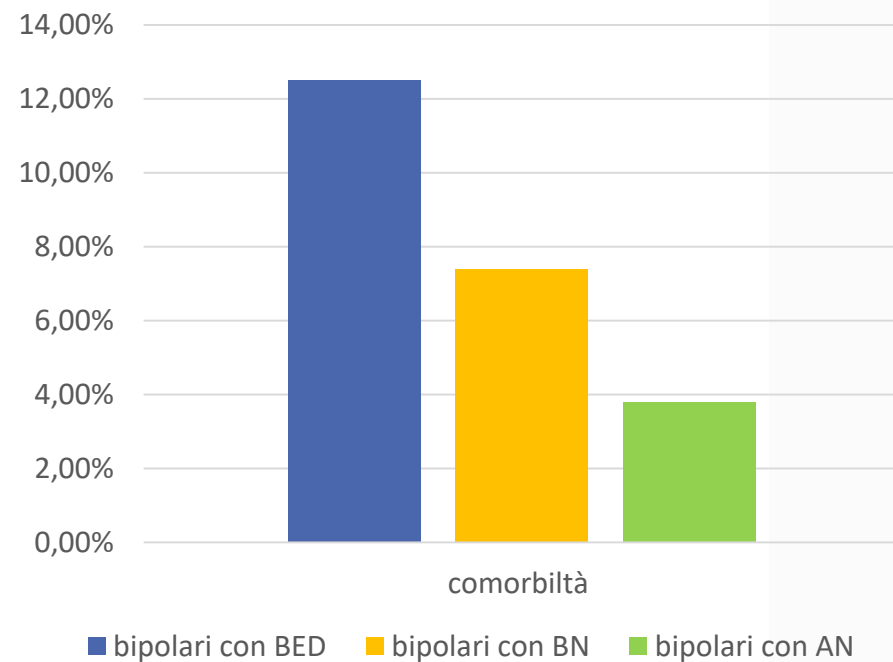


Research paper

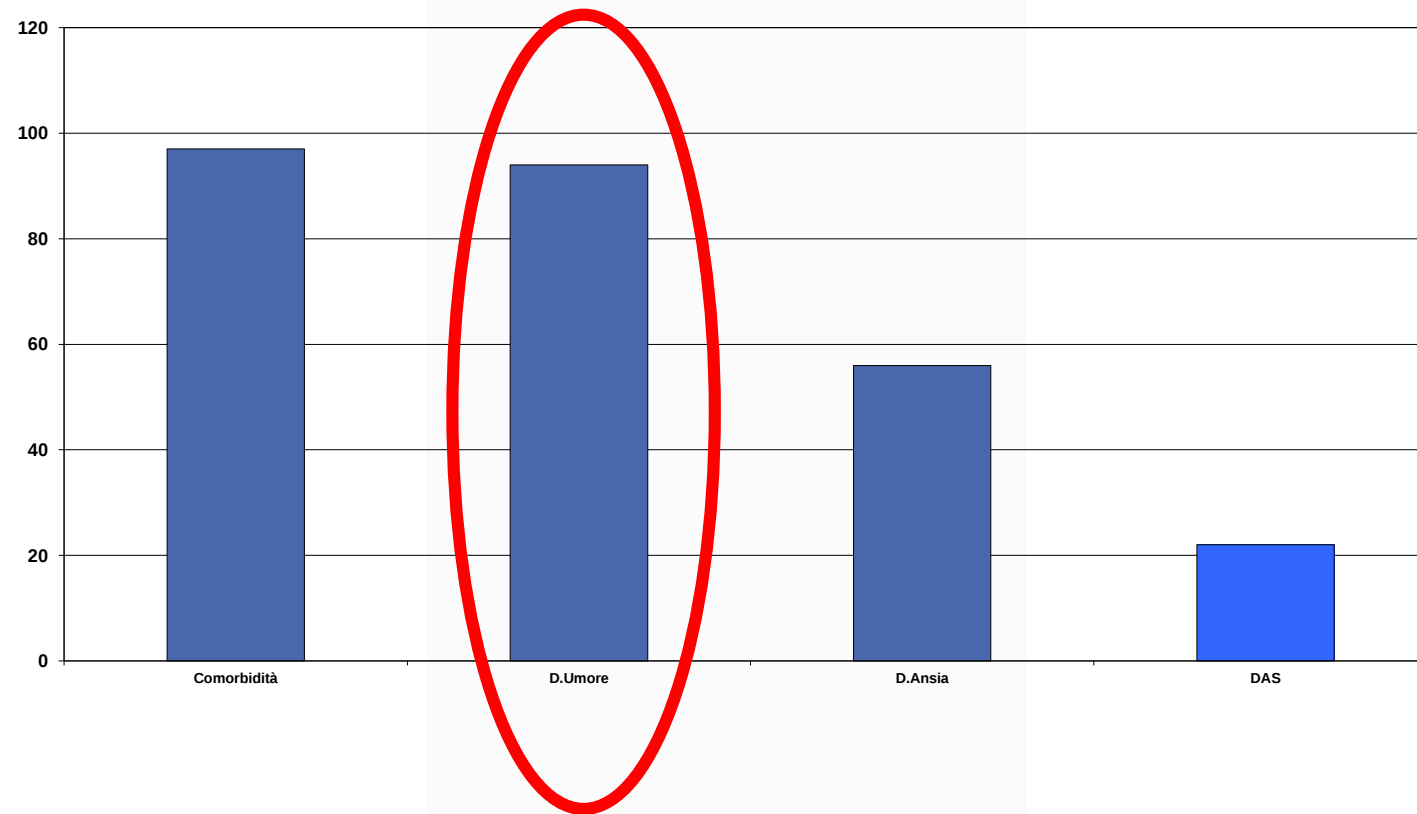
The prevalence, odds and predictors of lifespan comorbid eating disorder among people with a primary diagnosis of bipolar disorders, and vice-versa: Systematic review and meta-analysis

Michele Fornaro^{a,b,*}, Federico Manuel Daray^{c,*}, Fernando Hunter^c, Annalisa Anastasia^b, Brendon Stubbs^{d,e}, Domenico De Berardis^{b,f}, Jae Il Shin^g, Muhammad Ishrat Husain^{h,i}, Elena Dragioti^{j,k}, Paolo Fusar-Poli^{l,m,n,o}, Marco Solmi^{l,p,q}, Michael Berk^{r,s,t,u}, Eduard Vieta^v, André Ferrer Carvalho^{h,i}





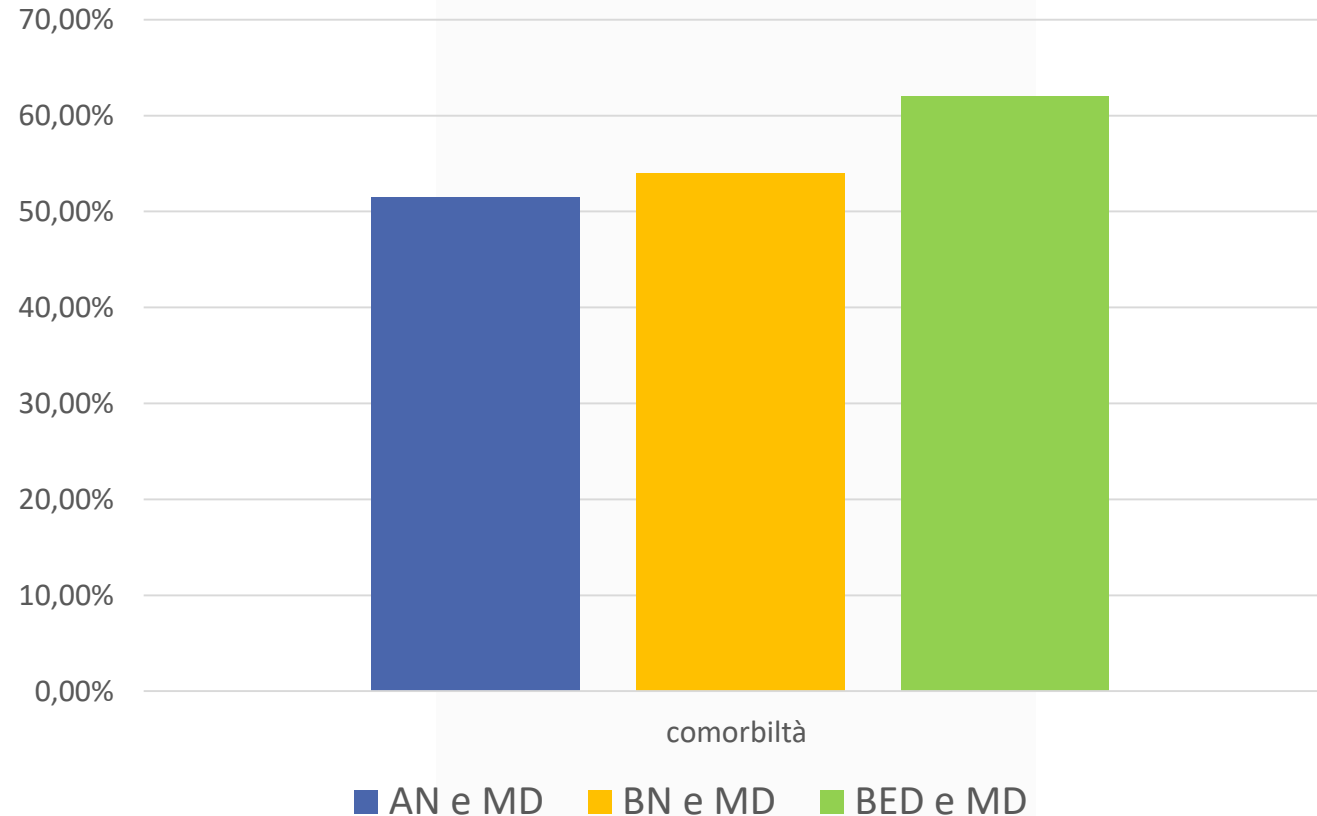
Comorbidità Eating Disorders





Psychiatric and medical comorbidities of eating disorders: findings from a rapid review of the literature

Ashlea Hambleton^{1*}, Genevieve Pepin², Anvi Le³, Danielle Maloney^{1,4}, National Eating Disorder Research Consortium, Stephen Touyz^{1,4} and Sarah Maguire^{1,4}



Mental Illness and Psychotropic Medication use Among People Assessed for Bariatric Surgery in Ontario, Canada

Jennifer Hensel^{1,2} • Melanie Selvadurai¹ • Mehran Anvari³ • Valerie Taylor^{1,2}

1534

Table 1 Prevalence of past or present mental illness as assessed on the psychological assessment (*N*=10,698)

Mental illness	Number	Percent
Any mental illness	5420	50.7
Attention-deficit disorder	201	1.9
Bipolar disorder	233	2.2
Isoregime personality disorder	36	0.3
Depression	4460	41.7
Panic disorder	161	1.5
Addiction (substance not specified)	186	1.7
Post traumatic stress disorder	343	3.2
Anxiety (type not specified)	2294	21.4

Table 2 Reported psychotropic medication use overall and by class

Medication class	Number ^a	% of total population (<i>N</i> =10,698)	% of all taking any psychotropic medication
Any psychotropic medication	4052	37.9	100
Any antidepressant	3811	35.6	94.1
Any neuroleptic	455	4.1	10.7
Selective serotonin reuptake inhibitor (SSRI)	2016	18.8	49.8
Serotonergic norepinephrine reuptake inhibitor (SNRI)	1255	11.7	31.0
Bupropion	647	6.0	16.0
Mirtazapine	59	0.5	1.5
Tricyclic antidepressant (TCA)	436 ^b	4.1	10.8
Monoamine oxidase inhibitor (MAOI)	3	0.0	0.0
Mood stabilizer	175	1.6	4.3
Stimulant	94	0.9	2.3
Trazodone	336	3.1	8.3
Other psychiatric	204	1.9	5.0

Prevalence of Overweight and Obesity in People With Severe Mental Illness: Systematic Review and Meta-Analysis

TABLE 2 | Pooled prevalence of overweight obesity and combined overweight and obesity according to SMI, geographical region, World Bank classification and year of publication.

	Overweight	Obesity	Combined prevalence of overweight and obesity
Number of studies	108	120	108
Overall pooled prevalence (95%CI)	31.2% (28.9-32.1)	25.9% (23.3-29.1)	60.1% (55.8-63.1)
Heterogeneity I ²	97.1%	88.3%	98.1%
τ^2	0.11	0.55	0.47
P	<0.01	<0.01	<0.01
Type of SMI			
Any SMI ¹	32.9% (31.2-34.7)	25.4% (20.1-31.7)	61.2% (56.3-65.7)
Bipolar disorder	31.1% (28.8-33.8)	27.5% (22.6-33.1)	60.7% (55.8-65.2)
Schizophrenia	29.8% (27.4-32.2)	25.5% (22.2-29.3)	58.6% (53.5-63.6)

Re-examining premature mortality in anorexia nervosa:
A meta-analysis redux

La morte per suicidio rappresenta il 20% dei decessi

Più a rischio all'esordio o dopo decenni

**Il rischio di suicidio è aumentato di 18.1
volte rispetto alla popolazione sana di
riferimento (15-34 anni)**



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Journal of Affective Disorders

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Research report

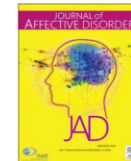
Hypomania across the binge eating spectrum. A study on hypomanic symptoms in full criteria and sub-threshold binge eating subjects

Federico Amianto, Luca Lavagnino*, Paolo Leombruni, Filippo Gastaldi, Giovanni Abbate Daga, Secondo Fassino

Results: Full criteria BED subjects were more likely to be female and showed higher HCL-32 scores and lower scores in character dimensions (Self-directedness and Cooperativeness) compared to s-BED subjects. A logistic regression with Eating Disorder Diagnosis as outcome measure (BED or s-BED) revealed that lower Cooperativeness, higher Hypomania scores and female sex predicted having BED full criteria.

Limitations: Further research is necessary to replicate these findings in a larger sample.

Conclusions: Patients with more severe binge eating might be more likely to have a comorbid bipolar spectrum disorder. Hypomanic symptoms should be assessed and mood stabilizing treatment should be considered in these patients.



Research paper

Exploring the relationship between problematic eating behaviors and bipolar disorder: A study on candidates for bariatric surgery

Claudia Carmassi, Laura Musetti, Erika Cambiali*, Miriam Violi, Marly Simoncini, Sara Fantasia, Leonardo Massoni, Gabriele Massimetti, Monica Nannipieri, Liliana Dell'Osso

Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy

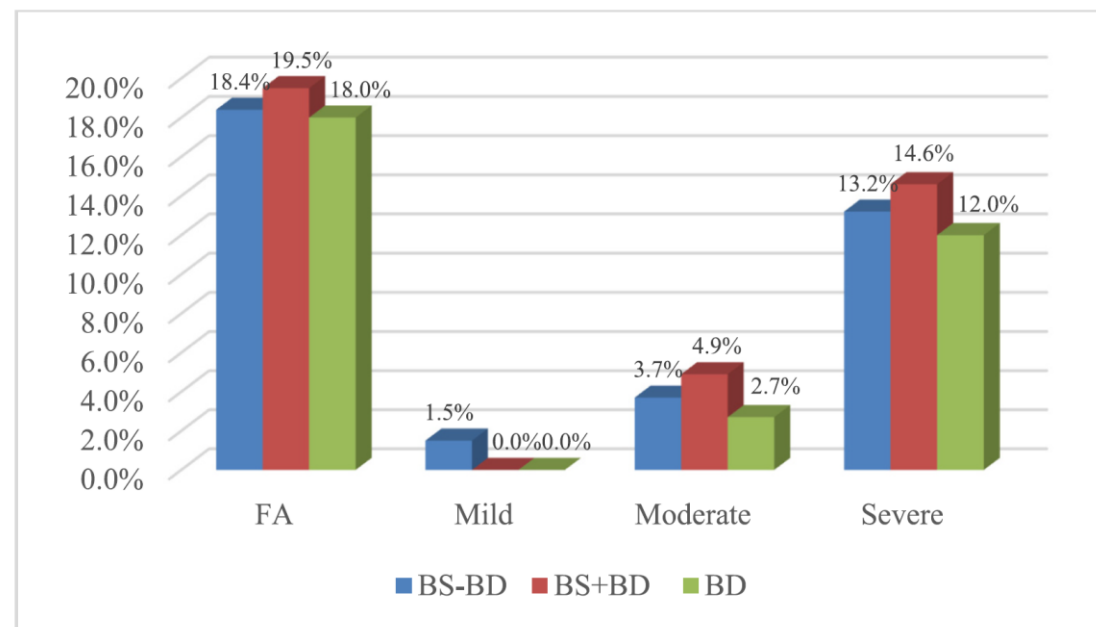
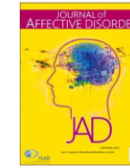
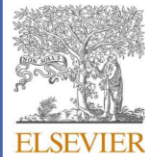


Fig. 1. Prevalence of FA according to Y-FAS 2.0 in three groups.



Research paper

Affective temperaments and obesity: Is there an association with binge eating episodes and multiple weight cycling?

Elena Scumaci ^a, Enrica Marzola ^{b,1,*}, Giovanni Abbate-Daga ^{b,2}, Marianna Pellegrini ^{a,3},

Table 3

Associations between affective temperament tracts (expressed as z-scores) and the risk of episodes of binge eating and weight cycling.

	Risk of episodes of binge eating	
	OR; 95% CI	p
Age (years)	0.98; 0.96-1.00	0.044
Male gender (%)	1.10; 0.50-2.42	0.82
Active smokers (%)	1.85; 0.81-4.20	0.14
HbA1c (mmol/mol)	0.97; 0.93-1.01	0.14
HDL-cholesterol (mg/dL)	1.03; 0.99-1.06	0.10
BDI score	1.16; 1.07-1.25	<0.001
STAI-state score	0.99; 0.96-1.02	0.55
z-score TEMPS-A Depressive	1.20; 0.76-1.97	0.43
z-score TEMPS-A Cyclothymic	1.61; 1.06-2.46	0.025
z-score TEMPS-A Hyperthymic	0.60; 0.44-0.81	<0.001
z-score TEMPS-A Irritable	1.00; 0.70-1.43	0.99
z-score TEMPS-A Anxious	0.76; 0.48-1.19	0.23
	Risk of multiple weight cycling	
	OR; 95 CI	P
Active smokers (%)	2.04; 1.96-3.92	0.032
BES score	1.01; 0.98-1.04	0.64
BDI score	1.04; 0.97-1.10	0.26
STAI-state score	1.00; 0.98-1.02	0.93
z-score Depressive	0.75; 0.51-1.09	0.12
z-score Cyclothymic	1.32; 0.92-1.88	0.13
z-score Hyperthymic	0.76; 0.58-0.99	0.044
z-score Irritable	1.01; 0.71-1.44	0.95
z-score Anxious	1.27; 0.87-1.86	0.21

Legend: TEMPS-A: Temperament Evaluation of Memphis, Pisa, Paris and San Diego Auto-questionnaire; BDI: Beck Depression Inventory; BES: Binge eating scale; STAI: State-Trait Anxiety Inventory.

Affective temperament in AN



Differences in affective temperaments between anorexia nervosa variants and healthy controls.

	Restricting variant (R-AN, n=64)	Bulimic variant (BP-AN, n=34)	Healthy controls (HCs, n=131)	Test statistics		Tukey Post-hoc
	Mean (SD)	Mean (SD)	Mean (SD)	F	p	
TEMPS-A						
Depressive	12.71(4.32)	13.94(3.23)	6.9(3.18)	88.092	< 0.001	HC < R-AN,BP-AN R-AN = BP-AN
Cyclothymic	8.68(5.04)	11.29(4.26)	6.21(4.15)	20.063	< 0.001	HC < R-AN, BP-AN BP-AN > R-AN
Hyperthymic	6.61(4.26)	6.71(4.27)	9.31(4.1)	11.485	< 0.001	HC > R-AN, BP-AN R-AN = BP-AN
Irritable	6.43(4.16)	7.58(4.33)	4.54(3.54)	10.895	< 0.001	HC < R-AN, BP-AN R-AN = BP-AN
Anxious	12.81(5.49)	15.91(4.41)	7.82(4.84)	45.930	< 0.001	HC < R-AN, BP-AN BP-AN > R-AN



Mediation models of anxiety and depression between temperament and drive for thinness and body dissatisfaction in anorexia nervosa

Allan Jérolon¹ · Vittorio Perduca¹ · Nadia Delsedime² · Giovanni Abbate-Daga² · Enrica Marzola²

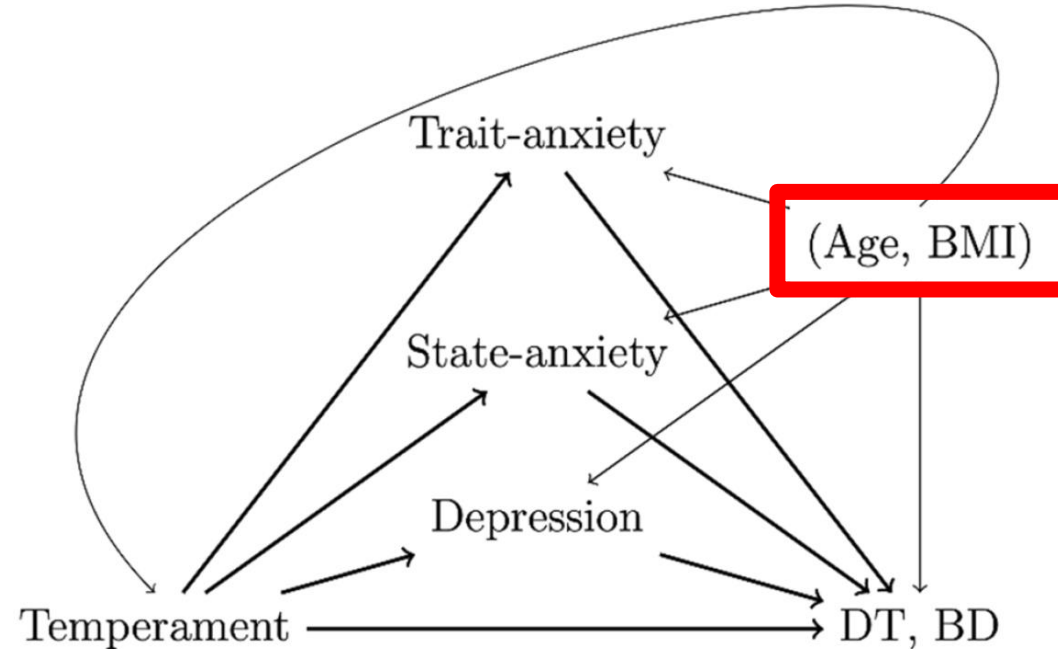


Fig. 1 Directed Acyclic Graph (DAG) showing the causal assumption between the variables of interest

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Prevalence of Eating Disorders in Patients with Bipolar Disorder: A Scoping Review of the Literature

Course	Early onset of mood disorder
	Large number of depressive episodes
	Fast cycling
Complications	Suicidal attempts
	Increased weight/High BMI
	Obesity

Major Depression and Avoidant Personality Traits in Eating Disorders

*Giovanni Abbate Daga^a, Carla Gramaglia^a, Ursula Bailer^{b, c},
Stefania Bergese^a, Enrica Marzola^a, Secondo Fassino^a*

693 casi

44% prevalenza di Depressione Maggiore

20% ha sintomi sottosoglia

Depressione **correla con gravità e con condotte purging**

Due cluster:

- presenti sintomi disforici e rabbia**
- Presenti inibizione ed evitamento**

Diagnostic Concordance between Research and Clinical-Based Assessments of Psychiatric Comorbidity in Anorexia Nervosa

Paola Longo , Federica Toppino , Matteo Martini , Matteo Panero , Carlotta De Bacco, Enrica Marzola  and Giovanni Abbate-Daga ^{*}

Table 1. Concordance between clinical and SCID-5 diagnosis in the total sample of patients with AN.

	Clinical Diagnosis(%)	SCID-5 Diagnosis (%)	Cohen's k (SE)	Interpretation of Agreement	Interpretation of Reproducibility
Major Depressive Disorder	30.3	34.4	0.197 (0.92)	poor	marginal
Persistent Depressive Disorder	0.8	10.7	−0.015 (0.015)	poor	marginal
Bipolar I Disorder	0	0.8	n.c.	-	-
Bipolar II Disorder	0	1.6	n.c.	-	-
Panic Disorder	0.8	20.5	−0.016 (0.016)	poor	marginal
Social Anxiety Disorder	1.6	9	0.130 (0.131)	poor	marginal
Generalized Anxiety Disorder	0.8	32	−0.016 (0.016)	poor	marginal
Agoraphobia	0	4.9	n.c.	-	-
Obsessive- Compulsive Disorder	1.6	2.5	0.388 (0.280)	fair	marginal
Post-traumatic Stress Disorder	0	17.2	n.c.	-	-
Substance Use Disorders	2.5	4.1	0.484 (0.220)	moderate	good

The Relationship of Body Image With Symptoms of Depression and Anxiety in Patients With Anorexia Nervosa During Outpatient Psychotherapy: Results of the ANTOP Study

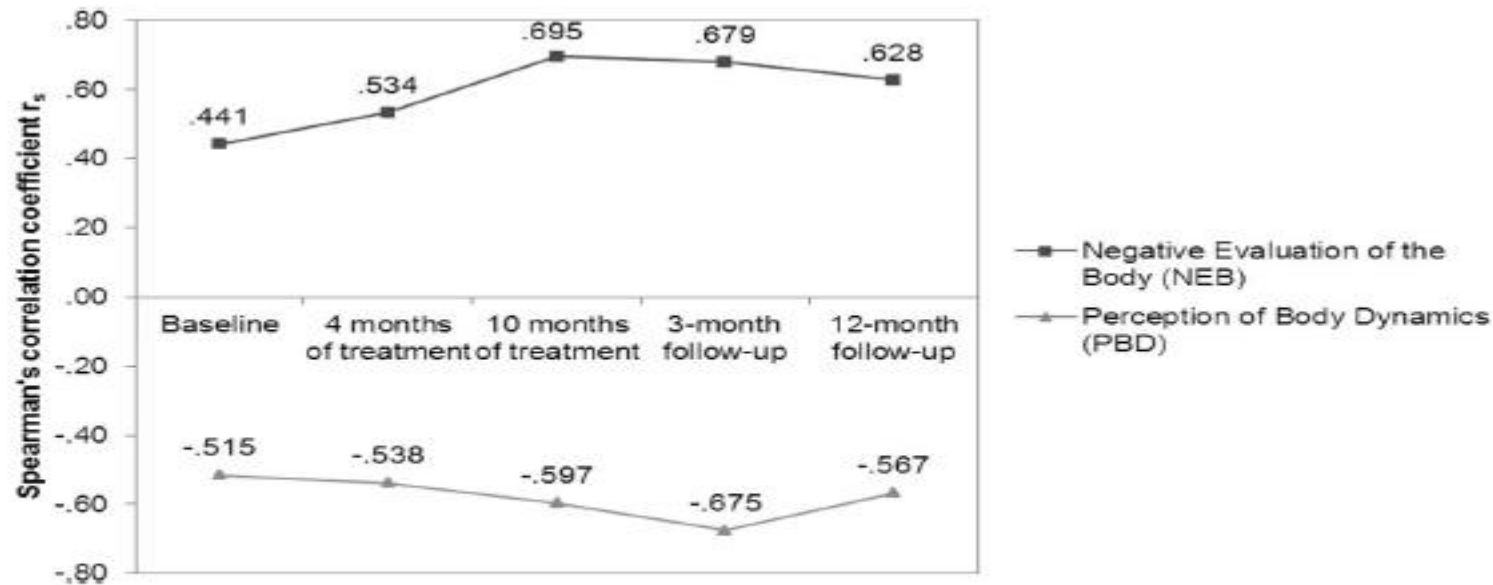
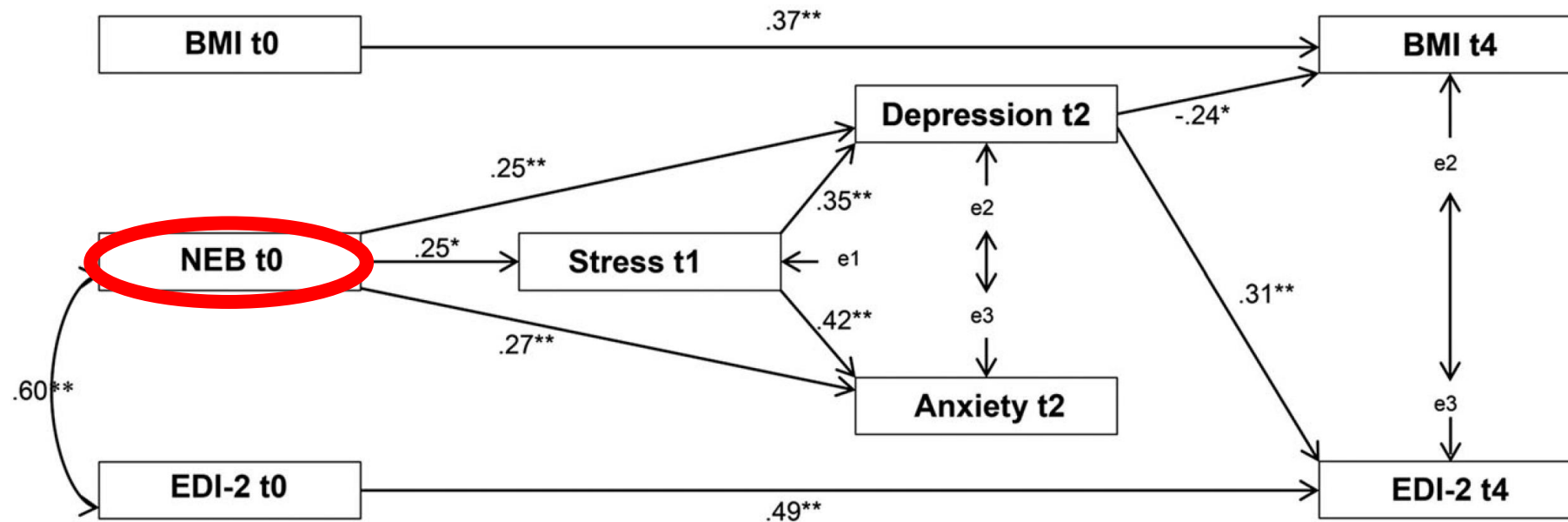


Figure 1. Association of BIQ-20 subscales with symptoms of depression (PHQ-9).

The importance of body image disturbances for the outcome of outpatient psychotherapy in patients with anorexia nervosa: Results of the ANTOP-study



NEB = valutazione negativa del corpo

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‘Psychiatric comorbidity’: an artefact of current diagnostic systems?[†]

MARIO MAJ

This use of the term ‘comorbidity’ to indicate the concomitance of two or more psychiatric diagnoses appears incorrect

1. Lo stesso sintomo spesso non può apparire in diagnosi differenti (es. ansia e depressione)
2. Proliferare delle diagnosi
3. Classificazione non gerarchica
4. Criteri meramente operativi (mancanza di gestalt, non colta l'essenza del disturbo)

**Quale natura della psicopatologia? Entità discrete o no? Sistema misto
Complessità**

Modelli della comorbidità

1. Artefatto
2. Co-occorrenza casuale
3. Predisposizione di un disturbo per un altro
4. Complicazione di un disturbo con manifestazione di sintomi psichiatrici differenti dal quadro clinico iniziale
5. Fattori causativi comuni alla radice di entrambi i disturbi
6. Disturbi differenti, ma all'interno di un unico spettro con causa comune
7. Patoplasticità reciproca tra disturbi differenti
8. Un disturbo è la variante adolescenziale dell'altro

Genome-wide association study identifies eight risk loci and implicates metabo-psychiatric origins for anorexia nervosa

Hunna J. Watson et al.*

16992 casi
55525 controllati

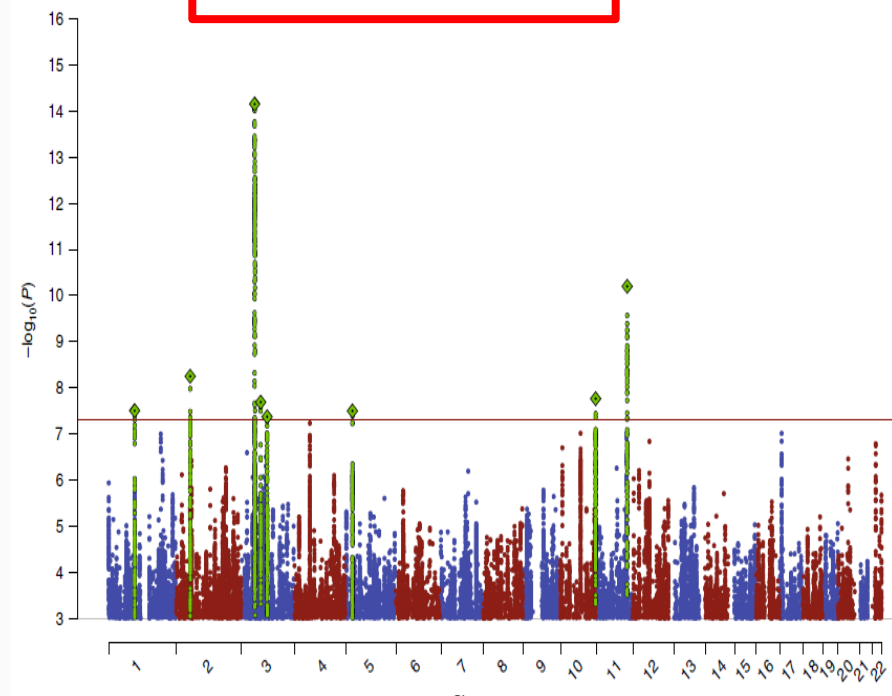
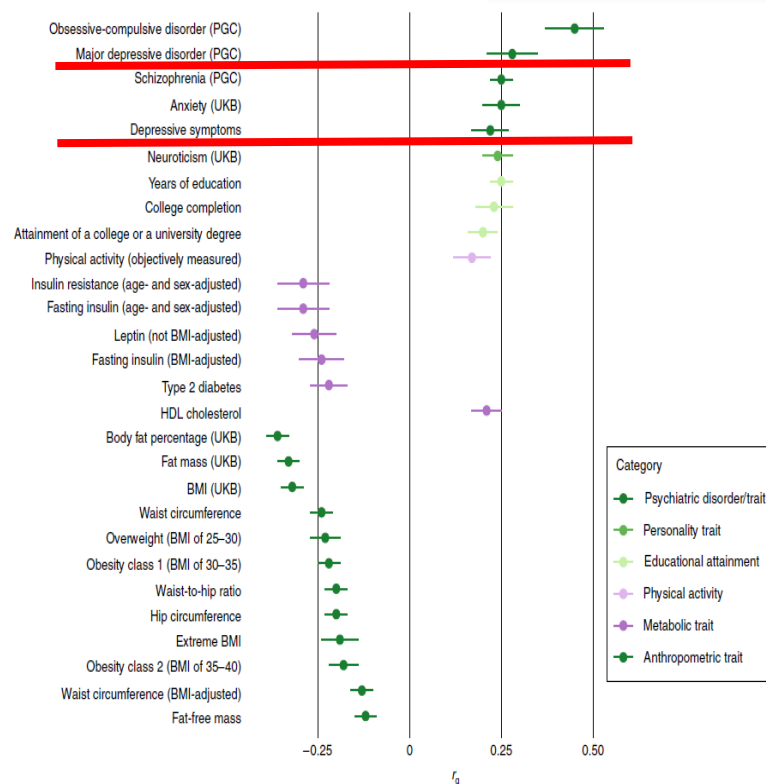


Fig. 2 | Bonferroni-significant genetic correlations (SNP- r_g) between anorexia nervosa and other phenotypes as estimated by LDSC. Only traits with significant P values following Bonferroni correction are shown. Error bars show the s.e. Correlations with 447 phenotypes were tested (Bonferroni-corrected significance threshold $P > 1.11 \times 10^{-4}$). Complete results are shown in Supplementary Table 10. Insulin resistance was analysed by the homeostatic model assessment of insulin resistance (HOMA-IR); UKB, UK Biobank.

Mendelian randomization analyses identify bidirectional causal relationships of obesity with psychiatric disorders

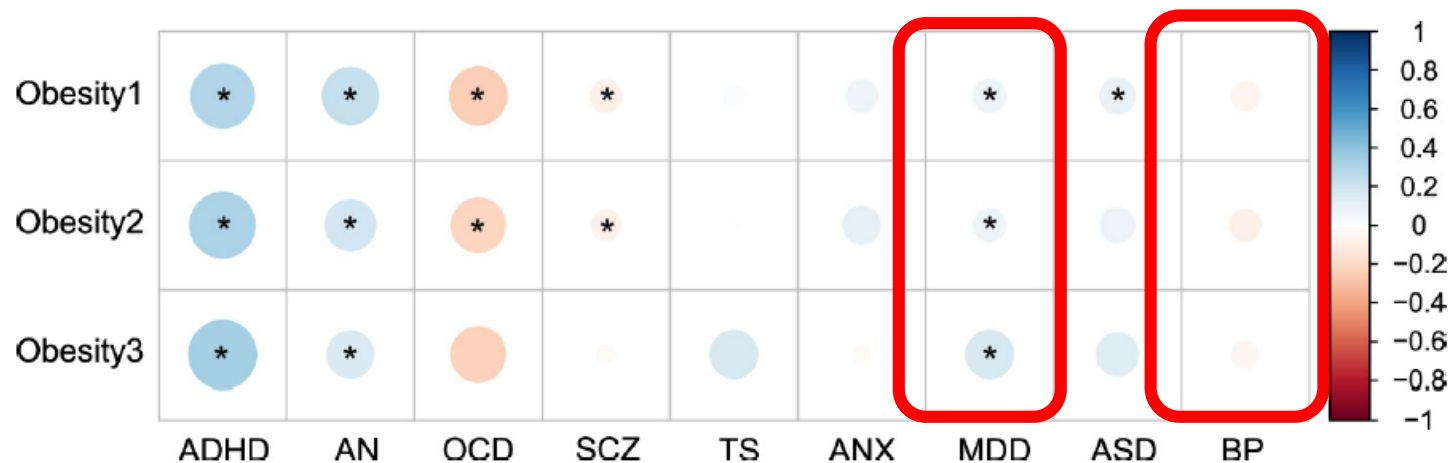
2023

Wenhui Chen^{a,1}, Jia Feng^{b,1}, Shuwen Jiang^{a,1}, Jie Guo^a, XiaoLin Zhang^c, Xiaoguan Zhang^d, Cunchuan Wang^a, Yi Ma^{b,*}, Zhiyong Dong^{a,**}

Shared genetics between classes of obesity and psychiatric disorders: A large-scale genome-wide cross-trait analysis

2022

Hui Ding^a, Mengyuan Ouyang^a, Jinyi Wang^a, Minyao Xie^a, Yanyuan Huang^a, Fangzheng Yuan^b, Yunhan Jia^b, Xuedi Zhang^a, Na Liu^{a,*}, Ning Zhang^{a,*}



Interaction between the *FTO* gene, body mass index and depression: meta-analysis of 13 701 individuals†

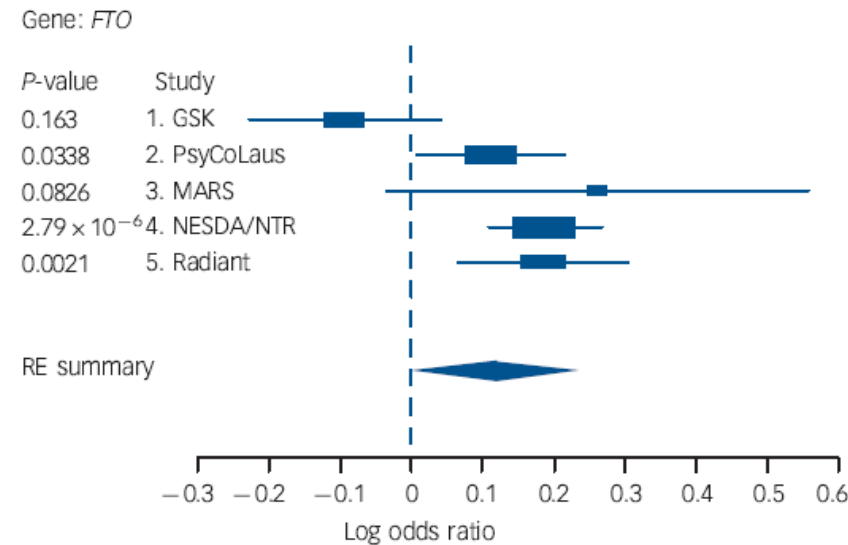


Fig. 1 Forest plot showing interactions between *FTO*, depression and body mass index.

GSK, GlaxoSmithKline study; MARS, Munich Antidepressant Response Signature project; NESDA/NTR, Netherlands Study of Depression and Anxiety/Netherlands Twin Register; RE, risk estimate.

increased risk for obesity. Our results demonstrate that depression enhances the effect of *FTO* variants on BMI, such that individuals with depression have an additional 2.2% increase in BMI for each rs9939609 risk allele (A) compared with psychiatrically healthy controls.

1386
adolescenti

Development of Disordered Eating Behaviors and Comorbid Depressive Symptoms in Adolescence: Neural and Psychopathological Predictors

RESULTS: DEBs and depressive symptoms developed together. Emotional and behavioral problems, including symptoms of attention-deficit/hyperactivity disorder and conduct disorder, predated their development. Alterations in frontostriatal brain areas also predated the development of DEBs and depressive symptoms.

CONCLUSIONS: These findings suggest that alterations in frontal brain circuits are part of the shared etiology among eating disorders, attention-deficit/hyperactivity disorder, conduct disorder, and depression and highlight the importance of a transdiagnostic approach to treating these conditions.

Table 1. Psychopathological Predictors of DEB Symptoms

Developers of DEBs	SDQ Symptoms at Age 14	Without Controlling for BMI			After Controlling for BMI		
		OR	95% CI	<i>p</i> Value	OR	95% CI	<i>p</i> Value
Binge-Eating Developers vs. Nonbingers	Conduct problems	1.29	1.06–1.57	.011			
	Emotional symptoms	1.35	1.10–1.66	4.4×10^{-3a}	1.34	1.09–1.65	5.7×10^{-3}
	Hyperactivity/inattention	1.27	1.03–1.57	.024			
	Peer problems	1.24	1.01–1.51	.037			
Purging Developers vs. Nonpurgers	Conduct problems	1.43	1.20–1.71	8.5×10^{-5a}	1.41	1.18–1.70	1.5×10^{-4}
	Emotional symptoms	1.24	1.03–1.49	.025			
	Hyperactivity/inattention	1.35	1.12–1.64	1.6×10^{-3a}	1.37	1.13–1.66	1.2×10^{-3}
	Peer problems	0.98	0.81–1.18	.86			
Dieting Developers vs. Nondieters	Conduct problems	1.22	0.92–1.59	.16			
	Emotional symptoms	1.22	0.91–1.63	.18			
	Hyperactivity/inattention	1.17	0.88–1.57	.27			
	Peer problems	1.23	0.94–1.59	.12			

BMI, body mass index; CI, confidence interval; DEB, disordered eating behavior; OR, odds ratio; SDQ, Strengths and Difficulties Questionnaire.

^aThese *p* values survived the Holm-Bonferroni correction, correcting for 12 tests (3 DEBs $\times$ 4 SDQ subscales). Significant associations were further controlled for BMI.

Factors associated with eating disorders in adolescents: a systematic review

Candy Laurine Suarez-Albor¹, Maura Galletta², Edna Margarita Gómez-Bustamante³

Risk factor variables

Body dissatisfaction

Female gender

Depression

lower self-esteem

Higher BMI

Association Between Depressive Symptoms in Childhood and Adolescence and Overweight in Later Life

Review of the Recent Literature

Eryn T. Liem, MD; Pieter J. J. Sauer, MD, PhD; Albertine J. Oldehinkel, PhD, MSc; Ronald P. Stolk, MD, PhD

Objective: To present an overview of the association between depressive symptoms in childhood and adolescence and subsequent overweight in later life.

Data Sources: MEDLINE, EMBASE, and Web of Science for all indexed journals from January 1, 1997, to May 30, 2007.

Study Selection: Abstracts of 513 articles were reviewed manually. Studies were excluded if unrelated to depressive symptoms and overweight ($n=460$), if they were conducted in an adult population ($n=10$) or in a population of all age groups ($n=2$), or if they were performed in clinic-based populations of overweight participants. In total, 32 articles were reviewed including 21 cross-sectional and 11 longitudinal reports.

Main Exposure: Depressive symptoms in childhood and adolescence.

Main Outcome Measure: Overweight.

Results: Four cross-sectional studies that satisfied our quality criteria revealed an association between depressive symptoms and overweight in girls aged 8 to 15 years, reporting different effect sizes including a correlation coefficient of 0.14 and a regression coefficient of 0.27. Four longitudinal studies in accord with our quality criteria suggest that depressive symptoms in childhood or adolescence are associated with a 1.90- to 3.50-fold increased risk of subsequent overweight (95% confidence intervals varying from 1.02 to 5.80, respectively).

Conclusion: These results support a positive association between depressive symptoms at age 6 to 19 years and overweight in later life, assessed after a period of 1 to 15 years.

Arch Pediatr Adolesc Med. 2008;162(10):981-988

Association of the Mediterranean Dietary Pattern With the Incidence of Depression

The Seguimiento Universidad de Navarra/University of Navarra Follow-up (SUN) Cohort

Almudena Sánchez-Villegas, BPharm, PhD; Miguel Delgado-Rodríguez, MD, PhD, MPH; Alvaro Alonso, MD, PhD; Javier Schlatter, MD, PhD; Francisca Lahortiga, BA, PhD; Lluís Serra Majem, MD, PhD; Miguel Ángel Martínez-González, MD, PhD, MPH

Context: Adherence to the Mediterranean dietary pattern (MDP) is thought to reduce inflammatory, vascular, and metabolic processes that may be involved in the risk of clinical depression.

Objective: To assess the association between adherence to the MDP and the incidence of clinical depression.

Design: Prospective study that uses a validated 136-item food frequency questionnaire to assess adherence to the MDP. The MDP score positively weighted the consumption of vegetables, fruit and nuts, cereal, legumes, and fish; the monounsaturated- to saturated-fatty-acids ratio; and moderate alcohol consumption, whereas meat or meat products and whole-fat dairy were negatively weighted.

Setting: A dynamic cohort of university graduates (Seguimiento Universidad de Navarra/University of Navarra Follow-up [SUN] Project).

Participants: A total of 10 094 initially healthy Spanish participants from the SUN Project participated in the study. Recruitment began on December 21, 1999, and is ongoing.

Main Outcome Measure: Participants were classified as having incident depression if they were free of depression and antidepressant medication at baseline and reported a physician-made diagnosis of clinical depression and/or antidepressant medication use during follow-up.

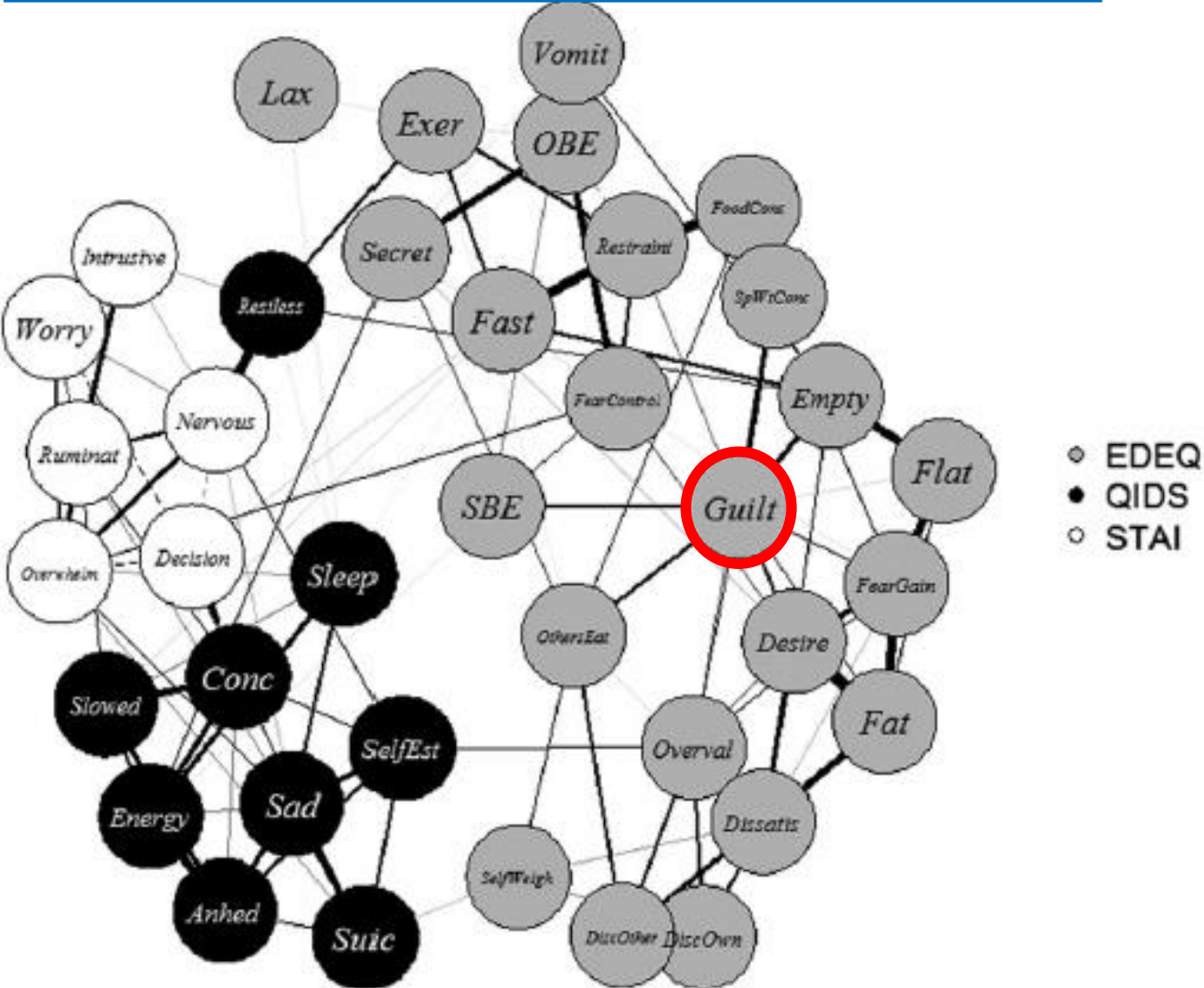
Results: After a median follow-up of 4.4 years, 480 new cases of depression were identified. The multiple adjusted hazard ratios (95% confidence intervals) of depression for the 4 upper successive categories of adherence to the MDP (taking the category of lowest adherence as reference) were 0.74 (0.57-0.98), 0.66 (0.50-0.86), 0.49 (0.36-0.67), and 0.58 (0.44-0.77) (P for trend $<.001$). Inverse dose-response relationships were found for fruit and nuts, the monounsaturated- to saturated-fatty-acids ratio, and legumes.

Conclusions: Our results suggest a potential protective role of the MDP with regard to the prevention of depressive disorders; additional longitudinal studies and trials are needed to confirm these findings.

Meccanismi

- Ruolo della malnutrizione
- **Impulsività e affective instability**
- **Reward e sentimento di colpa**
 - Dipendenza da cibo e da digiuno
 - Fattori culturali: body and food shame
- **Trauma**
- Infiammazione

A comparative network analysis of eating disorder psychopathology and co-occurring depression and anxiety symptoms before and after treatment



Smith et al. 2018

Life adverse experiences in relation with obesity and binge eating disorder: A systematic review

GIOVANNI LUCA PALMISANO^{1*}, MARCO INNAMORATI² and JOHAN VANDERLINDEN³

Background and aims: Several studies report a positive association between adverse life experiences and adult obesity. Despite the high comorbidity between binge eating disorder (BED) and obesity, few authors have studied the link between trauma and BED. In this review the association between exposure to adverse life experiences and a risk for the development of obesity and BED in adulthood is explored. *Methods:* Based on a scientific literature review in Medline, PubMed and PsycInfo databases, the results of 70 studies ($N = 306,583$ participants) were evaluated including 53 studies on relationship between adverse life experiences and obesity, 7 studies on post-traumatic stress disorder (PTSD) symptoms in relation to obesity, and 10 studies on the association between adverse life experiences and BED. In addition, mediating factors between the association of adverse life experiences, obesity and BED were examined. *Results:* The majority of studies (87%) report that adverse life experiences are a risk factor for developing obesity and BED. More precisely a positive association between traumatic experiences and obesity and PTSD and obesity were found, respectively, in 85% and 86% of studies. Finally, the great majority of studies (90%) between trauma and the development of BED in adulthood strongly support this association. Meanwhile, different factors mediating between the trauma and obesity link were identified. *Discussion and conclusions:* Although research data show a strong association between life adverse experiences and the development of obesity and BED, more research is needed to explain this association.



Traumatic events and post-traumatic symptoms in anorexia nervosa

Paola Longo , Antonella Bertorello, Matteo Panero , Giovanni Abbate-Daga and Enrica Marzola

Eating Disorders Centre, Department of Neuroscience, University of Turin, Turin, Italy

Treatment outcomes of psychotherapy for binge-eating disorder in a randomized controlled trial: Examining the roles of childhood abuse and posttraumatic stress disorder

Vivienne M. Hazzard^a, Ross D. Crosby^{a,b}, Scott J. Crow^{c,d}, Scott G. Engel^a, Lauren M. Schaefer^a, Timothy D. Brewerton^e, Giovanni Castellini^f, Kathryn Trottier^g, Carol B. Peterson^c, Stephen A. Wonderlich^{a,b}

Results and discussion

- Patients with BP-AN reported more frequent, more numerous, and more sexual abuses-related TEs compared to those with R-AN;
- Higher levels of emotion dysregulation in BP-AN than in R-AN
- Higher post-traumatic symptoms were described in patients with BP-AN than in those with R-AN.

Highlights

- Lifetime posttraumatic stress disorder predicted more frequent binge eating at end of treatment
- History of childhood abuse predicted more frequent binge eating at follow-up, but only among those with lifetime posttraumatic stress disorder
- Participants with trauma histories responded similarly to Integrative Cognitive-Affective Therapy and cognitive-behavioral therapy administered using guided self-help

Metabolic syndrome as a risk factor for neurological disorders

Akhlaq A. Farooqui · Tahira Farooqui ·
Francesco Panza · Vincenza Frisardi

Is there a “metabolic-mood syndrome”? A review of the relationship
between obesity and mood disorders

2015

Rodrigo B. Mansur^{a,b,*}, Elisa Brietzke^b, Roger S. McIntyre^a

of leptin, a peptide hormone released by white adipose tissue. These changes modulate immune response and inflammation that lead to alterations in the hypothalamic “bodyweight/appetite/satiety set point,” resulting in the initiation and development of metabolic syndrome. Meta-

Keywords Metabolic syndrome · Insulin · Leptin ·
Insulin resistance · Inflammation · Oxidative stress ·
Hypertension · Stroke · Alzheimer’s disease · Depression

**Entrambi i disturbi (obesità e depressione) sono associati a
un lieve grado di infiammazione sistemica costante**

Il fattore più studiato è l’interleuchina 1 e 6

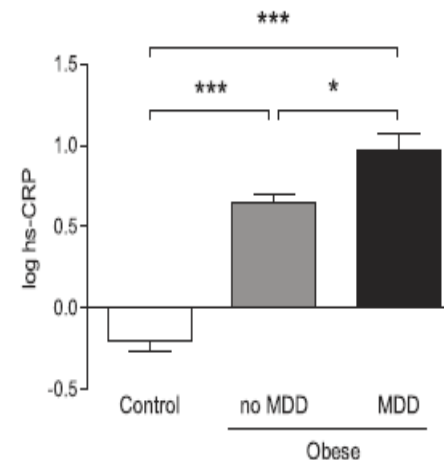
Qualche evidenza anche per la proteina C reattiva

Ohio State University, Columbus, OH 43221, USA
e-mail: farooqui.1@osu.edu

F. Panza · V. Frisardi
Geriatric Unit and Gerontology-Geriatric Research Laboratory,
IRCCS Casa Sollievo della Sofferenza,
San Giovanni Rotondo, Italy

lipoprotein (HDL) cholesterol in association with an elevated triglyceride levels. This may be due to an increased triglyceride load in the HDL particles, which are hydrolyzed by the hepatic lipase. The loss of the triglyceride results in small HDL particles that are filtered by the kidney, resulting in a decrease in apolipoprotein (apo) A and HDL

Obesity and major depressive disorder



Courtesy of Marzola

Outline

Comorbidità disturbi dell'alimentazione e disturbi dell'umore

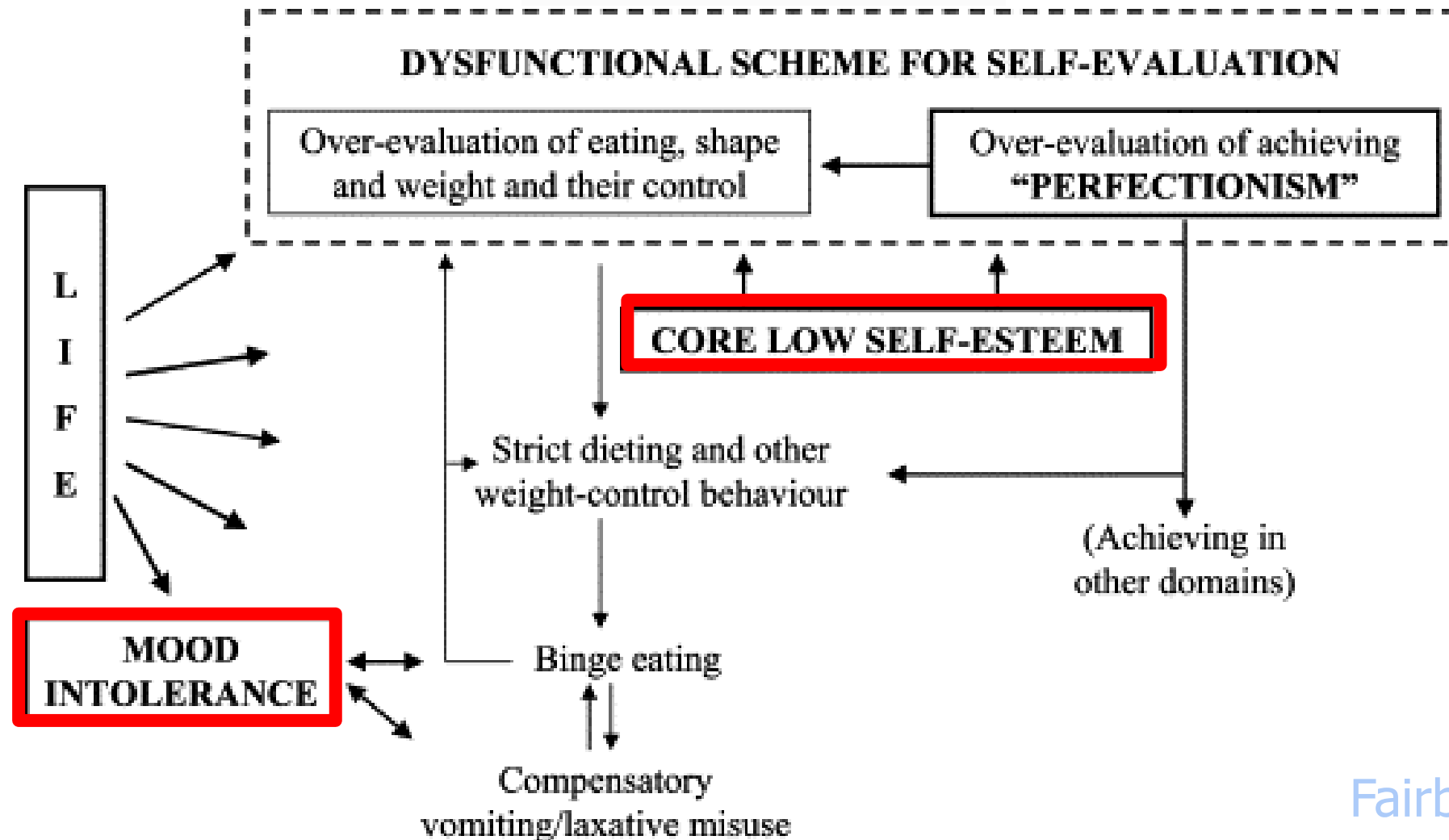
Caratteristiche cliniche dei disturbi dell'umore nei disturbi dell'alimentazione

Patogenesi

Trattamento

Prevenzione

Modello enhanced CBT (modello transdiagnostico)



The role of self-esteem in the treatment of patients with anorexia nervosa – A systematic review and meta-analysis

Denise Kästner  | Bernd Löwe | Antje Gumz

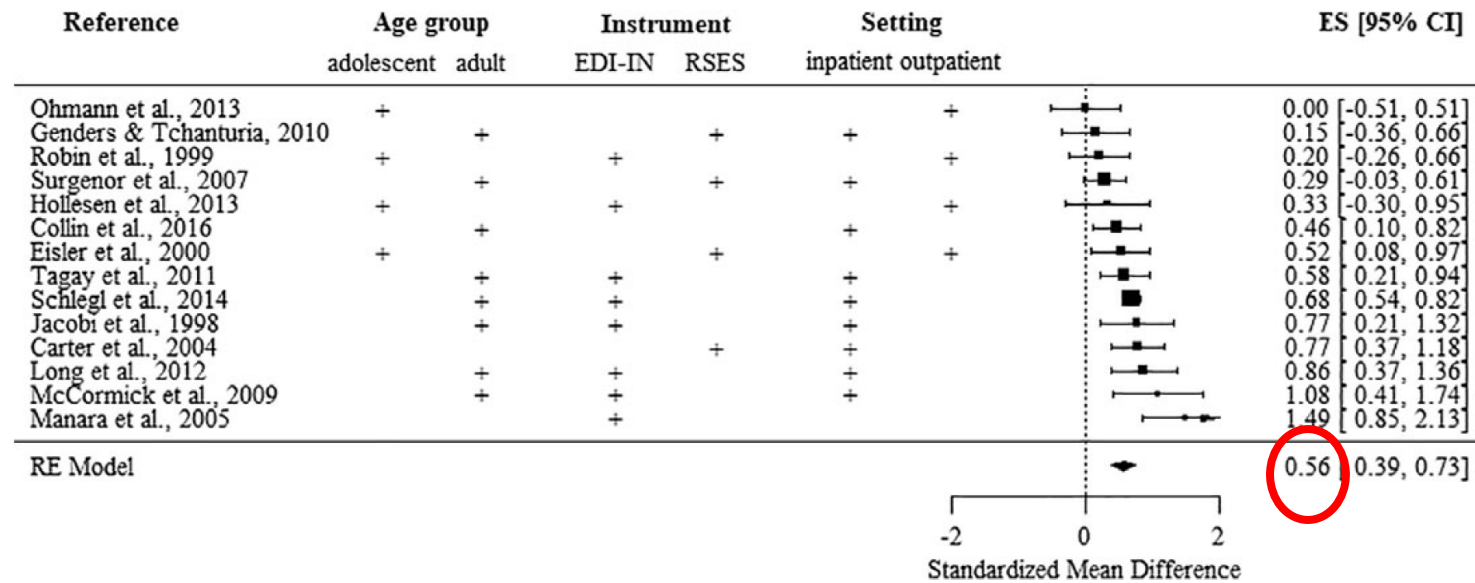


TABLE 3 Meta-analytical results for self-esteem changes in patients treated for anorexia nervosa

Time point	k	Mean d	95% CI	SE	z	p	Q	p	Failsafe N	n needed
EOT	14	0.557	0.393; 0.726	0.084	6.647	>.001	16.177	.240	608	28
≤ 12 months	8	0.501	0.301; 0.701	0.1024	4.915	>.001	7.676	.362	122	34
> 12 months	4	0.753	0.386; 1.120	0.187	4.024	>.001	3.267	.352	84	16

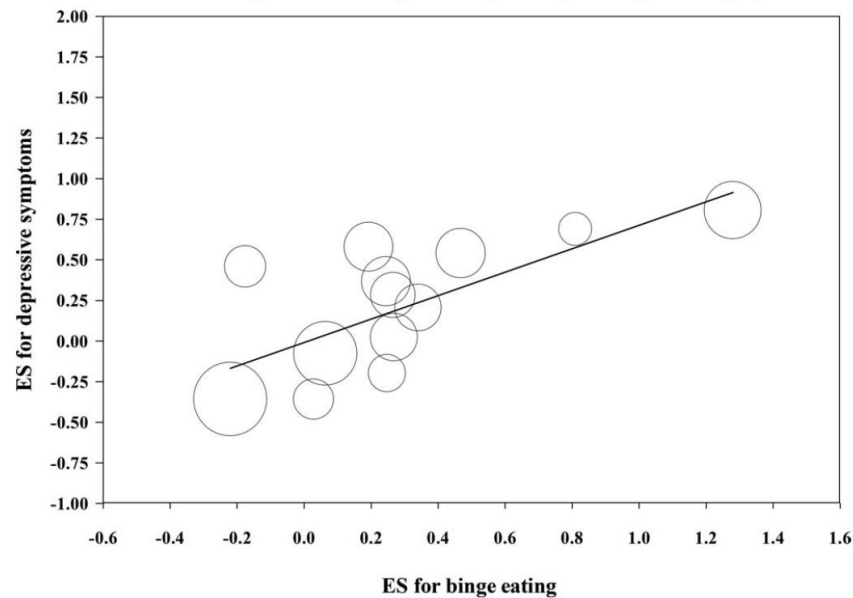
Note. EOT = end of treatment, ≤12 months = short-term follow-up of 12 months or less, >12 months = long-term follow-up of more than 12 months.

Psychotherapy for bulimia nervosa on symptoms of depression: A meta-analysis of randomized controlled trials

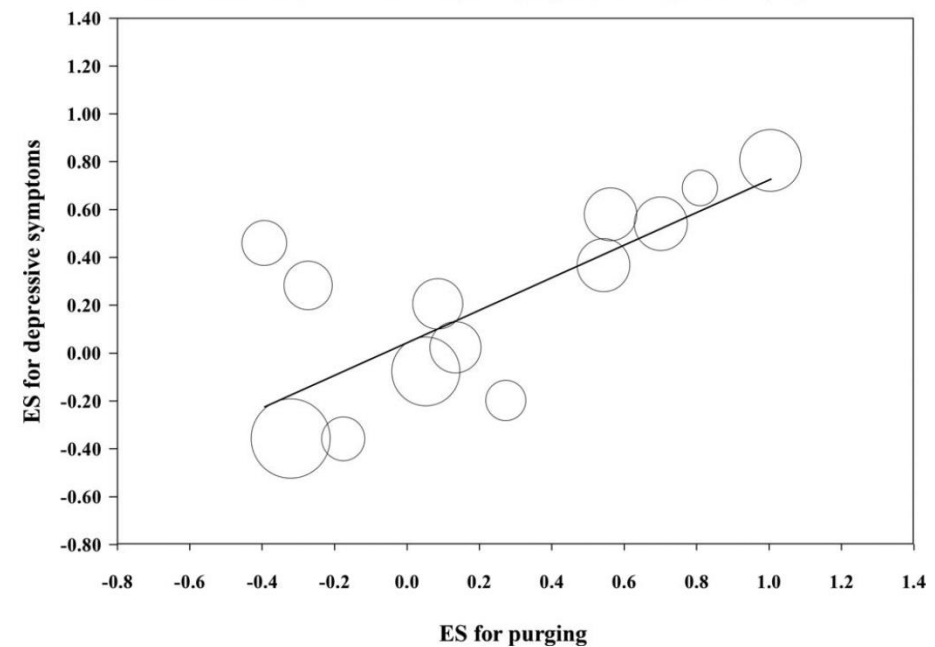
Jake Linardon, BA (Hons)¹  | Tracey Wade, PhD²  |

Xochitl de la Piedad Garcia, PhD¹  | Leah Brennan, PhD¹

The relationship between changes in binge eating and depressive symptoms



The relationship between changes in purging and depressive symptoms





World Federation of Societies of Biological Psychiatry (WFSBP) guidelines update 2023 on the pharmacological treatment of eating disorders

Hubertus Himmerich, Yael Doreen Lewis, Chiara Conti, Hiba Mutwalli, Andreas Karwautz, Jan Magnus Sjögren, María Mercedes Uribe Isaza, Marta Tyszkiewicz-Nwafor, Martin Aigner, Susan L. McElroy, Janet Treasure, Siegfried Kasper & The WFSBP Task Force on Eating Disorders

Table 2. Anorexia nervosa: level of evidence (LoE) and grade of recommendation (GoR).

Medication	LoE			GoR		
	Evidence that the intervention is effective	No evidence	Evidence that the intervention is NOT effective	Recommendation for the intervention	No recommendation possible	Recommendation AGAINST the intervention
Antidepressants						
Tricyclic antidepressants						
Amitriptyline			—A			—1
Clomipramine			—B			—2
Selective serotonin reuptake inhibitors						
Fluoxetine			—A			—1
Citalopram			—B			—2
Sertraline		D			4	
Other antidepressants						
Mirtazapine	C2			3		
Antipsychotics						
Typical antipsychotics						
Haloperidol	C2			3		
Sulpiride			—B			—2
Pimozide			—B			—2
Atypical antipsychotics						
Olanzapine	A ^a			2		
Aripiprazole	C1			3		
Risperidone			—B			—2
Quetiapine			—B			—2
Antiepileptics and mood stabilisers						
Lithium	B			3		
Valproate	C2			3		
Appetite stimulants						
Delta-9-tetrahydrocannabinol/dronabinol	B			2		
Cyproheptadine	B			3		
Opioid antagonists						
Naltrexone		D			4	
Hormones and endocrine medication						
Metreleptin	C1			3		
rhGH			—A			—1
Relamorelin	C1				4	—2
GHRP-2	C2			3		
Oxytocin		D			4	—2
Testosterone			—B			—2
Gastroprokinetic agents						
Cisapride			—A			—1
Metoclopramide	C2 ^b			3 ^b		
Domperidone	C2 ^b			3 ^b		
Nutritional supplements						
Zinc		D			4	
Polyunsaturated fatty acids			—B			—2
Tyrosine	C2			3		
Other medications						
Alprazolam		D			4	
Clonidine			—C2			—3
D-cycloserin		D			4	
Tandospirone	C2			3		
Adalimumab	C2 ^c			3 ^c		
Ketamine	C2			3		

Table 4. Bulimia nervosa: level of evidence and grade of recommendation.

Medication	LoE		GoR		
	the intervention is effective	sufficient evidence	the intervention is NOT effective	for using the intervention	AGAINST using the intervention
Antidepressants					
Tri- and tetracyclic antidepressants					
Imipramine		D			4
Desipramine	A			3	
Amineptine		D			4
Amitriptyline			—B		—2
Mianserin			—B		—2
Selective serotonin reuptake inhibitors					
Fluvoxamine		D			4
Fluoxetine	A			1	
Citalopram			—B		—2
Sertraline	C1			3	
Duloxetine	C2			3	
Reboxetine	C1			3	
Bupropion	B				—2
Monoamine oxidase inhibitors					
Moclobemide			—B		—2
Isocarboxazid	B			2	
Brofaromine			—B		—2
Phenelzine	B			2	
Other serotonergic antidepressants					
Trazodone	B			2	
Antipsychotics					
Atypical antipsychotics					
Aripiprazole	C2			3	
Antiepileptics and mood stabilisers					
Oxcarbazepine		D			4
Zonisamide	C2			3	
Topiramate	A			1 ^a	
Lithium			—B		—2
Carbamazepine			—C2		—3
Lamotrigine	C2			3	
Anticholinergics					
Methyl-Phenidate	C2			3	
Lisdexamfetamine	C1				4
Appetite modulators					
Appetite suppressants					
Sibutramine			—C2		—1
Fenfluramine	B				—1
d-Fenfluramine			—B		—1
Opioid antagonists					
Naltrexone			—B		—2
Hormones and endocrine treatments					
Oxytocin			—B		—2
Other serotonergic agents					
Ondansetron	B			2	
GABAergic medications					
Baclofen	C2			3	
Other medications					
N-acetylcysteine			—C2		—3
Combinations					
Flutamide and citalopram	B			—2	
Combination of pharmacotherapy with psychotherapy					
Desipramine and CBT	C1			3	

Table 6. Binge-eating disorder: level of evidence and grade of recommendation.

Medication	LoE			GoR		
	Evidence that the intervention is effective	No sufficient evidence	Evidence that the intervention is NOT effective	Recommendation for using the intervention	No recommendation possible	Recommendation AGAINST using the intervention
Antidepressants						
Tricyclic antidepressants						
Imipramine	B			3		
Desipramine	B			3		
Selective serotonin reuptake inhibitors						
Escitalopram			–B			–2
Citalopram	B			2		
Fluvoxamine	B			3		
Fluoxetine			–B			–2
Sertraline	B			2		
Vortioxetine			–B			–2
Other selective monoamine reuptake inhibitors						
Venlafaxine	C1			3		
Antiepileptics and mood stabilisers						
Topiramate	A			1 ^a		
Zonisamide	B			3		
Lamotrigine		D			4	
Anti-ADHD medication and stimulants						
Lisdexamfetamine	A			1		
Dasotraline	B				4	
Atomoxetine	B			2		
Methylphenidate	C1			3		
Appetite modulators						
Appetite suppressants						
Sibutramine	A					–1
d-Fenfluramine	B			–1		
Opioid antagonists						
Naltrexone			–B			–2
GLP-1 Agonists						
Liraglutide	C1			3		
GABAergic medications						
Baclofen	B					–3
Intestinal enzyme blocker						
Orlistat	C1				4	
Other medications						
Sodium oxybate	C1			3		–3
Combinations						
Naltrexone and bupropion		D			4	
Phentermine and topiramate	B				4	

The rows for lisdexamfetamine and topiramate are shaded green, because these are the best possible recommendations for BED.

LoE: A: Strong evidence that the intervention is effective; B: Limited evidence that the intervention is effective; C(1–3): Low evidence that the intervention is effective; D: No evidence; –A: Strong evidence that the intervention is NOT effective; –B: Limited evidence that the intervention is NOT effective; –C(1–3): Low evidence that the intervention is NOT effective.

GoR: 1: Strong recommendation for using the intervention; 2: Limited recommendation for using the intervention; 3: Weak recommendation for using the intervention; 4: No recommendation possible; –1: Strong recommendation AGAINST using the intervention; –2: Limited recommendation AGAINST using the intervention; –3: Weak recommendation AGAINST using the intervention.

Please note: For details regarding the grading of the Level of Evidence (LoE) and the Grade of Recommendation (GoR) see text. The grading was performed according to Hasan et al. (2019).

^aTopiramate is contraindicated in pregnancy and in women of childbearing potential if not using a highly effective method of contraception. Green shading: Best possible recommendations for BED.

Fluoxetine After Weight Restoration in Anorexia Nervosa

A Randomized Controlled Trial

B. Timothy Walsh, MD

Allan S. Kaplan, MD, FRCPC

Evelyn Attia, MD

Marion Olmsted, PhD

Michael Parides, PhD

Jacqueline C. Carter, PhD

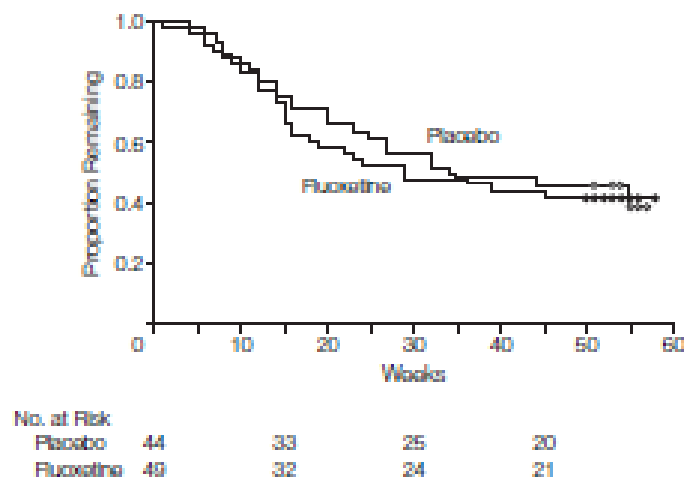
K. L. M. B. B. B.

Context Antidepressant medication is frequently prescribed for patients with anorexia nervosa.

Objective To determine whether fluoxetine can promote recovery and prolong time-to-relapse among patients with anorexia nervosa following weight restoration.

Design, Setting, and Participants Randomized, double-blind, placebo-controlled trial. From January 2000 until May 2005, 93 patients with anorexia nervosa received intensive inpatient or day-program treatment at the New York State Psychiatric Institute or Toronto General Hospital. Participants regained weight to a minimum

Figure 2. Patients Receiving Placebo and Fluoxetine Remaining in Treatment vs Number of Weeks After Treatment Inception



Circles indicate when patients left the trial after a full course of treatment (minimum 38 sessions, maximum 61 sessions over 12 months). Twelve month/full course of treatment criterion was satisfied if 38-session minimum was met between 50 and 60 weeks after randomization.

Table 3. Random-Effects Regression Analysis of Change During Treatment



Preliminary communication

Depression and eating disorders: Treatment and course

David Mischoulon^{a,*}, Kamryn T. Eddy^{b,c}, Aparna Keshaviah^d, Diana Dinescu^b, Stephanie L. Ross^b,
Andrea E. Kass^b, Debra L. Franko^{b,e}, David B. Herzog^{b,c}

ABSTRACT

Background: We examined the course of major depressive disorder (MDD) and predictors of MDD recovery and relapse in a longitudinal sample of women with eating disorders (ED).

Methods: 246 Boston-area women with DSM-IV anorexia nervosa-restricting (ANR; $n = 51$), AN-binge/purge (ANBP; $n = 85$), and bulimia nervosa (BN; $n = 110$) were recruited between 1987 and 1991 and interviewed using the Eating Disorders Longitudinal Interval Follow-up Evaluation (LIFE-EAT-II) every 6–12 months for up to 12 years. 100 participants had MDD at study intake and 45 developed MDD during the study. Psychological functioning and treatment were assessed.

Results: Times to MDD onset (1 week–4.3 years), recovery (8 weeks–8.7 years), and relapse (1 week–5.2 years) varied. 70% recovered from MDD, but 65% subsequently relapsed. ANR patients were significantly less likely to recover from MDD than ANBP patients ($p = 0.029$). Better psychological functioning and history of MDD were associated with higher chance of MDD recovery. Higher baseline depressive severity and full recovery from ED were associated with greater likelihood of MDD relapse; increased weight loss was somewhat protective. Adequate antidepressant treatment was given to 72% of patients with MDD and generally continued after MDD recovery. Time on antidepressants did not predict MDD recovery ($p = 0.27$) or relapse ($p = 0.26$).

Limitations: Small ED diagnostic subgroups; lack of non-ED control group.

Conclusions: The course of MDD in EDs is protracted; MDD recovery may depend on ED type. Antidepressants did not impact likelihood of MDD recovery, nor protect against relapse, which may impact on treatment strategies for comorbid MDD and EDs.

BRIEF REPORT



Inpatient treatment of anorexia nervosa with adjunctive valproate: a case series of 14 young and adolescent patients

Jacopo Pruccoli^{1,2}  · Antonia Parmeggiani^{1,2} 

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Abstract

Background The use of valproate in the treatment of Anorexia Nervosa (AN) in children and adolescents is currently not recommended by clinical guidelines, due to lack of evidence. Nonetheless, valproate is used to treat a series of psychiatric and neurologic conditions. To date, only six cases of patients with Feeding and Eating Disorders (three with AN) have been described.

Methods Case series of 14 children and adolescent patients hospitalized for AN and treated with valproate as an adjunctive treatment. Reasons for introduction, dosages, plasma levels, adverse drug reactions (ADR) and modifications of liver enzymes, platelets levels, abdominal and pelvic ultrasounds, and concurrent drugs plasma levels were assessed.

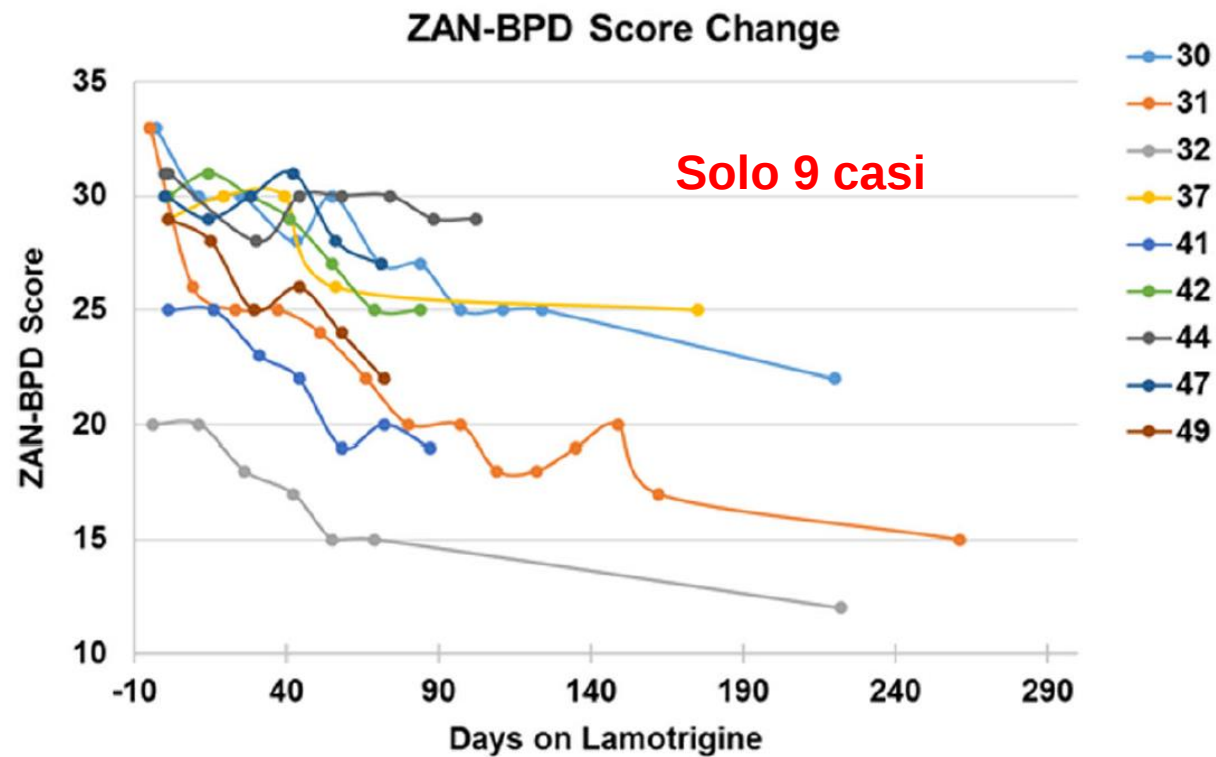
Results Reasons for the introduction of valproate included unstable mood (57.1%), lack of compliance (50%) and aggressive behaviour (21.4%). In 71.4% of patients an improvement on target symptoms was observed. Valproate was started at 241.7 (± 73.3) mg, up to 521.4 (± 204.5) mg; the most frequent scheme was twice-daily. The mean plasmatic concentration was 66.3 (± 25.0) mg/L. One patient (7.1%) experienced side effects (somnolence). No major modifications of liver enzymes, platelet levels, abdominal and pelvic ultrasounds emerged after the introduction of valproate. Low concurrent olanzapine and quetiapine levels were documented.

Conclusions This is the largest sample of patients with AN treated with valproate. Valproate was administered to improve psychiatric symptoms impairing compliance with inpatient treatment programs. The majority of patients experienced an improvement on target symptoms after being administered valproate, with minor ADR. These data should be investigated in wider populations and controlled studies.

Level of evidence Level IV, case series.

A pilot open series of lamotrigine in DBT-treated eating disorders characterized by significant affective dysregulation and poor impulse control

Mary Ellen Trunko¹, Terry A. Schwartz¹, Laura A. Berner¹, Anne Cusack¹, Tiffany Nakamura¹, Ursula F. Bailer^{1,2}, Joanna Y. Chen¹ and Walter H. Kaye^{1,3*}



Decresce significativamente anche la sintomatologia alimentare

Comparison between inpatients with anorexia nervosa with and without major depressive disorder: Clinical characteristics and outcome

Matteo Panero, M.D. , Enrica Marzola, M.D., Ph.D. , Tiziano Tamarin, M.D. , Annalisa Brustolin, M.D. , Giovanni Abbate-Daga, M.D

Table 1

Comparison of AN with MDD and AN without MDD groups in clinical variables and self-report tests.

	AN w/o MDD <i>n</i> = 65 <i>mean</i> (<i>SD</i>)	AN w MDD <i>n</i> = 22 <i>mean</i> (<i>SD</i>)	<i>t</i>
Age (years)	20.34 (4.19)	21.23 (4.16)	−0.86
Years of illness (years)	4.33 (3.70)	4.70 (3.99)	−0.39
Num of hospitalizations	1.31 (0.70)	2.05 (0.99)	−3.20**
Days of hospitalizations	33.25 (11.03)	44.36 (29.15)	−2.5*
Weight at admission (kilograms)	38.84 (6.22)	40.42 (10.30)	−0.85
BMI at admission (kg ² /cm)	14.63 (2.16)	15.18 (2.52)	−0.98
Caloric intake at admission	674.46 (388.16)	832.35 (526.17)	−1.34
Minumun weight (past) (kg)	36.28 (5.11)	37.32 (5.48)	−0.81
BDI Depression	15.98 (7.18)	20.41 (9.09)	−2.08*
BSQ BSQ	124.50 (49.67)	122.41 (42.82)	0.16
STAI State	53.44 (12.54)	63.04 (14.72)	−2.92**
Trait	58.57 (13.47)	63.00 (11.87)	−1.43
EDE-Q Restraint	3.12 (2.08)	4.09 (1.49)	−2.29*
Eating Concern	3.31 (1.67)	3.30 (1.30)	0.04
Shape Concern	4.16 (1.80)	4.46 (1.50)	−0.74
Weight Concern	3.65 (1.75)	4.21 (1.51)	−1.43
Global Score	3.54 (1.72)	4.04 (1.33)	−1.34

Legend: AN w/o MDD = Anorexia Nervosa without Major Depressive Disorders.

AN w MDD = Anorexia Nervosa with Major Depressive Disorders.

* = $p < 0.05$.

** = $p < 0.01$.

Predictors of long-term recovery in anorexia nervosa and bulimia nervosa: Data from a 22-year longitudinal study

Debra L. Franko^{a,b,*}, Nassim Tabri^c, Aparna Keshaviah^a, Helen B. Murray^d, David B. Herzog^e,
Jennifer J. Thomas^{a,e}, Kathryn Coniglio^a, Pamela K. Keel^f, Kamryn T. Eddy^{a,e}

- 176 pazienti (100 AN; 76 BN)
- Follow up 20-25 anni
- Pochi predittori negativi:
 - **Sintomi depressivi** alla presa in carico per AN
 - **BMI più basso** per AN b/p
 - Lunghezza di malattia per BN

Predictors of outcomes in outpatients with anorexia nervosa – Results from the ANTOP study

Table 3

Odds ratios multiple logistic regression analysis for the association between baseline variables and global outcome at one-year follow-up (n=156).

Baseline variables	OR	Model I 95% CI	P-value	OR	Model II 95% CI	P-value
BMI at T0	2.18	1.54; 3.09	< 0.0001	2.15	1.52; 3.04	< 0.0001
Study arm compared to TAU-O						
CBT-E	1.85	0.83; 4.12	0.133	1.56	0.70; 3.49	0.28
FPT	3.94	1.69; 9.19	0.002	3.50	1.49; 8.24	0.004
Center	0.94	0.83; 1.05	0.270	0.94	0.83; 1.05	0.270
Duration of illness	0.39	0.19; 0.79	0.009	0.36	0.18; 0.71	0.004
Depression (current and lifetime MD, dysthymia) (SCID)	0.47	0.24; 0.92	0.027	–	–	–
Self-esteem	–	–	–	1.05	1.01; 1.10	0.03

The Table shows two alternative models including either depression (Model I) or self-esteem (Model II) at baseline.

OR=odds ratio, CI=confidence interval, CBT-E=enhanced cognitive behavioral therapy, FPT=focal psychodynamic therapy, TAU-O= optimized treatment as usual, SCID=Structured Clinical Interview for DSM-IV, MD=Major Depression

An OR > 1 indicates that for this variable, a higher value is associated with a better outcome. An OR < 1 indicates that a higher value is associated with a lower outcome.

Outline

Comorbidità disturbi dell'alimentazione e disturbi dell'umore

Caratteristiche cliniche dei disturbi dell'umore nei disturbi dell'alimentazione

Patogenesi

Trattamento

Prevenzione

Quali interventi

Quali fattori di rischio che non siano troppo generici?

Prevenzione a chi?

Quali intervernti?

- Disturbi dell'Alimentazione
- Comorbilità con l'umore

Quali risorse?

Conclusioni

La comorbidità con disturbo depressivo è frequente, la comorbiltà con disturbo bipolare è sottostimata

La natura della comorbidità è in parte ancora da chiarire

Va caratterizzato clinicamente l'episodio depressivo

I sintomi affettivi correlano con la gravità, ma non sono un chiaro indice prognostico

La prevenzione è ancora nella fase iniziale

