

## **LE FRONTIERE DEI DISTURBI DELL'ALIMENTAZIONE**

### **IX CONGRESSO NAZIONALE SISDCA**

**Roma, 26-27 Febbraio 2016**

**Auditorium, 1<sup>a</sup> Clinica Medica  
Policlinico Umberto I di Roma**

I disturbi dell'alimentazione (anoressie, bulimie e obesità - DAO) sono caratterizzati da una persistente alterazione del comportamento alimentare (volta al controllo del peso e della forma del corpo) con importanti ricadute in termini clinici, del funzionamento psico-sociale e della qualità di vita.

La prevalenza e la gravità clinica e sociale dei DAO sono in crescita e impattano negativamente sullo stato di salute della popolazione.

Rappresentano gli argomenti di studio, formazione e ricerca della SISDCA, Società Scientifica per lo Studio dei Disturbi del Comportamento Alimentare. Questa, proprio per poter meglio affrontare le diverse problematiche legate ai DAO è una società ad alta componente multidisciplinare (medici di differenti specializzazioni, psicologi, dietisti, infermieri, tecnici della riabilitazione, educatori sanitari ed operatori della nutrizione) in cui clinici e ricercatori, di diverse discipline, si incontrano per studiare insieme le connessioni e le sovrapposizioni tra obesità, disturbi dell'alimentazione e disturbi dell'immagine corporea.

La SISDCA, partner dell'Academy of Eating Disorders ([www.aedweb.org](http://www.aedweb.org)), nel suo Congresso annuale del 26-27 Febbraio 2016, pone l'attenzione su alcuni aspetti, tra i tanti, che caratterizzano i DAO.

Si tratta di *foodaddiction* (con le sue problematiche sociali e biologiche), di obesità (ponendo l'attenzione in particolare agli aspetti multidisciplinari), dei trattamenti sanitari obbligatori (valutando i pro e i contro del ricorso a tali interventi, anche dal punto di vista legislativo) e della bulimia nervosa (coinvolgendo medici nutrizionisti e psichiatri, i medici di medicina generale e le associazioni di pazienti).



# Academy for Eating Disorders

## **LE “NOVE VERITÀ” SUI DISTURBI ALIMENTARI**

“Nine Truths” si basa sui contenuti della conferenza tenuta dalla dr.ssa Bulik nel 2014 al Congresso del National Institute of Mental Health. Titolo della conferenza: “9 Eating Disorders Myths Busted”

Verità 1: Molte persone con disturbi alimentari hanno sì un aspetto sano, ma possono essere molto malate.

Verità 2: Le famiglie non sono da biasimare, anzi possono essere le migliori alleate dei pazienti e degli operatori durante il trattamento.

Verità 3: Una diagnosi di disturbo alimentare è una situazione di straordinaria difficoltà (e di crisi) sanitaria che sconvolge il funzionamento personale e del gruppo familiare.

Verità 4: I Disturbi alimentari non sono scelte, ma sono gravi malattie con notevoli influenze sul piano biologico.

Verità 5: I disturbi alimentari colpiscono persone di tutti i generi, età, razze, etnie, di tutte le forme del corpo e di tutti i pesi, di ogni orientamento sessuale, e di differenti strati socio-economici.

Verità 6: I Disturbi alimentari comportano un aumento del rischio sia per il suicidio che per le complicanze mediche.

Verità 7: Sia i geni che l'ambiente giocano un ruolo importante nello sviluppo dei disturbi alimentari.

Verità 8: I geni da soli non predicono chi sarà la persona che svilupperà un Disturbo Alimentare.

Verità 9: Il recupero completo da un precedente disturbo alimentare è possibile. La diagnosi precoce e la qualità dell'intervento sono però molto importanti.

AED, l'Academy for Eating Disorders assieme alle maggiori organizzazioni del settore dei DA si impegna a diffondere questo documento.

Associazioni aderenti: Families Empowered and Supporting Treatment of Eating Disorders, National Association of Anorexia Nervosa and Associated Disorders, National Eating Disorders Association, The International Association of Eating Disorders Professionals Foundation, Residential Eating Disorders Consortium, Eating Disorders Coalition for Research, Policy & Action, Multi-Service Eating Disorders Association, Binge Eating Disorder Association, Eating Disorder Parent Support Group, International Eating Disorder Action, Project HEAL, and Trans Folx Fighting Eating Disorders.

In collaborazione con



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## PRIMA GIORNATA MONDIALE sui Disturbi Alimentari World Eating Disorders Action Day - 2 giugno 2016

### COMUNICATO STAMPA

I membri della comunità scientifica mondiale sui disturbi alimentari (DA), in collaborazione con le associazioni delle persone colpite da DA e delle loro famiglie, si sono virtualmente uniti allo scopo di aumentare l'accesso a informazioni accurate, di sradicare miti e di sostenere il cambiamento delle politiche nei confronti dei DA.

La prima Giornata Mondiale sui DA si svolgerà a Roma il 2 giugno 2016 e produrrà informazioni praticamente nei Paesi di tutto il mondo.

I Disturbi Alimentari sono malattie psicologiche, con importanti ricadute sul piano organico e funzionale, che interessano circa 70 milioni di persone nel mondo; persone che appartengono a differenti età, generi, identità etniche, nazionalità, strati socio-economici, competenze e capacità.

I disturbi alimentari hanno il tasso di mortalità più alto tra tutte le malattie mentali e si manifestano con importanti conseguenze sul piano organico e del funzionamento sociale, con gravi penalizzazioni della qualità di vita; per giunta, molto spesso, non c'è un'efficace presa in carico da parte dei servizi sanitari nonostante la ricerca abbia dimostrato in modo sempre più evidente che esistono metodi in grado di offrire risultati positivi fino al pieno recupero clinico-funzionale.

Sulla scia del rivoluzionario decalogo, "Nove Verità sui disturbi alimentari" viene ora lanciato uno sforzo globale che, attraverso il World Eating Disorders Action Day, richiami l'attenzione su queste malattie devastanti, ma curabili.

Secondo Amy Cunningham, co-fondatrice di International Eating Disorders Action, *"La prima giornata mondiale sui DA manda un messaggio forte ai responsabili politici di tutto il mondo sulla necessità di un'azione, sottolineando il fatto che i disturbi alimentari non possono diventare causa di discriminazione e che, anzi, occorre diffondere la speranza per interventi di successo"*.

Attraverso la mobilitazione virtuale e l'attivismo specifico di ogni Paese, il World Eating Disorders Action Day farà progredire la comprensione sui disturbi alimentari come malattie curabili che interessano una quota trasversale della popolazione del mondo, chiedendo ai responsabili delle politiche sanitarie più consapevolezza e responsabilità nella programmazione sanitaria e l'istituzione di reti e sistemi di cura nazionali adeguati.

Inoltre la giornata offrirà l'occasione per far crescere l'advocacy delle persone indebolite dalla malattia e per la creazione di nuovi partenariati tra mondo della ricerca clinica e Istituzioni. Una base di opportunità per future azioni finalizzate a cambiamenti a livello internazionale.

Il comitato internazionale fa riferimento alla Academy for Eating Disorders.

<http://aedweb.org/index.php/10-news/189-world-eating-disorder-day-of-action>

Per informazioni e per unire gli sforzi ci si può riferire a SISDCA, Società Italiana per lo Studio dei Disturbi del Comportamento Alimentare <http://sisdca.it/>; [segreteria.sisdca@gmail.com](mailto:segreteria.sisdca@gmail.com). Lorenzo M Donini ([lorenzomaria.donini@uniroma1.it](mailto:lorenzomaria.donini@uniroma1.it)); Umberto Nizzoli ([unizzoli@hotmail.com](mailto:unizzoli@hotmail.com)).



# Atti del IX Congresso nazionale della SISDCA

## Comunicazioni orali

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## Comunicazioni Orali

❖ 1<sup>a</sup> sessione 17.30-18.30 - Venerdì 26 febbraio pomeriggio.

### 01. RESIDENTIAL PROGRESSIVE PSYCHONUTRITIONAL REHABILITATION (RPP™) IN ADOLESCENTS WITH EATING DISORDERS (ED): AN OUTCOME STUDY

**Authors:** Monica Baiano<sup>1</sup>, Diego Gerlin<sup>2</sup>, Erika Baldissera<sup>1</sup>, Pierandrea Salvo<sup>1</sup>.

**Author's affiliation's:** Center for Eating and Weight Disorders (CWED), Portogruaro, Venice, Italy Psychiatric Clinic, University Hospital of Udine, Udine, Italy

**Key words:** progressive psychonutritional rehabilitation, eating disorders, adolescents

**Objective:** Recent researches suggest that residential treatment for patients with ED may significantly modify core anorexic thoughts and behaviours, thus supporting clinical recovery and prevention of recurrences. This study aimed to explore the effectiveness of the RPP™ model for adolescents with severe ED admitted to residential and/or hemiresidential treatment program.

**Methods:** The RPP™ consists of stepped and patient-tailored refeeding strategies combined with intensive psychosocial, medical and pharmacological interventions, aiming at progressive reduction of core ED psychopathology, reduction of comorbid psychiatric symptoms and achievement of spontaneous eating. The following outcome measures were used to assess clinical and psychopathological changes from admission (t0) to discharge (t1): Body Mass Index (BMI), caloric intake, Eating Disorder Inventory -2 (EDI-2) and Symptom Checklist-90 (SCL-90) scores.

**Results:** 107 adolescents with ED completed the RPP™ program in residential (68/107) or hemi-residential (25/107) or residential plus hemiresidential (12/107) setting at the CWED. 83 out of 107 patients were affected by Anorexia Nervosa (AN), 14 out of 107 by Bulimia Nervosa (BN) and 10 out of 107 by Eating Disorder Not Otherwise Specified (EDNOS). From t0 to t1, AN showed a significant weight gain ( $p < 0.001$ ) whereas BN and EDNOS showed a substantial weight stabilization ( $p = 0.248$  and  $p = 0.153$ , respectively). Caloric intake significantly increased over time in AN ( $p < 0.001$ ) and EDNOS ( $p = 0.018$ ), but not in BN. From t0 to t1, for AN and BN there were significant improvements in all EDI-2 and SCL-90 subscales ( $p < 0.001$  and  $p < 0.05$ , respectively). For EDNOS, improvements were found in five of 11 EDI-2 subscales and six of 11 SCL-90 subscales ( $p < 0.05$ ).

**Discussion:** RPP™ program seems to be effective in reducing core ED psychopathology and general psychiatric symptoms as well as weight normalization in the great part of our sample. These results also emphasize that the treatment of adolescent ED patients in a highly specialized unit can be an effective in promoting recovery and avoiding prolonged hospitalization. For this purpose, the University of Udine in collaboration with the CWED organize a second level master dedicated to RPP™ (see [www.disturbialimentari.info](http://www.disturbialimentari.info) and [www.uniud.it](http://www.uniud.it)).

### 02. COMPREHENSIVE GROUP WEIGHT LOSS INTERVENTION IN MORBID OBESE PATIENTS: FROM A PSYCHO-EDUCATIONAL APPROACH TO A COGNITIVE BEHAVIOUR THERAPY (CBT) APPROACH.

**Authors:** Giovanna Bosco, Dante Zini, Chiara Valenti, Luigi Valerio, and Riccardo Dalle Grave\*.

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**Key words:** obesity, therapy, group treatment, cognitive behavior therapy, lifestyle modification.

**Background:** According to recent guidelines, the most effective non-bariatric weight loss treatments are high-intensity (i.e.,  $\geq 14$  sessions in 6 months) onsite comprehensive lifestyle interventions provided individually or in group by a trained interventionist, including the following procedures: (i) recommendation to follow a moderately reduced calorie diet; (ii) recommendation to adopt an active lifestyle; and (iii) the use of behavioral strategies to facilitate adherence to diet and physical activity (1). Approximately a 5% to 10% weight loss should be considered a successful weight reduction which leads to a decreased risk for obesity-related medical conditions and cardiovascular diseases for many patients (2). Rate of drop out, weight loss maintenance and the lack of adequate studies about group approach are the main problems to address in traditional weight loss lifestyle modification programs.

**Purpose:** To assess the outcome of a weight loss lifestyle psychoeducational group treatment in 576 obese patients from 2010 to 2015, in order to underline critical aspects and plan a new weight loss "cognitive" behavioral therapy group intervention.

**Methods:** 32 psychoeducational groups (18 class II and III obese patients for each group) were retrospectively evaluated. 14 sessions (6 months: weight loss phase; 6 months: weight maintenance phase) were provided by a nutritionist medical doctor, a psychotherapist and a nurse. The primary

outcome of the study was the percentage of weight loss. Secondary outcomes were changes on metabolic syndrome parameters and the rate of drop out.

**Results:** The results are reported at time before therapy (T0), T1 (6 months, after weight loss) and T2 (12 months, after 6 months of maintenance therapy). Weight: T0 103.6±13.4 kg (mean±SD); T1 94.7±10.5; T2 94.5±10.5; BMI T0 38.2±3.03 (mean±SD); T1 35.7±4.4; T2 35.6±4.1. Weight loss percentage: T1 6.8%; T2 6.8%. Glycaemia levels decreased in a subgroup of diabetic patients, and dropout rate was 38.8% (28.1% in the first two months; 10.7% in the following months).

**Conclusions:** The percentage of weight loss (6.8%) achieved by our treatment after six months was similar to the results reported by literature (1,2), and was maintained after 6 months. Although this amount of weight loss seems modest, a decrease of weight of 5% is associated with clinically relevant improvement of the main risk factors associated with obesity. However, the drop out rate of 38.8% was unsatisfactory. For this reason, we decided to design a new group treatment aimed to improve patients' adherence and long time maintenance. In the new treatment a great effort is put in enhancing the motivation of the patients, and engaging them actively in the treatment. The treatment is highly individualized and patients are trained to use some specific procedures derived by the CBT (i.e. the weight loss personal formulation, the self-monitoring record) to individuate and address with specific cognitive behavioral procedures the obstacles to weight loss and maintenance. In this way the traditional psychoeducational approach was replaced by a CBT approach (3).

**Bibliography:** 1)Jensen MD et al: 2013 AHA/ACC/TOS guidelines. *Circulation* (2014) 129,S102-138. 2) The DPP. *Diabetes Care*. 2002; 25(12): 2165–2171. 3) Dalle Grave R et al: *Eating and Weight Disorders* (2013) 18, 339-49.

### 03. THE EMILIA-ROMAGNA PROGRAM FOR EATING DISORDERS: A REGIONAL PATHWAY FROM EXPERIENCES TO EVIDENCE

**Authors:** Marinella Di Stani<sup>°</sup>, Antonella Piazza<sup>°°</sup>, Lucia Camellini<sup>°°°</sup> and the Regional ED Work Group<sup>1</sup>

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**KEY WORDS:** integrated clinical network, multidisciplinary treatment, outcome evaluation

**INTRODUCTION:** According to the Eating Disorders (ED) Regional Program, Emilia-Romagna has adopted a multidisciplinary model of treatment, based on progressive levels of care and integrated networks of services (1, 2). The ED Program is mainly addressed to young people (aged 12-30). In addition to the annual monitoring of resources and activities, two longitudinal studies on ED regional cases have been carried out in order to provide epidemiological data about incidence and prevalence, check the Program effects on care pathways and play a part in the development of outcome evaluation.

**METHODS:** The first study, based on current administrative data, is a retrospective investigation on ED patients living in Emilia-Romagna treated by mental health departments or admitted to hospitals in 2012. Their admissions, residential treatments, contacts with mental health services for adults and minors, other specialist outpatient visits and contacts with emergency services have been followed-up along a 12-month period.

The second study consists in a prospective 12-month follow-up for new cases enrolled in the Regional Program in 2014. For these patients (aged 12-30 years) socio-demographic and clinical characteristics were recorded at baseline, including comorbid diseases and weight-height measurements. Clinical follow-up assessments are being recorded every six months, along with treatments received.

Annual monitoring of the Program is providing indicators on hospitalizations and outpatient treatments, as well as on allocated resources and weaknesses observed by members of the regional work group.

**RESULTS AND CONCLUSIONS:** The retrospective study found 1614 ED patients 11 year-older, treated in 2012 by mental health services, public hospitals or private-licensed facilities of Emilia-Romagna. Forty-eight per cent are new cases. The regional rate of treated prevalence is about 4 cases per 10,000 residents. The specific prevalence rate for females aged 12-24 is 24/10,000. Large variability in prevalence and incidence rates across Local Health Trusts has been shown. Compared with patients of the ED Program, older cases tend to have more admissions with shorter hospital stays and to receive less psychotherapeutic treatments in mental health services. The results of the prospective research are expected by the end of 2016.

Indicators from annual monitoring and results of the retrospective investigation confirm that up to the present the multidisciplinary-multiprofessional-multilevel-network model of the ED Program has been implemented in Emilia-Romagna with relevant differences across Local Health Trusts.

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<sup>1</sup> Giuliano Limonta, Massimo Rossetti, Anna Maria Gibin, Enrica Manicardi, Claudio Annovi, Carlotta Gentili, Emilio Franzoni, Carlo Della Gala, Stefano Caracciolo, Ester Giaquinto, Daniela Ghigi.

**REFERENCES:** Tavolo regionale DCA dell'Emilia-Romagna. *Linee di indirizzo tecnico per la costruzione di percorsi clinici per le persone affette da disturbi del comportamento alimentare (attuazione DGR 1298/2009)*. Bologna: 2009; Agenzia sanitaria e sociale regionale. *Programma regionale per i disturbi del comportamento alimentare. Contributi 2009-2012*. Dossier n. 240/2014. Bologna: 2014

#### **04. A PROJECT FOR A SHARED PROTOCOL FOR COOPERATION BETWEEN SERVICES FOR EATING DISORDERS AND EMERGENCY DEPARTMENTS IN THE REGION FRIULI VENEZIA GIULIA**

**Authors:** Gruppo Regionale di Studio sui DCA: Nazzareno Trojan\*, Gian Luigi Luxardi\*, Stefania Lorenzon°, Claudio Bearzi#, Ciano Rossana§, Sepulcri Orietta§, Balestrieri Matteo§

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**Key words:** Eating Disorders, emergency departments, screening, clinical assessment, SCOFF

**Abstract:** Anorexia nervosa (AN) has an incidence of 5.1 per 100,000 person-years and bulimia nervosa (BN) has an incidence of 6.6%. AN is the 1st cause of death among psychiatric diseases; the crude mortality rate for AN is 5.1 deaths per 1000 person-years, 20% of them caused by suicide; for the BN mortality was of 1.74 deaths per 1000 person-years, 23% of which for suicide. Sixteenth percent of patients 14 to 20 years old screened in the Emergency Departments (EDs) present an eating disorders, a percentage much higher than in general population. The symptoms most frequently involved in the request for medical evaluation are: marked asthenia, dizziness and vertigo, gastrointestinal complaints, chest pain, palpitations, severe depression or severe anxiety. Patients with greater access to EDs have a worse prognosis. 80% of patients suffering from AN have cardiovascular complications, which are the cause of death for one third. A link between severe arrhythmias and sudden death was found for values of QT > 600 ms; in particular, hypokalemia associated with metabolic alkalosis is a marker of risk for the increase of QT and arrhythmias. This condition must be closely monitored in such patients. The greatest risk occurs in anorexic patients with purging behavior (laxatives, diuretics, self-induced vomiting). Any psychiatric comorbidity has a negative impact on the prognosis of eating disorders.

In many cases EDs are the only approach of these patients with a health facility or a social health service. This is very important because the prognosis of eating disorders is worse the greater the duration of the disease. An early diagnosis can reduce the frequency of accesses to EDs. The patients with eating disorders usually ask for help to EDs when their condition are compromised and their symptoms are no longer manageable by themselves. EDs can be a crucial area for intercepting people at risk who do not would ask for help to the dedicated services. In addition to the clinical evaluation, the doctors of the EDs can use the SCOFF questionnaire, which provides an initial diagnostic orientation for eating disorders. SCOFF is the gold standard for screening in the UK, it showed excellent sensitivity (72-100%) and good specificity (73-94%). It consists of five questions (two positive out of five may indicate an eating disorder) and is easy to use even in the environment of EDs.

Therefore, we consider extremely important that doctors of EDs are trained to assess the severity of the clinical picture, to provide an initial diagnostic screening and early nutritional support and medications.

The aim of our group is to build a shared protocol to determine clinical risk and diagnostic orientation, and to define pathways of different intensity of care and follow-up. After clinical assessment and diagnostic screening, patients will be directed to the following pathways:

- 1) hospitalization in the medical or intensive care unit
- 2) need for a psychiatric evaluation
- 3) sending to the center for eating disorders

#### **05. GROUP INTERVENTION INTEGRATING DIALECTICAL BEHAVIOR THERAPY (DBT) AND NUTRITIONAL PSYCHOEDUCATION IN BINGE EATING DISORDER (BED) PATIENTS (PILOT STUDY).**

**Authors:** Pennacchi Loretta<sub>1</sub>, Angella Laura<sub>1,2</sub>, Paolicchi Rossella<sub>1</sub>, Miraglia Raineri Alessandra<sub>2</sub>, Gravina Giovanni<sub>1</sub>.

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**Key words:** Binge Eating Disorder, Dialectical Behavior Therapy, Nutritional Psychoeducation.

**Introduction:** An adapted version of DBT, primarily focused on emotional dysregulation, has proven effective for treatment of BED. Taking into account the presence of specific symptoms of the eating disorder, this study describe an intervention that integrates DBT and Nutritional Psychoeducation (NP) for the treatment of BED treatment.

**Tools:** Tests (EDE-Q, BES, TAS-20, DERS, BDI-II) and self-evaluation questionnaire about cognition, eating behavior and motivation to complete the treatment.

Three modules of group intervention in six months (12 sessions) conducted by psychologist and dietitian :

- 1) nutritional psychoeducation (interactive discussion, exercises and homework)
- 2) mindfulness
- 3) emotional regulation.

Participants: two groups of 8 female subjects [who] met full criteria for BED (established using EDE and BES), who do not currently use psychotropic drugs; mean age: 36.5 yrs; mean BMI: 35. Follow up at 3 and 6 months.

**Objectives:** To evaluate if a group intervention that integrates DBT and PE can reduce eating and emotional dysregulation in BED patients.

**Results:** All patients had a come from the diagnosis of BED. Emotional dysregulation decrease at T3 from T2 and T1, related to more self-awareness (DERS). Lack of confidence remains, probably due to the presence of mood disturbances, but with an increased acceptance of emotions. At T2 and T3 we observed the following additional results:

- Increase in the consumption of fruits and vegetables, with reduction of sugar and fatty foods consumed
- Improved knowledge and skills about meal organization
- Improved ability to manage situations that trigger food dyscontrol
- Increase in regular physical activity
- Decreased mean BMI (33.8 at T3)

**Conclusions :** The group intervention described appears to be useful with respect to the stated goals, improving self-efficacy in emotional control and allowing positive changes in eating behavior of the participants.

**Bibliography :** Safer DL et al. (2011) "Dialectical Behavior Therapy for Binge Eating and Bulimia". Guilford Press, NY. Whiteside U et al (2007). "Difficulties regulating emotions: do binge eaters have fewer strategies to modulate and tolerate negative affect?". Eat. Behav 8: 162-169.

## **06. EMERGENCY MANAGEMENT IN ADOLESCENT WITH EATING DISORDER AT CHILDREN'S HOSPITAL MEYER, FLORENCE.**

**Authors:** Stefanini Maria Cristina<sup>°</sup>, Troiani Maria Rita<sup>°</sup>, Pisano Tiziana<sup>°</sup>, Filippini Anna<sup>°</sup>, Innocenti Elisabetta<sup>°</sup>, Antonelli Carla<sup>°</sup>, Scordo Maria Rosaria<sup>°</sup>, Allori Paola<sup>°</sup>.

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**Keywords:** Eating Disorders in adolescent, hospitalization in emergency, cases analysis.

**Introduction:** The psychiatric emergency in Eating Disorders (ED) has special characteristics: primary mental disorder is often expressed by opposition, denial, rejection of care in cases of emergency. At the same time we have a situation of physical malnutrition even severe with high risks for life. The intervention in acuteness have to mix these factors: psychopathology and somatic impairment.

We know that the ED's outcome may be better if there is a therapeutic, specific intervention with specialized integrated multidisciplinary teams.

**Objective:** To analyze the case record that refer to Child and Adolescent Psychiatry Unit – Meyer for acute psycho-somatic break down in ED. To verify the appropriateness of sending, according to the criteria of severity, and the compliance of our interventions to national guidelines. To monitor the duration and outcome of intervention.

**Methodology:** We considered non-deferrable (from Emergency Room, ER) or programmable (max 72 hours) inpatients in last year. We assess the presence of refusal of care and its manifestations and the parental presence consent to hospitalization or their refusal. It evaluates also the indexes of somatic, psychological and contextual gravity. We analyze the actions and timing of the acute intervention and the stabilization, and transition to the rehabilitation phase.

**Results:** We had 30 cases: 20 access by the ER for syncope, bradycardia, etc. , or psychomotor agitation; 10 sent in urgency for rapid weight loss or refusal of treatment, by outpatients service's specialists. The average duration of the acute stage was between 4-6 weeks. Enteral Nutrition has been necessary in 30%, without incidence on length course of intervention.

**Conclusion:** The hospitalization results appropriate in 95% of cases. Hospital treatment in acute ED needs of highly specialized multi-professional team. The long hospitalization requires specific training and management protocols, according to Guide Line. Acute hospital access does not correspond to a worse prognosis. In presence of refusal's adolescent, parents consent to care, only in one case we need court order.

**Bibliography:** Nice 2004; APA 2006; CC Roma 2012, Quaderni MdS n17/22 2013, Linee Guida DCA Regione Toscana 2006, Giunta Regione Toscana, Delib.1063, 09-11-2015



### 07. FAMILY-BASED TREATMENT (FBT) FOR ADOLESCENTS WITH ANOREXIA NERVOSA IN A CLINICAL-MANAGEMENT APPROACH: AN ITALIAN STUDY.

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**Key words:** Adolescence, Anorexia Nervosa, FBT

**Background:** International Guidelines (APA, 2005; NICE, 2004; RANZCP, 2014) and the recommendations by the Italian Ministry of Health (Quaderni del Ministero della Salute 17/22, 2013; Rapporto ISTISAN 13/6, 2013), Family Based Treatment (FBT) is the reference evidence-based treatment for the cure of Anorexia Nervosa (AN) in adolescence. Developed in the '80s at the Maudsley Hospital in London, it integrates several therapeutic approaches (cognitive-behavioural, systemic-relational and clinical management). (Lock & LeGrange, 2013). The contemporary research on "Developmental Psychopathology", might give the proper theoretical frame in which the FBT fundamental assumptions should be better understood (Moretti et al., 2015). Focusing on parental role in caring and helping the adolescent in restoring his/her bodyweight, FBT helps to put the adolescent back on his physiological development that is stuck because of the eating behaviour disorder. The FBT treatment is a multi-professional approach for patients with stable medical conditions that is scheduled for 10-20 sessions from 6 to 12 months and based on 3 steps: Step 1 – Outpatient bodyweight recovery under parents control; Step 2 – Help the adolescent eat by himself; Step 3 – Adolescence passage: physiological tasks and difficulties.

**Aim:** To evaluate, in a naturalistic study, the efficacy of FBT, compared with Treatment As Usually (TAU) delivered by the Eating Disorders Unit ASL RME.

**Method:** 20 patients suffering of Anorexia Nervosa attended FBT (mean age 16,8; average BMI: 15,1), and were compared with 20 patients previously treated according with TAU. Each patient went through a multi-professional assessment (psychiatrist, psychologist, nutritionist); psycho-diagnostic data were collected by using different self-report instruments (SCL-90; EDE-Q; EDI-3; BUT, MACI, DIS-Q; Motivational Questionnaire). All patients were assessed again with all the psycho-diagnostic instruments after one year. Difference in BMI was registered.

**Results:** Consistent with the international literature, most of the patients treated with FBT reached the expected body weight after 10-12 month. Psychological conditions paralleled the improvement of body weight. Comparing with the TAU group, the FBT group reached a better improvement in less time.

**Conclusion:** Our experience supports the mandatory effort for the dissemination of the evidence-based treatments in the public health services.

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### 08. EATING DISORDER PREVENTION: A PROGRAM BASED ON DISSONANCE INTERVENTION

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**Key words:** Eating Disorder (ED), Prevention programs (PP), Dissonance Intervention (DI)

**Introduction:** Approximately 10% adolescent females experience threshold or subthreshold ED, chronicity and high costs of the pathology require effective prevention programs. Until now little success has been reached in this field. A third generation of PP uses interactive approach and persuasive principles to face risk factors theoretically defined. First intervention that has produced replicable effects is a dissonance program (E.Stice, K.Presnell, Texas University) in which at-risk girls are voluntarily enrolled in group setting as suggested

by ISS Consensus Conference 2012. Many studies endorse 60-61% reduction in ED at 3 years follow up in participants to these programs.

**Aim:** ED risk factors reduction and ED development reduction

**Materials and methods:** A PP based on dissonance intervention has been proposed to 220 young girls (age 15-18) in a high school of Ravenna (Liceo Classico Dante Alighieri). A female dietitian and a psychologist trained in Stice PP conducted groups of 6/8 girls for 4 meetings of 1 hour. Participants compiled psychometric tests: Ideal Body Stereotype Scale-Revised, Dutch Restrained Eating Scale (DRES), Satisfaction and Dissatisfaction with Body Parts Scale, Positive Affect and Negative Affect Scale-Revised, Eating Disorder Examination Questionnaire (EDE-Q), at the enrolment T0, at the end T1 and after 6 months T2. We evaluated psychometric tests with non-parametric analysis of variance for repeated measures (Friedman Test).

**Results:** 21 girls have been voluntarily enrolled in PP. 19 subjects completed the program (2 resulted ED affected). Between T0 and T6 total scores in EDE Q resulted improved ( $p=0,006$ ) as well as subscales scores for food restriction ( $p=0,002$ ), weight concern ( $p=0,031$ ) and shape concern ( $p=0.024$ )

**Conclusions:** This PP is theoretically sustained, easily reproducible, low cost, and achievable by different professionals trained in the method. In our experience efficacy of this PP is confirmed as in previous literature and it opens proposals for future interventions.

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## 09. CHILDHOOD OBESITY AND DIETING: RISK FACTORS FOR EATING DISORDERS

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**Key words:** eating disorders, childhood obesity, dieting, risk factors, self-restriction

**Introduction:** Obesity from early age is considered a strong predictor of the premature development of cardiovascular diseases and other comorbid conditions [1-4]. However, non-enough attention is given to the consequent psychological impact of childhood obesity [5].

**Objective:** This study aims at showing that childhood obesity and do it yourself (DIY) diet attempts may be important risk factors for developing (Eating Disorders) EDs, not always taken into due consideration.

**Material and methods:** A group of patients with diagnosis of EDs ( $n=118$ ) was compared with a control group ( $n=419$ ). Personal data, socioeconomic status, agonistic sport activity, weight history, dieting, body mass index at pubertal status, family history of obesity as well as eating disorders have been considered. Logistic regression has been used to assess the influence of childhood obesity in the development of EDs, compared to other risk factors.

**Results:** Obese children had almost two times ( $p=0.017$ ) the risk to develop EDs, compared with normal and underweight ones. Moreover, females and subjects with motherly positive anamnesis for EDs (MPAEDs), had respectively a five times ( $p<0.001$ ) and ten times ( $p=0.006$ ) higher risk to develop EDs than males and subjects with motherly negative anamnesis for EDs. Dieting also increased the risk for EDs ( $p=0.001$ ).

**Discussion:** In line with previous results reported in literature [6-8] we found a high prevalence of EDs in patients with early history of childhood obesity onset (38.9% of cases). It appears that obese children are at higher risk of developing EDs, particularly BED ( $p=0.018$ ) and BN ( $p=0.031$ ). We also investigated the association between dieting and EDs and identified that 84% of the subjects with positive anamnesis of childhood obesity ( $N=138$ ) had dieted before. The 32% ( $N=44$ ) of whom developed an ED.

**Conclusions:** Early obesity onset should be considered a risk factor for EDs in children, especially when they go on DIY diets. Therefore, it is important to raise awareness of EDs' early symptoms, although arising in children who have been or are still obese.

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#### **O10. A RETROSPECTIVE STUDY ON EATING DISORDER PATIENTS WITH AND WITHOUT PREVIOUS TREATMENTS**

**Authors:** Schumann R., Fasoli V., Mazzoni C., Ballardini D - Centro Gruber, Bologna

**Key words:** eating disorders, psychiatric comorbidity, previous treatment, long-term eating disorders, childhood obesity.

**Background:** In literature there is a lack of studies about previous treatments in EDs. Patients with Eating Disorders (EDs) who arrive in clinical observation with a history of previous treatments show in some cases the presence of psychiatric comorbidity, longer duration of the illness and medical and psychosocial complications.

**Aim:** The aim of the study was to analyze the clinical features of a sample of ED patients with and without previous treatments for EDs.

**Method:** This retrospective study uses the data of patients who were taken in charge in a specialized Treatment Center for EDs, between 1994 and 2014. The Center offers a multidisciplinary treatment (Cognitive and Cognitive-Behavioral Therapy (CT/CBT) integrated to Psycho-Nutritional Rehabilitation (PNR)) for EDs. The sample was composed of 555 patients (Anorexia Nervosa (14.6%), Bulimia Nervosa (39.5%), Binge Eating Disorder (24.3%) and Eating Disorder Not Otherwise Specified (21.7%) (DSM IV e IV-R). The sample was divided in two groups: patients with previous treatments (PrevT) and without previous treatments (noPrevT).

**Results:** The results show statistically significant differences between the two groups: the PrevT group present higher age at the request of treatment, longer duration of the illness, more psychiatric comorbidities, higher weight in childhood and adolescence and higher number of weekly binge episodes.

**Conclusions:** The differences that emerged from the analysis seem to suggest that the presence of comorbidity (CD) may represent a critical aspect for the outcome. The accurate assessment of the ED along with the assessment of comorbidities is focused to make a differential diagnosis and to collect the symptoms history in order to understand if: 1) the previous treatments focused also on CD; 2) if CD was treated with good outcome; 3) if CD was treated with partial or inadequate outcome perceived by the patient. The evaluation of these aspects together with the assessment of any previous therapeutic relationship can be remarkable for the customization of therapeutic interventions and also can contribute to build a more effective therapeutic relationship. To enlarge our treatment offer and to guide the integration of different, individualized treatments for long-term patients with an eating disorder, psychiatric comorbidities and eventually even a childhood obesity in their history.

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#### **O11. TRAUMATIC EXPERIENCES AND EATING DISORDERS (ED): WHEN THE BODY TELLS MORE THAN WORDS**

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**Key words:** eating disorders, traumatic experiences, psycho-nutritional rehabilitation, integrated multidisciplinary team approach, body experience

**Abstract:** ED patients who need an impatient treatment frequently present psychiatric comorbidity influenced by a history of traumatic experiences. The integrated multidisciplinary team of ED Unit of Casa di Cura Villa Margherita performs an intensive psycho-nutritional rehabilitation program with a cognitive-behavioural approach. In recent years our interest turned to most severe patients who often present dissociative aspects and self-harm behaviours depending on traumatic experiences, which became the focus of our psychological

intervention, sometimes needing a specific treatment as EMDR. Our clinical aim is not only to understand and treat traumas as far as DSM-5 diagnostic criteria, but also traumatic events concerning attachment. According to literature, ED subjects who lived traumatic experiences had a tendency to consider their body as an object to coldly and hypercritically break and judge in parts and most feel confusion about body as part of self or about self-identity. The study sample consisted of 147 patients hospitalized in our Unit subdivided in two groups: 1. ED subjects with traumatic history; 2. ED individuals without traumatic history. Aim of the study was to assess differences between the two groups. In particular, we investigate the perception of the body as the elected place of traumatic memories and we consider variables indicative of metacognitive deficits belonging to alexitimia, depersonalization, emotional dysregulation, personal estrangement, asceticism and interoceptive awareness. At the beginning of hospitalization the subjects were assessed through the following tests: SCL-90R; BUT; EDI-3; TAS-20; EPS. 43% of the entire sample referred a history of traumatic experiences while 57% did not. The diagnosis among the trauma-group were: 39.7% AN restricting type, 22.2% AN binge-purging type, 30.2% BN, 7.9% BED. The statistical analysis found that, between the two groups, patients with traumatic history scored significantly higher at: the subscale Somatization of SCL-90R ( $p=0.021$ ); the subscale Body Dissatisfaction ( $p=0.033$ ) of EDI-3; the Weight Phobia subscale of BUT ( $p=0.04$ ); the Difficulty to Emotion Discrimination subscale of TAS-20 ( $p=0.04$ ). The results of the study confirm that the relation with the body in ED patients is more difficult in presence of traumatic experiences.

## 012. IMPACT OF DIFFERENT DIET REGIMES ON HUMAN GUT MICROBIOTA

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**Key words:** Human microbiota, Antibiotic Resistance, Diet

**Introduction:** The scientific community is increasingly showing interest in revealing the correlations between diet and health status. In fact, worldwide dietetic recommendations are principally based on the evidence that an assorted, well-balanced, low fat diet, that includes different daily portions of vegetables and mainly vegetal proteins source, has shown to have a preventive significance toward non-communicable diseases.

However, these dietetic suggestions reflect only the nutritional point of view and essentially lack of any concern regarding the exposition to chemical and microbiological hazards including Antibiotic Resistance (AR) determinants through food ingestion that could impact microbial gut ecology.

**Aim:** In this context our effort will have been addressed to fill this gap by clarifying to what extent food of animal and vegetal origin can contribute to the ecological microbial relationships and to the establishment of AR bacteria populations in human gut.

**Materials and methods:** Three cohorts belonging to vegans, vegetarians, omnivores categories were selected using the following inclusion criteria: being strictly vegan, vegetarian or omnivore; being adults; being not under antibiotics use or having assumed antibiotics in the last twelve months. Each participant was asked to record a food frequency diary for two weeks and to provide a faecal sample. Total DNA was extracted from faecal samples and a metagenomic analysis based on 16S rDNA genes sequences, was performed. Moreover qPCR was applied for the measurement of presence/absence of the AR determinants.

**Results:** A number of 102 participants were considered for the analysis, 44 of which were omnivora, 27 vegan and 31 vegetarian. The firsts results showed a clear impact of diet regimes on the composition of gut microbiota in terms of key species. Conversely no significant differences in terms of AR genes were noticed between the three investigated cohorts. Moreover a correlation was identified between anthropometric parameters such as BMI, BFM, BLM and specific bacterial genera.

**Discussion and Conclusions:** The available evidences suggest that variations of feeding type but also of anthropometric features might impact gut microbiota species, modifying the ecological state of equilibrium reached between the bacterial strains and the host.

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### O13. DIFFUSION OF EATING DISORDERS, ORTHOREXIA NERVOSA AND MUSCLE DYSMORPHIA IN A GROUP OF UNIVERSITY STUDENTS: AN ITALIAN MULTICENTRIC SURVEY

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**Key words:** eating disorders, orthorexia nervosa, muscle dysmorphia, university students

**Introduction and background:** Over the best known and studied eating disorders (ED) like anorexia nervosa (AN), bulimia nervosa (BN) and binge eating disorder (BED), are spreading some behavioral styles excessively focused on nutrition and/or body appearance that can compromise lifestyle, social life and health. In this regards, some examples are orthorexia nervosa (ON) and muscle dysmorphia (MD). The term orthorexia nervosa, derived from the Greek *orthos* (accurate) and *orexis* (hunger), was first coined by the physician Bratman in 1997 to describe an excessive fixation with healthy eating, often associated with significant dietary restrictions, life threatening medical conditions related to malnutrition, affective instability and social isolation. It is not officially recognized as a psychiatric diagnosis, even though its behavioral pattern is frequently recognized by eating disorder specialists (Koven & Abry, 2015). The lack of thoroughly vetted measures with clear psychometric properties for ON makes it difficult to obtain trustworthy estimates of its diffusion. Anyway some high-risk groups have been identified: dieticians and nutrition students, other healthcare professionals including medical students, fitness participants and performance artists (Varga et al., 2013). MD is a psychological condition currently classified in DSM-5 as a subtype of body dysmorphic disorder (APA, 2013). People with MD are mainly men, characterized by a preoccupation to appear small and skinny despite a normal or developed musculature, to enforce rigid diets, to exercise excessively and to experience substantial impairment in their occupational, social and interpersonal functioning (Suffolk et al., 2013). MD disorder was first recognized in bodybuilding centers and described as "reverse anorexia", because of the reverse direction of the concerns compared to AN (Pope et al., 1993). MD diagnostic placement has been repeatedly questioned because a strong relationship exists between MD symptomatology and features of obsessive compulsive and eating disorder pathology (Murray et al., 2010). Currently, large epidemiological studies on MD are missing. Some researchers consider that the prevalence in men is proportional to the rate of AN in women. Men who suffer from MD are generally engaged in sports where body size is exasperated, such as bodybuilding, wrestling, football. Some authors have suggested that those who have a predisposition for MD may be more inclined to play sports (Leone et al., 2005).

**Aim of the study:** This study aims to investigate the spread of traits typical of ED, ON and MD in a group of university students attending the first year in three Italian Universities (Turin, Pavia and Naples Parthenope) by administering tests 2 specifically validated. A second objective of the study is to evaluate the possible difference in the diffusion of the examined conditions between students enrolled in three different areas of study courses (sanitary-scientific, economic-humanistic and sport sciences).

**Materials and methods:** This research was reviewed and approved by the Bioethical Committees of the Universities involved. A questionnaire was administered to students in class during lessons. To participate in the survey all the participants gave their informed consent. The filling out was anonymous. Questionnaire was made up of four sections: (i) socio-demographic section with question about gender, age, weight, height, hours and type of physical exercise, use of supplements, drugs, diets; (ii) test ORTO-15 to identify individuals with traits of ON (Donini et al., 2005) (iii) Test MDDI-ITA (Santerrecchi & Dettore, 2012) to identify traits of MD and test EAT-26 (Dotti & Lazzari, 1998) to identify ED. The tests were validated on the Italian population. Data were processed using SPSS 21, with descriptive techniques, correlational (Pearson *r*), comparison of central tendencies ( $\chi^2$  and T test), and one-way ANOVA analyses.

**Results:** Overall the questionnaire was completed by 1.122 students (Torino *n* = 482, Pavia *n* = 224, Napoli *n* = 415), 46% female and 54% male, attending degree courses related to the sanitary-scientific area (35%), economic-humanistic area (38%) and sport sciences (27%). Traits of eating disorders were recognized in 6.9% of the students; 37.9% showed traits of ON and 5.3% of MD. Females showed a greater risk for eating disorders and ON (*p* < 0.05). The area of sport sciences was at increased risk for MD and less for ED (*p* < 0.001). No significant difference was found for the other comparisons. On the whole, 432 students (38,5%) showed the presence of traits of one of the disorders examined: 366 (32,6%) of just one condition, 52 (4,6%) of two conditions simultaneously and 14 (1,2%) of three conditions.

**Discussion and conclusions:** Mental illness of modern man appears in different ways and the current increase in food-related disorders and in problems with the perception of one's body are a demonstration.

Students enrolled in the survey showed a certain tendency on developing ON. Anyway this result could also depend on a lack of specificity of the test ORTO-15 in discriminating only ON, as also highlighted in other scientific studies (Alvarenga et al., 2012). The major diffusion of traits of MD between students of the area of sport sciences could be due to a peculiar inclination to sports, as it emerges from the literature (Leone et al., 2005), as well as by the high activity associated with the course studies.

It is interesting the detection in several subjects of the co-presence of traits of two or three of the condition examined simultaneously: this can indicate the presence of some common component in the different disorders. Further studies are necessary to better illustrate the epidemiological picture of these disorders, overall of ON and MD for which data on the diffusion are scarce: this can lead to correctly implement the necessary preventive interventions. 3

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#### 014. THE EFFECT OF PARTIAL SLEEP DEPRIVATION ON FOOD CRAVING AND ENERGY INTAKE DIFFERS DEPENDING ON HABITUAL SLEEP QUALITY

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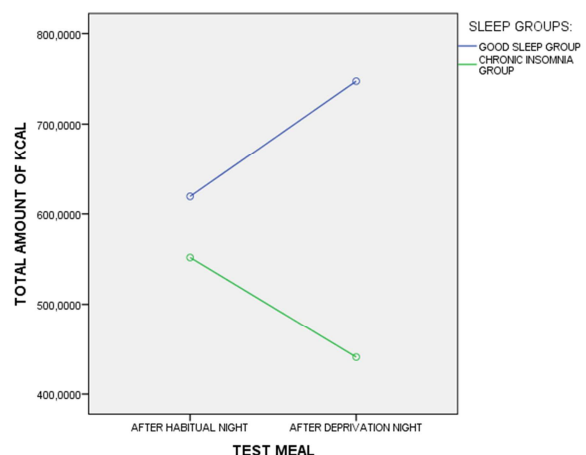
**Key words:** Sleep deprivation, food craving, food intake, insomnia

**INTRODUCTION:** Cross-sectional studies and systematic reviews show that poor sleep is associated with obesity. A meta-analysis of longitudinal studies<sup>(1)</sup> confirms that children with short sleep have twice the risk of being overweight/obese than controls. In adults this relationship is still debated but experimental studies report that partial and acute sleep deprivation increases hunger and ghrelin levels, reduces leptin levels and alters metabolism of carbohydrates<sup>(2)</sup>.

**OBJECTIVES:** The study aims to compare the effects of partial sleep deprivation (5 hours of sleep allowed) on food craving and energy intake in good sleepers and participants reporting symptoms of chronic insomnia.

**METHOD:** Twenty participants (5 males; Mean age=23.85 ± 2.35) took part in the study. On the basis of self-reported symptoms, 10 were classified as good sleepers (GS) and 10 as individuals with symptoms of chronic insomnia (CI). They came to the laboratory without having breakfast after a normal night of sleep (NN) and after an experimentally induced night of partial sleep deprivation (DN) in a counterbalanced order. Food craving was induced presenting sweet and salty food images. Energy intake was measured through a test meal.

**RESULTS:** The total sleep time differed significantly between nights in both groups  $F_{(1,18)}=48,6$ ,  $p<.001$ . A mixed design factorial Anova group (GS vs ICI) x night (NN vs DN) x Moment (baseline vs post exposure) evidenced that both groups rated as more positive sweet stimuli than salty stimuli ( $F_{(2,17)}=9.936$ ;  $p<.001$ ) and observed sweet stimuli for longer time than salty stimuli ( $F_{(1,18)}=4.516$   $p<.05$ ). There was a significant interaction



nights\*groups ( $F_{(1,18)} = 4.83$   $p < .05$ ): after the deprivation night

Figure 1.

GS reported higher sense of craving for sweet stimuli as compared to CI. The ANOVA group x night conducted on the amount of total energy consumed during the test meal revealed a significant interaction night\*group ( $F_{(1,18)} = 5.86$   $p < .05$ ) as reported in Figure 1.

**DISCUSSION AND CONCLUSION:** Sleep deprivation increases craving for sweet foods and energy intake in normal sleepers and reduces energy intake in people reporting symptoms of chronic insomnia. On the basis of these results it is possible to speculate that inconsistencies evidenced by previous research on adults may be reduced taking into account insomnia symptoms.

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## 015. BODY IMAGE AND EATING BEHAVIOR IN A SAMPLE OF MALE PROFESSIONAL BODY BUILDERS

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**Key words:** Gender, Body Image, Eating Disorders, Body Builders

**Introduction:** Eating Disorders in males are a complex phenomenon. In spite of their low percentage they are stimulating a growing clinical interest in the peculiarities of their expressions, different from ones in female, and because of their difficult approach and treatment.

Body image, is a complex, subjective construction that depends on several variables.

Gender is considered an important factor in body image development: women in fact seem to be consistently more discontent with their body appearance, and this is often related with the idea to be overweight and too fat.

Furthermore, if body image traditionally refers to leanness and thinness for women, body shape in terms of muscularity is an important key issue for body image development in males.

If we define body dissatisfaction -key symptom of Eating Disorders- as the existing discrepancy between current body shape and ideal body shape, it is important to stress that in the last decades male models have become more and more lean and muscular at the same time.

In "muscle dysmorphia" there are overconcerns about body, body image distortions, unhealthy eating, compulsory activity and weight control practices.

The aim of our study is to investigate -in a sample of 10 male professional body builders- the presence of the risk factors for eating disorders such as body dissatisfaction/ disperseption or risk behaviors such as dangerous eating habits, dieting, using anabolic substances or body checking and obsessive weight control.

**Methods.** 10 male professional body builders are recruited in some gyms in Ferrara (Italy) . A questionnaire, a dieting investigation and some tests- Eating Attitude Test to investigate eating behavior and Body Uneasiness Test to investigate the body uneasiness-are administered.

**Results:** Body-checking, focusing on body image and compulsory sport activity are present in all the group, especially during competitions time. 20% of the whole sample present high score in GSI (BUT test) up the clinical cut-off, which shows general body dissatisfaction. 70% present high score of PSDI of the BUT test indicating uneasiness of specific body parts such as height, hair, nose and so on.

Considering all the sample individuals the average EAT score (13.3) is under the clinic cut off (>30).

The dieting questionnaire reveals restricted eating behavior, especially during competitions time, with a strong reduction of carbohydrates and fats and with a higher intake of proteins. In only 10% the diet has been prescribed by a dietician, in 40% by a personal trainer and in 50% self administered.

All the body builders take nutritional supplement. 40% take diuretics or practices compulsory activity as weight control method.

**Discussion and conclusion:** Our study highlights the risk factors for developing a complex disorders such as "muscle dysmorphia" in professional body builders. We pinpointed a high focus on body muscularity and compulsory activity, which could be risk factors for an ED. Furthermore, a negative body image can encourage unhealthy behaviors in men such as dieting, disordered eating, exercise dependence and steroid abuse.

Knowledge on etiological factors for MD is still lacking. In this particular field further studies should be carried out to better understand the risk factors for developing a distorted body image, key symptom of eating disorders. Since body image has an enormous impact on the mind and life of subjects, all people practicing sport that requiring weight control should be carefully investigated.

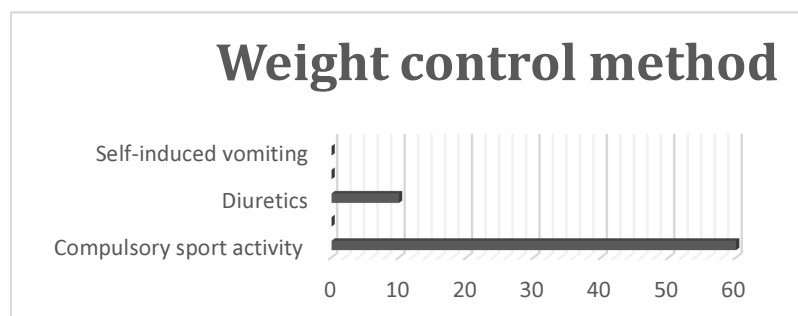
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Figure 1. Body and food checking



Figure 2. Weight control method





## P1. ED PREVENTION: BETWEEN STRATEGIC PLANNING AND IMPLEMENTATION BUSINESS

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**Key words:** Health promotion, prevention, implementation plans, organizational aspects

**Introduction and background:** In Emilia-Romagna the regional technical group for ED, comprising representatives from business (professionals with expertise on the topic), according to DGR 12 98/09, to related implementation documents and to Determina 6060/13, deals with the constitution of thematic subgroup responding to regional programmatic indications.

**Aim of study:** According to recent definition and publication of PRP 2015-18, the regional group for ED has set up a technical sub-group finalized to producing Guidelines for the implementation of initiative to promote food health and prevention evidence based.

**Materials and methods:** The working methodology of thematic subgroup allowed to focusing technically on prevention and promotion of food health, through a focused discussion and the elaboration of document processing by email.

**Results:** It were produced synthetic guidelines (3 text pages and 3 annexed pages) and operational indicating clearly the elements predicted in the training projects of trainers provided for the implementation of project included in MRP. Document's official diffusion is provided through regional circular and representatives of the subgroups identified at the regional and corporate level for the PRP.

**Discussion and conclusions:** The innovation of the contribution is not limited to organizational and clinical approach. On the hand, the regional group for ED has contributed to realization of reference project included in the PRP, on the other hand it has been deactivated for production of technical guidelines that support the implementation of prevention projects. In addition, the document emphasizes the role of the company representatives ED as consultants technical and scientific at the promoters of initiatives of prevention and promotion (eg Public Health Departments), fostering the integration between business functions on a typical cross theme.

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## P2. EFFICACY OF A REHABILITATIVE TREATMENT IN A RESIDENTIAL CENTRE FOR EATING DISORDERS.

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**Key words:** eating disorders, rehabilitative treatment, residential setting

**Background:** Treatment of Eating Disorders (ED) is a difficult therapeutic task. In some cases, patients benefit of temporary leaving from the habitual familiar and social environment, hosting in dedicated residential Centers.

**Aim of the study:** To evaluate in a group of ED patients (Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorders (BED), Not Otherwise Specified Eating Disorders (EDNOS) the effectiveness of a 3 -5 months multidisciplinary residential rehabilitative treatment.

**Patients and Methods:** Fifty-one female patients (23.5±6.1 years), 22 with Anorexia nervosa (AN), 14 with Bulimia nervosa (BN), 9 with Binge eating Disorders (BED) and 6 with not-otherwise specified eating disorders (EDNOS) were admitted at the Center for Eating Disorders "G. Gioia" in Chiaromonte (Potenza, Italy), from 2010 to 2012. Residential regimen lasted at least 3 months and was followed by 2 follow up (FU) visits, at 6 and 12 months after admission, respectively. Anthropometric (weight, height, BMI), clinical (Blood Pressure, Heart Rate), biochemical and body composition parameters were evaluated at entry, at 1 - 3 and 5 months while

residents and 6 and 12 months after admission. A multidisciplinary team including specialized medical doctors, psychotherapist and dietitian was involved in the treatment.

**Results:** A significant and progressive weight gain in 22 patients with AN both at the end of the residential period and at the FU ( $+ 8.5 \pm 0.6$  kg at 6 months) was observed, with no signs of refeeding syndrome. Resting Energy Expenditure (REE) progressively increased ( $+ 188 \pm 90$  Kcal), reaching significance ( $p < 0.02$ ) at 5 month treatment. Menses spontaneously recovered in 12 patients, after 17 (5-48) months amenorrhea.

A substantially stable body weight was observed in 14 patients with BN, with the elimination of binge eating and purging episodes. 9 patients with BED gradually lost weight ( $-14.5 \pm 3.2$  kg at 6<sup>th</sup> month FU) and in particular Fat Mass (FM), with significant ( $p < 0.05$ ) blood lipids and serum transaminases improvement.

**Conclusions:** These observations suggest the effectiveness, without complications, at least in the short term of a multi-disciplinary and integrated approach carried out in a residential setting for patients with ED, in particular restrictive AN.

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### P3. PSYCHIATRIC COMORBIDITY IN CHILDREN AND ADOLESCENTS WITH EATING DISORDERS

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**Key words** eating disorders, depression, social anxiety

**Introduction and background:** Eating disorders (ED) with onset in childhood are increasing. ED are characterized by significant disturbances in eating behaviors and distress or excessive concerns about body shape or weight. ED often occur with severe medical and psychiatric co-morbidities including depression, bipolar disorder, obsessive compulsive disorder, anxiety disorders and post-traumatic stress disorder.

**Objective:** The current study examined the prevalence of psychiatric co-morbidity in a sample of help seeking patients referred to the eating disorder centre of the Child and Adolescent Psychiatry division of the Second University of Naples. Co-morbidity are described both in categorical and dimensional frame.

**Method:** Data were collected by trained and expert child and adolescent psychiatrist. Demographic and personal data derived from a clinical interview. The Eating attitude test-26 (EAT-26) and the Body Uneasiness Test provided eating disorder symptoms and body image data. Categorical co-morbidity data are gathered from the structured clinical interview Kiddie schedule for affective disorders and schizophrenia (K-SADS), Dimensional co-morbidity are obtained by the following self-report questionnaires: Children Depression Inventory (CDI), Liebowitz social anxiety scale (L-SAS), Children's Yale Brown Obsessive Compulsive Scale (CY-BOCS) and the Young Mania Rating Scale (YMRS).

**Results:** The sample consisted of 59 subjects, 52F (88,1%). Mean age was 172, 3 months (SD 19,8 range 132-214). Mean BMI was 16,1 (SD 2,4 range 11-23,6). EAT-26 and BUT mean score were respectively 25,8 (SD 19,8) and 1,8 (SD 1,3). 38 subjects (64,4%) have received a diagnosis of Anorexia Nervosa (AN) and 21 (35,6%) had a diagnosis of Eating disorder not otherwise specified (ED-NOS). 49 (83,1%) and 8 (15,3%) participants had respectively a restrictive and binge/purging subtype. 18 (30,5%) patients showed one co-morbidity, 17 (28,8%) two co-morbidity and 5 (8,5%) three co-morbidity. The categorical most frequent co-morbidities were Social Anxiety disorder (29 SS, 49,2%) and Depression disorder (21 SS, 35,6%). The mean scores at dimensional questionnaires are: CDI (15,9 SD 11,2); L-SAS (35,4 SD 28,7); CY-BOCS (12,5 SD 10,4) and YMRS (9,6 SD 4,6).

**Conclusion:** Depressive disorder and Social anxiety disorder were the most prevalent categorical co-morbidities detected by the clinical investigation. However the self-report evaluation of these two disorders with a dimensional construct provided conflicting results because the social anxiety symptoms are adequately recognized by the subjects whereas depressive symptoms were mostly denied or misunderstood.

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### P4. CREATION OF A UNIFIED SERVICE FOR EATING DISORDERS IN UDINE'S AREA

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**Authors' affiliation(s):** AOU-UD, Santa Maria della Misericordia, Clinica Psichiatrica Universitaria

**Key words:** protocol, integrated service, eating disorders

**Introduction:** The University Psychiatric Clinic (UPC) located in the Academic Hospital in Udine (AOU-UD) has been dealing for several years with the treatment of patients suffering from eating disorders. The 2015 Hospital Implementation Plan aimed to create a consolidated and structured treatment plan, between AOU-UD and Socio-Health Agency 4 (AAS4) of Udine for the treatment of patients with eating disorders. It was therefore expected

the definition of organizational models, involving AOU-UD and AAS4, in order to ensure a suitable treatment for this type of patients.

**Methods:** In order to achieve such organizational models it was necessary to:

- a) define the treatment and rehabilitation pathways;
- b) define personalized projects for young patients that are entering adulthood;
- c) provide a shared document in order to create, by 31/12/2015, a cooperation protocol between the local services and the hospital. The clinical activities were performed by:

- the UPC located in AOU-UD
- the AAS4 eating disorders outpatient service (ADA) of the AAS4

The 2015 economic goal was the consolidation of an integrated treatment plan for patients with eating disorders.

**Results and conclusions:** The new protocol now defines a new approach with an intervention model based on different levels:

Level 1. First assessment, follow-up in the outpatient service and case-management over time

Level 2. Psychotherapy approach and clinical research in the CPU

Level 3. Day hospital in the Department of Internal Medicine

Level 4. Hospitalization programmed in the Department of Clinical Medicine

Level 5. Admission in a rehabilitation specialized structure located in Portogruaro

The treatment plan includes: diagnostic and psychotherapeutic/psycho-educational interventions, evaluation and nutritional rehabilitation, an appropriate follow-up over time and the possibility to achieve a Day Hospital or a regular hospitalization. These two different types of hospitalization are reserved for patients requiring more detailed clinical investigation and/or complicated cases that require complex medical interventions. To this aim we established the Unified Service for Eating Disorders in Udine's area.

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## **P5. RELATIONSHIPS OF PARENTS' AND CHILDREN'S ALEXITHYMIA WITH CHILDREN'S EATING BEHAVIOUR AND BMI IN A GROUP OF OVERWEIGHT AND OBESE 8-12 YEARS OLD**

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**Key words:** Alexithymia, childhood obesity, parents, affect regulation, eating behaviour, prevention

**Abstract:** This study evaluated correlations between BMI and level of Alexithymia (Alexithymia Questionnaire for Children) and eating behaviour style (DEBQ), as well as with their parents' level of Alexithymia (TAS 20), in a group of 25 overweight or obese children between ages 8 and 12, without weight related illnesses, contacted in pediatric practices. All children completed the Alexithymia Questionnaire for Children and the DEBQ-C. Parents completed the TAS-20 and the DEBQ-P. Results showed a significant correlation between children's BMI and their alexithymia scores indicating that difficulties in affect regulation had some influence on weight, probably linked to a use of food as an external instrument to regulate their own emotions. Mothers' level of alexithymia and fathers' externally oriented thinking showed a significant correlation with children's BMI. Children's Emotional eating behaviour showed a significant correlation with their ability to individuate their emotions and feelings, but not directly with BMI. Results suggest that treatment and prevention of overweight and obesity in children should consider aspects which go beyond lifestyle in favour of emotional and family relational aspects of eating behaviour.

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## **P6. CLINICAL AND NUTRITIONAL EFFECTS OF LIFE-SAVING HOSPITALIZATIONS AT AN INTERNAL MEDICINE UNIT OF PATIENTS WITH EATING DISORDERS (ED)**

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**Key words:** eating disorders, anorexia nervosa, life-saving hospitalization

**Introduction:** ED are complex diseases causing serious malnutrition with clinical complication and potentially leading to death. Hospitalization is necessary when malnutrition is life-threatening or the psychiatric morbidity is severe.

**Methods:** Thirty-five consecutive patients (pts) (4 male and 31 female, mean age 25.1±6.6 years) with ED (29 with restricting anorexia and 2 with restricting type of bulimia nervosa, DSM-IVR criteria) had a life-saving hospitalization at the Internal Medicine Unit of the Trento Hospital between the years 2010 and 2012. The pts were treated by an interactive multi-disciplinary team (internist, psychiatrist, psychologist, nutritionist, dietitian, nurse). The refeeding program consisted in an increasing protein-caloric intake along with vitamins and trace elements supplementation. Meals were assisted by TERP, nurse and dietitian. Twelve pts were treated also with enteral nutrition by a naso-gastric tube and 10 pts with parenteral nutrition, both overnight. The artificial nutrition, calculated to satisfy the resting energy expenditure, began with an induction period to reduce the "refeeding" risk and to stimulate the feeding per os. Here we show several indices of the nutritional state at the entry and at the discharge from the hospital.

**Results:** The mean clinical stay was 17.2±8.7 days. No pts died nor had major complications. No mandatory medical treatment (TSO) was needed. We observed a significant increase of body weight (42.3±8.4 → 44.3±8.5 kg) BMI (15.3±2.3 → 16.1±2.3 kg/m<sup>2</sup>), systolic (95.2±8.3 → 103.6±10.6 mmHg) and diastolic (61.0±7.0 → 65.6±8.6 mmHg) blood pressure, cardiac rate (55.7±16.5 → 67.5±14.5 b/m), serum prealbumin (0.26±0.05 → 0.29±0.04 mg/dl); AST was reduced (34±21.8 → 27.4±13.9 UI/l) (all *P* < 0.05 or less). Non significant changes were observed for leukocytes, lymphocytes, C3, ALT and transferrin levels. One pts was transferred to a rehabilitation unit, 17 pts were discharged at home with an ambulatory follow-up at the ED center, 6 pts chose a voluntary discharge.

**Conclusion:** Our results demonstrated the therapeutic efficacy of a multi professional team in the treatment of severe ED conducted in a Medicine Unit, leading to a significant improvement of the nutritional parameters and to the possibility to continue the successive treatment in an ambulatory setting.

## P7. ASSESSING AUTISM SPECTRUM DISORDERS IN AN EATING DISORDER POPULATION DURING THE COURSE OF THE FIRST DIAGNOSIS.

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**Key words:** Eating Disorder; Anorexia; Autism Spectrum Disorder; RAADS-R; Autism Quotient.

**Background:** Eating Disorders and Autism Spectrum Disorders share common difficulties like deficit in Theory of Mind, Central Coherence and Set Shifting. Recent epidemiological studies found that about 20% of women with Anorexia Nervosa has enough autistic traits to reach the cut-off in common screening questionnaires like the AQ (Westwood et al., 2015). In a recently published case-series Mandy and Tchanturia (2015) found that many AN women with suspected ASD fulfil the criteria for a clinical diagnosis, having ASD symptoms before developing an Eating Disorder.

**Aims:** Assessing the frequency of clinical ASD in a mixed Eating Disorders sample. Finding distinctive traits between ED only and ASD+ED to develop a short clinical interview for a differential diagnosis.

**Methods:** We assessed 70 patients admitted at the Eating Disorders Outpatient Unit of ASL RomaE, aged 16 years or older and without intellectual disability. They underwent through the usual assessment for ED and completed three self-report questionnaires (AQ, EQ and SQ) for ASD (Baron-Cohen et al., 2013) and the RAADS-R scale (Ritvo et al., 2011), a semi-structured clinical interview for ASD assessment. We stored responses to each item and selected through cluster analysis the most predictive items matching the clinical diagnosis.

**Results:** 36% of ED subjects was also positive at the ASD evaluation. Within the AN subjects 25% had ASD, in line with literature. The least frequent comorbidity with ASD was observed in BED patients (13%) while 50% with ED-NOS showed an ASD comorbidity. Clinical RAADS-R scores and AQ correlation is 0.56. A set of 15 questions can distinguish ED and ED+ASD with a specificity and sensibility of 100% in our sample.

**Conclusion:** From an exploratory cluster analysis 3 groups emerged: pure ED (40%) where ASD traits are in line with typical population, ED+ (25%) where there are more traits but not enough for a diagnosis and ED+ASD (35%) who fulfil the criteria for ASD. Our analysis suggests that auditory oversensitivity, difficulties in regulatory behaviour of social interaction; understanding of body-language and social expectations, together with an increased need for solitude and the presence of special interests can discriminate the disorders. ED can increase ASD traits but it's also frequent in people with a previous and undiagnosed ASD.

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## **P8. EATING DISORDERS, DIALECTICAL BEHAVIOR THERAPY AND METACOGNITION: AN EXPLORATIVE STUDY.**

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**Abstract:** In the last decade, scientific literature reviews suggest that Dialectical Behavior Therapy (DBT) can be also effective in treating Eating Disorders (ED) behaviors. DBT-based skills group are focused on "teaching" clients better and more functional way so cope with emotions and difficult life circumstances. Despite this efficacy, when compared with other treatments there are few significant post-treatment difference between groups in emotion regulation scores. Furthermore, negative perseverative thinking is significantly higher in ED subjects and is associated with ED symptomatology. We administered a test battery (Metacognition Questionnaire, Penn State Worry Questionnaire, Difficulties in Emotion Regulation Scale, Ruminative Response Scale and Brief COPE) in the first assessment phase of a two different DBT-based skills groups in order to find other change-related psychological characteristics involved in the treatment.

## **P9. PREGNANCY EFFECTS ON ED**

**Author:** Chiara Covri, psychologist psychotherapist

**Keywords:** eating disorders, psychopathology, pregnancy, postpartum

**Introduction and background:** According to some studies, pregnancy may not benefit women affected by ED as it can, in some cases, heighten some of the symptoms, especially bulimic symptoms (Lewis L, Le Grange D, 2006). Some longitudinal studies have highlighted how eating symptomatology can be lessened during pregnancy, especially in the third trimester; nonetheless, the levels of psychopathology remain clinically significant, as is the comorbidity for anxiety and depression. Furthermore, women with ED often hide from their gynecologist or midwife the existence or the severity of their ED (Easter A, Solmi F, Bye A, et al, 2014; Blais MA, Becker AE, Burwell RA, et al, 2000). Some studies identify pregnancy as a possible precipitant event in the appearance of ED (Tiller J, Treasure J; 1998; Easter A, Bye A, Taborelli E, et al, 2013). Many studies share the conclusion that 6-9 months after giving birth, ED levels are back to pre-conception levels and women with ED - or with a previous history of ED - are at higher risk of developing depressive symptoms during the postpartum period (Knolph C, Von Holle A, Zerwa S, et al, 2013; Mazzeo S, Jones I, Mitchell K, et al, 2006; Easter A, Solmi F, Bye A, et al, 2014; Blais MA, Becker AE, Burwell RA, et al, 2000).

**Method:** The case study applied to 6 clinical situations (2 AN and 4 BN).

**Outcome:** Neither patient with AN revealed to the medical team the presence of ED, with severe risks for the foetus' health; the anorexic symptoms worsened considerably during pregnancy, requiring hospitalization, which had never occurred pre-pregnancy. A bulimic patient completely stopped binge eating and vomiting but she developed AN. Three patients with BN significantly reduced their bulimic behaviours during pregnancy and during the postpartum period, but the symptomatology reverted to pre-conception levels once they stopped breastfeeding; one of them developed a clinically significant depressive symptomatology during the postpartum period.

## **P10. EATING DISORDERS PREVENTION: A POSSIBLE CHALLENGE**

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**Keywords:** prevention, ED, dissonance, risk factors

**Background:** The Eating Disorders (ED), quickly moved from a sporadic into a widespread event, may now be considered a "rampant symptomatic expression of our modern western culture." Being multi-factorial aetiology disorders, both an early diagnosis and an effective course of treatment are difficult. The lowering of the age of onset, the health costs of the treatment and the heavy consequences on the physical-psychological-social status of the patient, make ED prevention investments necessary.

**Objective:** Analyse the literature and collect evidence related to the Eating Disorders' prevention.

**Materials and methods:** Comparison between evidence-based studies in the field of ED prevention (cognitive

dissonance, media literacy), and bibliographic material.

**Discussion:** numerous ED prevention attempts were put in place in the past. Nevertheless, some common strategies have proved to be ineffective or even harmful. Today, therefore prevention approaches based on cognitive dissonance and media literacy are preferred, since they seem to provide promising results in reducing variable risk factors, such as the internalization of the ideal of slimness and the dissatisfaction with body shapes. In our work, we have chosen to expand on some of the risk factors considered most interesting and innovative: sports, dieting (focus on vegan and vegetarian nutrition), unattainable aesthetic models and the difficulty of emotional expression within the family unit (focus on the relationship with the father figure).

**Conclusions:** To prevent eating disorders, the promotion of measures that oppose non-specific risk factors and increase general protection factors is needed. It is also important to raise awareness of general practitioners, pediatricians, families and teachers in order to make an early diagnosis more rapidly.

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## P11. THE INTEGRATED TREATMENT OF EATING DISORDERS

**Authors:** Maria Teresa Daniele, Mario Pinto. Vincenzo Manna

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**Key Words:** treatment of eating disorders, psychotherapies, pharmacotherapies, integrated treatment

**Abstract:** The treatment of eating disorders is still controversial. The three main types of therapy proposed in clinical practice in recent years, that is, nutritional therapy, psychotherapy and pharmacotherapies, when administered separately, have given very uncertain effects, positive in some cases, but with a demonstrated efficacy in a percentage too background of patients, to be accepted in current clinical practice. These disappointing results have been verified by numerous scholars, in every clinical setting, either in an outpatient setting and in day hospital and during hospitalization in a hospital specialist. Psychotherapies most studied and practiced are: cognitive behavioral therapy (CBT), interpersonal therapy (IPT), family therapy and that a psychodynamic approach. Pharmacotherapies have evaluated the therapeutic effects of tricyclic antidepressants and those selective serotonin (SSRI) but also of classic and atypical antipsychotic drugs, as well as many other preparations. The best therapeutic results in randomized controlled trials appear to be those induced by integrated therapy, which uses the same nutritional therapy, psychotherapy and pharmacotherapy. There are objective obstacles to the treatment of eating disorders (DCA). The treatment of eating disorders presents inherent difficulties. Eating disorders are not just simple lifestyle choices or behavioral problems. DCA cure means to address the relationship of the patient with the food, the co-existing health conditions, nutrition, habits, the micro and the macro-environment of the patient and the problem that initially triggered the eating disorder.

## P12. THE ROLE OF THE DIETITIAN IN THE MULTIDISCIPLINARY INTENSIVE DAY-TREATMENT FOR EATING DISORDERS IN AN ITALIAN SPECIALIST CENTRE

**Authors:** Dapporto E., Pozzi L., Ballardini D., Schumann R. - Centro Gruber, Via S. Stefano 10, 40125 Bologna, Italy

**Keywords:** Eating Disorders; Dietitian; Meal support; Day-Hospital; Multidisciplinary Team.

**Background:** International guidelines suggest to treat ED by a multidisciplinary and specialized team composed of professionals such as medical nutritionist, dietitian, psychologist, psychotherapist and psychiatrist. The recent guidelines of the Royal Australian and New Zealand College of Psychiatrists (RANZCP) show the appropriateness of the dietitian support during the IDT for the outpatient treatment of Eating Disorders (EDs).

**Aim:** To define and reflect on the specific role of the dietitian in the Nutritional Psycho-Rehabilitation (NPR) during the Intensive Day-Treatment (IDT) in a multidisciplinary and specialist centre in Italy (Centro Gruber).

**Materials and methods:** The role of the dietitian in the IDT for EDs has been defined using the international guidelines (APA; NICE; ADA; RANZCP; AED). Centro Gruber, certified by the ISO 9001 Quality Certification, integrates the dietitian in a structured program of diagnosis and treatment for EDs. Starting from these data, it was built the flowchart which describes the specific role and the clinical intervention of the dietitian during the IDT.

**Results:** The dietitian is a key professional with organizational and therapeutic skills who integrates with the other therapists of the multidisciplinary team within the NPR for EDs in day-hospital. During the therapy, the dietitian realizes psycho-education and cognitive restructuring interventions focused on nutrition, guiding the

patient to the taste discovery and to nutritional balance. He/she provides mealtime support identifying dysfunctional behaviors and deconstructing false beliefs induced by the psychopathology.

**Conclusions:** To achieve the therapeutic objectives it is necessary that the work of the dietitian, member of a multidisciplinary team, is set within a structured program of diagnosis and treatment for EDs. This therapeutic model allows for the standardization of the method and a greater customization of the clinical intervention.

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### **P13. THE THIN IDEAL AND BODY DISCOMFORT : CASE STUDY OF AN INTERVENTION FOR SELECTIVE PREVENTION (SP) OF EATING DISORDERS (ED)**

**Authors:** Di Loreto Gianna 1, Piccione Carla 2, Marchetti Piero 3, Gravina Giovanni 4

**Authors' affiliation(s):** 1. Psychologist, Servizio di prevenzione per i DCA in collaborazione con Centro Arianna. ASL 5 Pisa; 2. Dietitian, Centro per i Disturbi Alimentari Casa di Cura San Rossore. Pisa; 3. PhD , Azienda Ospedaliero Universitaria Pisana; 4. PhD Endocrinologist , Centro Arianna per il trattamento dei DCA. ASL 5 Pisa.

**Key words:** Thin ideal, ED prevention, cognitive dissonance.

**Introduction:** The study and the intervention for SP of ED was conducted within 3rd year classes of a scientific lyceum in Pisa.

#### **Objectives:**

1. Evaluate the extent to which the thin ideal is internalized by a nonclinical sample of students.
2. Evaluate in a nonclinical sample of female students the possible correlations between BMI and eating behavior, body image distress, and internalization of the thin ideal
3. Decrease internalization of the ideal of thinness in a subgroup at risk of ED.

#### **Materials and methods:**

1. Administer test IBIS-R to 150 students: 55 M and 95 F from 8 classes ( $\mu$  age = 16).
2. Evaluate in the subgroup of 95 F with BUT and EDE-Q, subdividing of the sample according to BMI and presence/absence of prodromes for ED, with associated correlations.
3. SP intervention (Body Project) based on cognitive dissonance on groups of female subjects (n. 6 meetings for each group of 7-8, average age 16 yrs) with pre and post-operative evaluation (DERS, IBIS-R, BPDS, Negative Affect Scale, EDE-Q).

#### **Results:**

- a lack of internalization of the thin ideal is detected without gender differences.
- 62% of the sample got BUT GSI > 1.2 (likely to have a significant bodily discomfort)
- Both the probability of bodily discomfort and the internalization of the thin ideal do not correlate significantly with BMI
- 44 % of F had EDE-Q > 1,76 (prodromes for ED). The highest score of prodrome increases with the increase of the BMI.
- There is a positive linear relationship between the presence of prodromes per ED and probability of significant bodily discomfort. ( $r = .82$ )
- The evaluation after the intervention group of SP shows a significant decrease in internalization of the thin ideal and to negative emotions.

#### **Conclusions:**

1. Gender and BMI are not decisive variables for joining the ideal of thinness.
2. The high number of girls who presents prodromes per ED and who are more likely to have a significant bodily discomfort reinforces the need to develop effective prevention programs in this field.
3. The Body Project intervention is effective for ED prevention.

The intervention was conducted by the Memorandum of Understanding "Pisa città che mangia sano" between University of Pisa and Government of Tuscany and Pisa.

**Bibliography:** Stice E, Presnell K (2007). *The Body Project*. Oxford University Press. New York



#### **P14. EATING DISORDERS SYMPTOMS AND PERFECTIONISM IN HOMOSEXUAL AND STRAIGHT SAMPLE.**

**Authors:** Esposito R.M., Martini C., Minnucci V., Stassi L., Lombardo C. - *Dipartimento di Psicologia, "Sapienza" Università di Roma*

**Keywords:** Eating Disorder, Lesbian, Gay, Heterosexual, Perfectionism

**Introduction:** The comprehension of eating disorders and disorders related to body image in straight women has greatly improved, however it is not yet clear how these disorders occur in sexual minority groups, such as lesbians and gay (1). Since perfectionism is a risk factor for eating disorders (2), we hypothesized that it could play the same role in the minority groups as well.

**Method:** The current study examined sexual orientation and perfectionism as predictors of eating disorders symptoms in a sample of 89 homosexual (39 lesbians and 50 gay) and 103 heterosexual participants (55 women and 48 men), mean age = 28.72 ± 8.70. Participants filled in two self-report measures of perfectionism (3, 4) and the Eating Disorders Inventory-3 (5). All participants were members of cultural, sports, religious or LGBT associations.

**Results:** Hierarchical regression analyses were performed for men and women separately. In men, *Drive for Thinness* (DT) was predicted by sexual orientation and *self-oriented perfectionism* ( $B = 0.21$ ). The model accounted for 33% of the total variance. In women the only significant predictor of DT was *socially prescribed perfectionism* ( $B = 0.13$ ). The variance accounted for was 17%.

**Discussion and conclusion:** Sexual orientation was related to drive for thinness only in gay men, not in lesbians while perfectionism was confirmed as an important predictor for the eating disorders symptoms also for sexual minority as in the general population.

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#### **P15. ATTENTIONAL BIAS FOR WORDS INDICATING HIGHLY PALATABLE FOOD IS HIGHER IN PEOPLE REPORTING SYMPTOMS OF EATING DISORDERS NOTWITHSTANDING THE MANIPULATION OF PERFECTIONISTIC ATTITUDES**

**Authors:** Esposito RM<sup>1</sup>, Lombardo C<sup>1</sup>

<sup>1</sup>Department of Psychology, Sapienza university of Rome

**Keywords:** eating disorders symptoms; attentional bias; emotional Stroop Task; perfectionism.

**Introduction:** Perfectionism is a risk factor for many mental disorders, including eating disorders (Egan et al., 2011). Recent findings show that the experimental induction of Perfectionistic attitudes significantly increases eating restriction and bingeing during the 24h after manipulation as compared to a non perfectionistic condition (Boone et al. 2012, 2014). It is possible to speculate that this effect is mediated by an increase in attentional bias for food stimuli, that may increase the drive for control. Current study aimed to explore this possibility evaluating whether the experimental manipulation of perfectionism drives attention toward food stimuli in an emotional Stroop task.

**Method:** Fifty-nine females (M age = 20.90 years; SD = 2.0) were presented with a Stroop task that included 3 lists of words: one indicating fruits and vegetables, one indicating highly palatable foods (sweets, pasta, etc) and a control list indicating animals. Participants were randomly assigned to one of the following experimental conditions: a standard Stroop Task instruction condition (ST); a condition in which high Personal Standards were induced (PS); a condition in which high Evaluative Concerns were induced (EC). Eating disorders symptoms were assessed using the Eating Disordered Questionnaire (DEQ; Lombardo et al., 2011). The difference between reaction times (RT) recorded for the target list (fruits and vegetables vs highly palatable foods) and those recorded for the control list were used as measure of attentional bias.

**Results:** ANCOVA (DEQ scores were the covariate) showed only a statistical significant main effect for the factor Instructions ( $F(2,54) = 3.545$ ;  $p < .05$ ). Post-hoc tests revealed that ST ( $M = 843.79$ ;  $SD = 16.86$ ) had higher RTs than PS ( $M = 795.56$ ;  $SD = 17.45$ ) and EC ( $M = 784.94$ ;  $SD = 15.94$ ) to all stimuli. Moreover, the interaction between the factor List and the covariate was statistically significant ( $F(2,54) = 3.174$ ;  $p < .05$ ) indicating that participants reporting high symptoms of eating disorders showed more attentional bias toward highly palatable foods than healthy controls.

**Discussion:** Although not influenced by the experimental manipulation of perfectionistic attitudes, attentional bias toward highly palatable foods was higher in people reporting eating disorders symptoms.

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#### **P16. BODY SHAME AND EARLY TRAUMA IN BINGE EATING DISORDER (BED)**

**Authors:** M. Fabbriatore. C. Imperatori, A.S. Ferracane, A. Contardi, M. Innamorati. - Department of Human Sciences, European University, Rome, Italy

**Key word:** body shame, binge eating disorder, early trauma, Yale Food Addiction Scale.

Many studies show body shame (BS) as a key element in development and maintenance of eating disorders. Other studies have shown that BS has an important role in binge eating disorder (BED). The schemes of self-based on shame are also affected by traumatic childhood experiences (ET).

The objectives of this work were:

- Verify the association between types of trauma and BED;
- Verify the association between BS and types of trauma;
- Check the mediation model where BS takes on role of mediation between ET and BED.

All participants answered the following questionnaires: the Italian version of the Objectified Body Consciousness Scale (I-OBCs), the Yale Food Addiction Scale (YFAS), the Binge Eating Scale (BES), the Hospital Anxiety and Depression Scale (HADS) and the Childhood Trauma Questionnaire (CTQ)

The research sample consists of 108 women. The mean age of the sample was 48 years, 40.74% of subjects were overweight and 25% obese. BES showed that 19.4% of patients had BED, particularly BED was moderate in 14,8% and of high grade in 4.6% of the cases.

Data processing was carried out with the statistical program SPSS 17.0 for Windows (IBM, Somers, NY, USA). To determine the relationship between emotional abuse, BS and BED "Preacher and Hayes' strategy" (2008) was used. The results obtained showed that the BES is positively associated with two scales of the OBC-I, in particular with the scale of surveillance and with the scale of body shame. BES also has positive correlations with the YFAS, with the two scales of HADS. With the CTQ it was observed that all types of abuse except physical neglect are positively correlated with BED.

According to the Preacher and Hayes' strategy the total effect of the emotional abuse on BED was significant and more serious emotional abuse was associated with greater severity of BED. In addition, this association seems to be direct and not mediated by BS, but BS is significantly associated with both BE and emotional abuse. In conclusion, trauma, especially emotional abuse, plays a central role in the genesis of BED, and plays a central role in the genesis of BS. BS seems most associated with concern for the body form and it confirms that in BED concern about body image does not play a central role as it does for anorexia and bulimia nervosa.

#### **P17. FOOD SUPPRESSION THOUGHTS IN PATIENTS WITH DYSFUNCTIONAL EATING PATTERNS AND EARLY TRAUMA**

**Authors:** M. Fabbriatore. C. Imperatori, A.S. Ferracane, A. Contardi, M. Innamorati  
Department of Human Sciences, European University, Rome, Italy

**Key word:** obesity, binge eating disorder, food addiction, food suppression thoughts, early trauma.

Child abuse and early trauma (ET) are powerful antecedents of eating disorders (ED). Furthermore in patients who suffered a trauma the phenomenon of suppression of thoughts occurs.

The objectives of the research were to investigate a) the association between dysfunctional eating patterns (DEP) and ET; b) the association between DEP and the suppression of thoughts related to food (FST); c) the association between DEP, the presence of ET and the FST, in people with DEP.

The participants were 86 women overweight or obese with a mean age of  $47.80 \pm 10.94$  years, BMI was  $29.43 \pm 4.98$ .

All participants completed the Yale Food Addiction Scale (YFAS), the Food Cravings Questionnaire -trait (FCQ- T), the Binge Eating Scale (BES), the Food Thought Suppression Inventory (FTSI) , the Hospital Anxiety and Depression Scale (HADS) and the Childhood Trauma Questionnaire (CTQ).

Data processing was carried out with the statistical program SPSS 17.0 for Windows (IBM, Somers, NY, USA). In order to identify the DEP analysis was performed according to the method of Cluster TwoSteps. The analysis was conducted on scores obtained in the BES, YFAS and FCQ-T.

The data showed that 33.7% of the sample reported a moderate/severe BED in accordance with BES, 29.1% of patients reported a FA in accordance with the YFAS.

Based on the results of the cluster analysis, our sample was divided into two groups: patients with DEP (n = 42) and patients without DEP (n = 44).

Regarding the first objective results show a significant relationship between DEP and ET with a preponderance of physical and emotional neglect and physical and emotional abuse.

As regards the second objective a significant link between DEP and the phenomenon of FST was evidenced.

As regards the third objective, there was a positive correlation between DEP, the presence of ET and the FST.

Individuals with DEP, when they are on a diet, tend to rely on the FST as a technique of coping with short-term weight loss, but this technique, in the long term, contributes to the maintenance of ED because paradoxically an increase of thoughts about food that stimulate people to eat more occurs. Therefore the use of the FSTI can predict BED and other DEP and may help to explain one of the factors of maintenance of the disorder.

Moreover high scores in FTSI in a subject with DEP could go back to a probable ET.

## **P18. EFFECTIVENESS OF A MULTIDISCIPLINARY APPROACH TO THE IMPROVEMENT OF CAPILLARY BLOOD GLUCOSE LEVELS AND BODY MASS INDEX IN DIABETIC PATIENTS**

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**Key words:** Obesity, Weight Loss, Diabetes, Glycemic Control, Multidisciplinary Treatment

**Background:** Diabetes and Obesity are growing global health challenges, intrinsically linked. The first-line strategy for the treatment of obesity and prevention comorbidities is weight loss<sup>1</sup>. In diabetic patients strict glycemic control helps in preventing complications<sup>2</sup>.

**Aim:** The study aims to evaluate the change in Body Mass Index (BMI) and fasting capillary blood glucose (CBG) in a population of patients with obesity (BMI > 30) and type 2 diabetes after hospitalization (residential and/or semi-residential) at "Villa Pia" the Center for the Treatment of Eating Disorders and Obesity in Guidonia (RM).

**Materials and methods:** We enrolled 53 patients (32 Female, 21 Male, mean age 51.5 years) with BMI > 30, diagnosed with type 2 diabetes and receiving drug therapy. They underwent multidisciplinary treatment (nutritional therapy, psychotherapy, therapeutic-rehabilitative activities) in residential and/or semi-residential from a minimum of 24 to a maximum of 260 days (average 126 days). For each group (sample in toto, F, M) we calculated and correlated the input and output average BMI and CBG values and evaluated the correlation between BMI and CBG variation and treatment duration.

**Results** The difference between mean values in input and output of BMI and CBG was statistically significant in total sample ( $p < 0.0027$  and  $p < 0.0001$  respectively), in group F ( $p < 0.0001$ ,  $p < 0.0037$ ) and in group M (both  $p < 0.0001$ ). A significant linear correlation was also observed between the change of the values of CBG and duration of treatment in the total sample, group M and group F ( $r < 0.99$ ). The correlation between BMI changing and treatment duration seems to be less strong in all groups (total sample  $r < 0.37$ , group M  $r < 0.38$  and group F  $r < 0.35$ ).

**Discussion** Weight loss is necessary to achievement beneficial effects on cardio-metabolic parameters<sup>1,2</sup>, but in diabetic obese patient only weight loss might not be enough to improve glycemic control<sup>3</sup>.

**Conclusions** This study shows that multidisciplinary treatment leads to an improvement of CBG and BMI in both males and female. The improvement of CBG levels is also strongly correlated with treatment duration.

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## **P19. HAEMATOLOGICAL IMPLICATIONS IN EATING DISORDERS: DISTINCTIVE FEATURES IN ANOREXIA NERVOSA AND BULIMIA NERVOSA**

**Author:** Galeotalanza MR, Giaquinto E, D'Alessandro G, Ravaioli E, Felicita F, Galassi P

**Key word:** hematologic abnormalities, eating disorders, haematological data

**Aim:** To determine the prevalence of haematological abnormalities in patients with eating disorders (ED), and assess the relationships between these changes and type of ED

**Subjects and Methods:** We retrospectively studied 69 outpatients attending the Centre for Eating Disorders of dietetic and clinical nutrition unit in M. Bufalini Hospital in Cesena. In agreement on DSM-V diagnostic criteria for Eating Disorders, patients were divided in two groups: Anorexia Nervosa (AN) (48 patients: female 44; Male:4) and Bulimia Nervosa (BN) (21 patients: female 20; Male 1). Anthropometric measurements and haematological data, specifically blood haemoglobin concentration, red blood cell, white blood cell, neutrophil leucocyte count, lymphocyte count and thrombocyte count were measured on admission and after six months.

**Results:** On admission, in AN group (48 patients: 44 female; 4 male; mean of age 24,33 years $\pm$ 8,56 years), the mean of haemoglobin concentrations (Hb g/dl: 15,37  $\pm$  12,35), leukocyte count (cell/dl: 5330  $\pm$  1440) and thrombocyte counts (cell $\times$ 10<sup>3</sup>/dl: 225,15 $\pm$ 56,74) were largely within reference ranges, but in 8 of 48 (16%) patients was detected anaemia (Hb<12,0 g/dl); in 7 of 48 patients (14,5%) was detected leucopenia (< 4  $\times$  10<sup>3</sup> cells/l) and neutropenia (< 1,5  $\times$  10<sup>3</sup> cells/l) was present in 5 of 7 leucopenic patients (71%). After six months we observed an important drop out (40% female patients dropped out), so we could to examine only 29 patients (25 female; 4 male). After six months the mean of haemoglobin concentrations (Hb g/dl: 12,6  $\pm$  1,08), leukocyte count (cell/dl: 5443  $\pm$  1785) and thrombocyte counts (cell $\times$ 10<sup>3</sup>/dl: 238,5 $\pm$ 50,6) remained largely within reference ranges and not importantly differences were observed in the frequency of anaemia (24%), Leucopenia (16%) and secondary neutropenia (75%). We observed an important increase of weight (44,31 kg  $\pm$ 5,98 kg vs. 46,02 kg $\pm$ 7,48; p<0,05) and BMI (16,9 $\pm$ 2,03 vs. 17,6 $\pm$ 2,54; p<0,05) and, importantly, a decrease of Red Blood Cells count (RBC: cell  $\times$ 10<sup>6</sup>/dl) (4,49 $\pm$ 0,5 vs. 4,61 $\pm$ 0,5; p<0,05).

In BN group (21 patients: female 20; Male 1; mean of age 33 years $\pm$ 11,59 years), on admission, the mean of haemoglobin concentrations (Hb g/dl: 13,32  $\pm$  1,37), leukocyte count (cell/dl: 5963  $\pm$  1430) and platelets counts (cell $\times$ 10<sup>3</sup>/dl: 282,15 $\pm$ 62,96) were largely within reference ranges and, except for haemoglobin, their values were higher than AN especially for thrombocyte count (cell $\times$ 10<sup>3</sup>/dl: 282,5 $\pm$ 62,96 vs. 225,15 $\pm$ 56,74; p<0,05). Anaemia (Hb<12,0 g/dl) was detected in 2 of 21 (9,5%) patients; leucopenia (< 4  $\times$  10<sup>3</sup> cells/l) was detected in 2 of 21 patients (9,5%) and neutropenia (< 1,5  $\times$  10<sup>3</sup> cells/l) was not found in this group. Either in BN group a large number of female patients (47%) dropped out after six months and finally BN group was constituted only on 10 patients (9 female; 1 male). The mean of haemoglobin concentrations (Hb g/dl: 13,54  $\pm$  1,13), leukocyte count (cell/dl: 4925,71  $\pm$  1390,78) and thrombocyte counts (cell $\times$ 10<sup>3</sup>/dl: 247,42 $\pm$ 62,12) remained within reference ranges although with lower values than at admission. We didn't observe events of anaemia or neutropenia, but in 3 of 8 (30%) patients was detected leucopenia (< 4  $\times$  10<sup>3</sup> cells/l). After six months the mean of weight (53,37 $\pm$ 9,51 kg vs. 53,83 $\pm$ 7,14 kg) and the BMI (20,02 $\pm$ 3,48 vs. 20,25 $\pm$ 2,82) decreased but not importantly whereas platelets count decreased importantly (cell $\times$ 10<sup>3</sup>/dl: 247,42 $\pm$ 62,12 vs. 287,28 $\pm$ 81,14; p<0,05).

**Conclusions:** Anaemia, leucopenia and thrombocytopenia are possible haematological complication of eating disorders and weight loss. these can be present or latent at the time of first examination, frequently going unrecognized and/or inadequately treated particularly when patients are not strictly followed up by specialized centre. Our study shows that the haematological abnormalities in eating disorders depend not only on rate and amount of weight loss, but also on type of eating disorders. In fact in AN group weight recovery was followed by an important decrease of RBC, perhaps expression of a chronic organic adaptation to starvation. In BN group the prevalence of anaemia, leucopenia and other haematological complications was lower than AN group in every time of observation. These findings could be related to better nutritional status at time of first examination. Nevertheless an important reduction of platelet count occurred in BN group without important changes in weight or BMI after six months. Unfortunately our conclusions are possible invalidated because of little number of participants to the study, especially after six months. This depends on high rates of drop out, very frequent in patients with eating disorders and strictly related to psychiatric issues of these pathologies.

## P20. THE IMPORTANCE OF THE ED & O ASSESSMENT IN CLINICAL POPULATIONS. THE EXPERIENCE OF THE ASSOCIATION "CASA FAMIGLIA ROSETTA" ONLUS

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**Key words:** Eating Disorders, Assessment, Clinical populations, SCOFF, EDE-Q

**Background and aims.** Eating Disorders are topics with an increasing interest from a clinical point of view. Nowadays, alongside the usual clinical pictures of Anorexia Nervosa and Bulimia Nervosa, new states of disorders, such as the binge eating disorder or psychogenic obesity, are showing up with even higher

epidemiological dimensions. Eating disorders include a wide age range and are generally characterized by a multifactorial aetiology. The assessment step is crucial and represents the multidimensional evaluation moment on which the therapeutic pathway has to be built. According to the DSM-5, the ED diagnosis may be secondary to other diseases and this often make diagnosis and identification hard. Clinical populations identified within residential and/or outpatient therapeutic contexts can be representative of specific groups which can be analyzed by the ED experts in order to highlight possible subjects at risk or already in the full-blown disorder stage that, for other reasons, tend to be masked or may appear not to be very evident. Often, however, EDs are not sufficiently identified.

**Methods:** The ACFR, a non-profit organization that manages health and social health services targeted to different clinical populations, has carried out a preliminary observational study on the co-occurrence of EDs and different disorders such as substance and behavioural addictions, neuromotor and intellectual disabilities, psychiatric disorders, HIV/AIDS condition, and also adolescents at risk, giving a particular focus to gender differences. Self-report questionnaires for EDs have been administered to a total population of 273 (176 males and 97 females) patients: 82 of which are undergoing residential treatment for substance and behavioural addictions; 104 being treated in centres for people with psychiatric and intellectual fragility; 71 being treated in neuropsychomotor rehab services; 8 were staying in a residential home for people living with HIV/AIDS, and 8 teenagers were in a children's home.

**Results:** SCOFF results have highlighted the need to administer 34 EDE-Q tests and 6 YFAS, resulting in the identification of various risk conditions and/or with the diagnosis of ED.

**Discussion.** According to the latest guidelines, EDs normally deserve a multidisciplinary and integrated treatment that requires specific skills. The identification of patients with high risk or in full-blown ED among clinically defined populations and subjects under treatment, highlights the need to also include specific markers for EDs within the assessment steps so as to consider specific disorders such as, for instance, substance and behavioural addictions. This attention may activate multi-professional support treatment to the primary pathology and it may reduce the risk of missing information on comorbidity, especially with addictions, other psychiatric and psychopathologic disorders, intellectual fragility, AIDS, other chronic and disabling neuropsychomotor pathologies, and in children and adolescents in social risk situations. The ACFR is involved in the constitution of a multidisciplinary work group to handle patients with ED. The project of ACFR includes: - Continuing education of the whole staff operating in the different services that the Association offers; - The constitution of a Multidisciplinary permanent work group for the assessment of EDs and Obesity in the services which ACFR offers in order to identify risk and vulnerability factors in the early stages and/or to diagnose the Disorder among clinical populations; - The constitution of a multi-professional permanent Team for the treatment of EDs.

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## **P21. BODY DISSATISFACTION DIFFERENCES BETWEEN EATING DISORDER (ED) PATIENTS WITH ADULT OR ADOLESCENT ILLNESS ONSET**

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**Key words:** eating disorders, adolescents, adults, bulimia nervosa, body dissatisfaction

**Objective:** A growing number of studies explored body shape dissatisfaction construct in ED. This study aimed to investigate whether body image attitudes differed between patients with adult or adolescent ED onset.

**Methods:** ED age of onset was identified by patient's clinical records. The Body Attitude Test (BAT) was used as the main psychometric instrument.

**Results:** 314 patients were assessed. 206/314 were affected by Anorexia Nervosa (AN), 69/314 by Bulimia Nervosa (BN), 11/314 by Atypical Anorexia Nervosa (AAT), 23/314 by Eating Disorder Not Otherwise Specified (EDNOS) and 5/314 by Binge Eating Disorder (BED). 261 out of 314 patients had ED onset in adolescence (age 11-17, group A) and 53 out of 314 had ED onset in adulthood (age ≥18, group B).

Significant differences for BAT Total score (t-test,  $p=0.033$ ) and the subscales negative appreciation of body size (t-test,  $p=0.020$ ) and general body dissatisfaction (t-test,  $p=0.031$ ) were found, with higher scores obtained for the group A. No differences were found for lack of familiarity with one's own body subscale (t-test,  $p=0.150$ ).

Pair wise analyses run for each single diagnostic subgroup revealed differences between BN A and B groups for the same subscales (t-test, respectively  $p=0.047$  and  $p=0.018$ ).

**Discussion:** Body dissatisfaction is a core psychopathological feature in ED. Our results show that patients with adolescent ED onset have a more severe body dissatisfaction, thus suggesting early body image disturbance. Further studies should be planned to explore other psychopathological differences considering age at onset, as to better address treatment interventions.

## **P22. SHORTER DURATION OF UNTREATED EATING DISORDERS AT THE CENTER FOR EATING AND WEIGHT DISORDERS OF PORTOGRUARO, ITALY**

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**Key words:** eating disorders, onset, rehabilitation

**Objective:** A trend towards a progressive reduction of age at admission to residential or hemiresidential Progressive Psychonutritional Rehabilitation (RPP™) at the CEDW have been recently observed. This study aimed to explore whether there was a relationship between age at ED onset and age at RPP admission.

**Methods:** patients admitted during 2007-2015 received a clinical and psychopathological assessment at admission. The age of onset was identified by clinical records. ANOVA was used for statistics, with  $p<0.05$ .

**Results:** 347 subjects with Eating Disorders completed the assessment: 225/347 were affected by Anorexia Nervosa (AN), 75/347 by Bulimia Nervosa (BN), 11/347 by Atypical Anorexia Nervosa (AAN), 31/347 by Eating Disorder Not Otherwise Specified (EDNOS) and 31/347 by Binge Eating Disorder (BED).

The whole sample analysis showed a significant reduction in age at admission ( $p=0.018$ ) and length of illness ( $p=0.004$ ) but not for age at onset ( $p=0.974$ ). Mean length of illness showed a reduction of -0,38 years for each year. These results were confirmed in AN group ( $p=0.005$ ,  $p=0.006$  and  $p=0.680$  respectively) but not in the others EDs groups.

**Discussion:** lack of significativity respect to specific EDs other than AN is probably due to low numerosity of the samples. These results suggest that greater attention has been recently given to early ED diagnosis and consequent delivery of early interventions. Therefore, this can lead to shorter duration of untreated illness and more favourable treatment outcomes. More complex statistical analyses should be planned to explore or confirm which factors may explain earlier interventions.

Whole sample Admission year	Age at onset			Age at admission			length_of_illness		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
1	47	16,94	5,95	47	25,64	8,17	47	8,70	6,13
2	27	16,52	4,86	27	22,59	8,12	27	6,07	5,90
3	34	16,88	5,26	34	25,00	10,08	34	8,12	8,55
4	38	16,39	5,63	38	22,24	7,71	38	5,84	6,73
5	39	17,28	5,73	39	24,38	9,47	39	7,10	7,86
6	42	16,57	4,84	42	22,17	6,37	42	5,60	5,25
7	35	16,34	4,61	35	21,40	7,70	35	5,06	6,14
8	41	16,16	4,45	41	19,93	7,05	41	3,77	4,68
9	9	15,78	3,56	9	21,44	9,19	9	5,67	9,25
Total	312	16,62	5,13	312	22,92	8,25	312	6,30	6,66

AN Admission year	Age at onset			Age at admission			length_of_illness		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
1	27	18,07	7,64	27	26,22	8,54	27	8,15	5,52
2	23	15,65	4,03	23	22,70	8,20	23	7,04	6,40
3	24	17,13	6,02	25	26,32	11,06	24	9,67	9,48
4	25	16,68	5,90	25	21,80	8,11	25	5,12	6,75
5	23	15,65	3,81	24	21,54	8,22	23	6,17	7,10
6	32	16,69	5,56	32	22,16	6,91	32	5,47	5,48
7	29	16,41	5,57	29	21,21	8,46	29	4,79	6,21
8	31	15,40	3,87	31	17,94	5,73	31	2,53	3,81
9	9	15,11	1,83	9	19,44	9,36	9	4,33	9,07
Total	223	16,41	5,34	225	22,24	8,49	223	5,90	6,71

## P23. ANOREXIA NERVOSA IN ADOLESCENCE: THE EXPERIENCE OF A SPECIFICALLY TRAINED MULTIDISCIPLINARY TEAM IN TERMS OF PATHOLOGY AND AGE GROUP

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**Key words:** Adolescents, Anorexia nervosa, early onset, specific treatment, multidisciplinary team.

**Introduction:** Anorexia Nervosa seems to be the most common form of eating disorder during adolescence. Epidemiological studies bring to light a reduction in age for the onset of the disease, with a peak between the ages of 12 and 17. An Italian study shows that the average age of onset has lowered by one year (from 18.6 to 17.6 years of age) over the last ten years. It is therefore fundamental to design a specific treatment for patients in this age group.

**Materials and Methods:** The study investigated ten girls, aged between 14 and 18 years old: 4 were diagnosed with AN-BP and 6 with AN-R, with a BMI between 15 and 16.6. The evaluation instruments used were: EAT-26 and SCL-90, accompanied by a clinical examination.

The patients underwent a programme including psychotherapeutic humanist bioenergetic orientation. They attended nutritional and psychiatric examinations on a weekly basis over a period of 18 months.

Three patients underwent psychopharmacological treatment. An Emotional Eating Diary was used as a shared working tool.

**Results:** All patients completed the follow-up. An average weight increase of approximately 5.9kg was recorded. BMI >18 was reached in 75% of the patients in the first three months. No relapse was recorded.

**Discussion and Conclusions:** Our study found that some essential factors required to deal with eating disorders in adolescence are:

- a multidisciplinary team, specifically trained in adolescent therapy, that is capable of providing combined treatment.
- Synchronicity of treatment and continuous communication between team members by means of a common and shared language.
- Early involvement of the family on behalf of all team members

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## P24. PREVENTION OF EATING DISORDERS: BODY PROJECT IN THREE SCHOOLS OF PORDENONE

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**Key words:** Prevention of Eating Disorders, Body Dissatisfaction, Body Project, Peer Education, Thin-ideal Internalization

**Abstract:** The field of eating disorders prevention has grown rapidly in the past two decades. Successful eating disorders prevention programs typically focus on modifying specific factors known to confer greater risk for developing eating disorders. Prospective studies have identified several modifiable risk factors to develop global eating pathology, including: belief in the cultural thin-ideal (called thin-ideal internalization), perceived pressure to be thin, body dissatisfaction, self-reported dieting, and negative affect (e.g., depressive symptoms). Body project (Stice & al., 2008) is an intervention based on Cognitive Dissonance Theory and utilizes active verbal, written, and behavioral exercises to challenge directly the belief in the current cultural beauty ideal. Activities have been designed to elicit psychological dissonance/discomfort to promote a change in attitudes and behavior surrounding weight loss and beauty. Several independent studies of efficacy and effectiveness have reported significant reductions in eating disorder pathology and other eating disorder risk factors.

The project was implemented in three schools of Pordenone, using the methodology of peer education. Participants were assessed at baseline (T0); at the end of the program (T1); six months after the end (T2). In order to assess the level of thin ideal internalization and body acceptance we used the following self-administered questionnaires: "The Wishing Well Test" (WWT); "The Body Image Thoughts Test" (BITT); "Body Uneasiness Test" (BUT).

The results showed a significant reduction of the negative thoughts and judgments about themselves. At the same time, we saw an increase in positive thoughts toward themselves and their own bodies. The improvement was not significant in T1, but it was in T2. This suggests that the process of self-acceptance went on gradually

after the end of the program. Moreover, in T1 we found less focus on the body along with a reduction of the discomfort associated. The results were maintained in T2.

## P25. MENTAL FUNCTIONING IN EATING DISORDERS

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**Key words:** Eating Disorders, Alexithymia, Coping, Distress, Depression

**Abstract:** Eating Disorders (ED) are important diseases with a strong impact on the health and significant risks of secondary damage. For a long time, the severity of the symptoms of malnutrition has focused the treatment on the rehabilitation, neglecting the underlying mental functioning. Likewise, the DSM has reduced the complexity of eating disorders to the core symptoms related to the diagnosis. This has created a side effect that oversimplifies the psychological characteristics of patients with eating disorders and the logic of clinical reasoning. If we consider psychotherapy as a practice in search of the subjectivity of the individual, this simplified diagnostic logic does not help to build a treatment plan tailored on the single patient.

The aim of this study is to identify areas of research that have examined various aspects of psychological functioning of people with eating disorders, in order to build a multidimensional model and to investigate the presence of subgroups with similar characteristics. We have identified a number of areas of psychological functioning and for each of them we have done a search on PubMed for recent literature. The considered areas are Coping, Emotions, Family, Interpersonal Relationship, Trauma, Mentalization, Perfectionism, Executive Function, Impulsivity, Body Image, Internalization, Personality, Temperament and Attachment. For every field of research we have considered the state of art and the main assessment tools.

## P26. BODY IMAGE, EATING HABITS AND WEIGHT GAIN IN PREGNANCY AND POST PARTUM

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**Key words:** body image, pregnancy, dissatisfaction

**Introduction:** Pregnancy induces deep and quick changes in female body and in psychological functions. Furthermore, pregnancy with its weight changes is an interesting moment to study the changes in body image. Few research studies analyzed the correlations between body image, eating habits and weight gain during pregnancy.

**Objective:** The aim of our study is to investigate some possible correlations between body image, eating habits, mood disorders and BMI along pregnancy.

**Method:** 33 women in the last month of pregnancy were recruited in two public hospitals (Ferrara and Udine). A structured interview along with the following tests: Eating Disorders Inventory, Body Uneasiness Test, Eating Attitudes Test, Beck's Depression Inventory, were administered.

BMI was examined before pregnancy and during the pregnancy.

The body perception before pregnancy has been investigated by means of following question: " how did you see yourself: underweight, normalweight or overweight?" the answers have been correlated with BMI The post pregnancy BMI informations were collected by phone.

**Results.** The study showed a strong correlation between body image and weight gain: in fact a disturbed body perception before pregnancy is correlated with an altered weight gain during pregnancy. Also the BMI before pregnancy is correlated with weight gain in pregnancy (in an inversely proportional way) furthermore, pre-pregnancy underweight or overweight are correlated with higher body dissatisfaction during pregnancy. The weight gain during the pregnancy is not correlated with eating habits, that improve very much becoming safer and healthier than before pregnancy in all the sample.

**Conclusions:** The study highlights the role of body image and BMI before pregnancy and their influence on weight gain during pregnancy.

It also suggests the importance of a multidisciplinary approach to pregnancy and the need to investigate eating behaviors and body disperception prior to pregnancy because of their role in weight changes during pregnancy.

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## P27. ALEXITHYMIA, COPING SKILLS AND DISTRESS IN A SAMPLE OF EATING DISORDER PATIENTS

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**Key words:** Eating Disorders, Alexithymia, Coping, Distress, Depression

**Abstract:** The majority of studies focusing on eating disorders have found higher levels of alexithymia in individuals with eating disorders and disturbed eating compared to healthy controls. In this study, we have chosen to consider the relationship between alexithymia, coping skills, disturbed eating behavior and distress. 94 participants with eating disorders (ED) (M 23,2 years, SD 9,6) and 57 healthy control (HC) (M 25,4 years SD 10,3) took part in this study. Eating Disorder Inventory-2 (EDI-2), Coping Inventory for Stressful Situation (CISS), Toronto Alexithymia Scale (TAS) and Symptom Checklist-90-R (SCL-90) test were used. The results show firstly an important reduction of symbolization skills associated with alexithymia, that influences different aspects of eating symptoms. Also, the strong correlations between Emotion Oriented Coping and eating symptoms in alexithymic (A) patients suggest a mechanism in which three variables feed each other in a vicious circle that maintains the symptoms.

Secondly, TAS-20 presents high correlations with EDI-2 test; when controlling for two SCL-90 subscales, Depression and Interpersonal Sensitivity, the only correlations that remain elevated are among eating symptoms and the first TAS-20 subscale. Thus alexithymia seems to be independent from depression, and the interaction with eating disorders symptoms doesn't result mediated by mood and interpersonal disorders.

Thirdly, comparing Alexithymic ED group (A) with No Alexithymic (NA) and HC, A group shows higher average values on EDI-2 test, SCL test and Emotion oriented coping. Alexithymia seems to be a factor that intensifies eating symptoms and influences general wellbeing; a therapeutic intervention on alexithymia may be considered one of the main focus in ED treatment.

## P28. THE EFFECTIVENESS AFTER 1 YEAR OF AN INTENSIVE AND MULTIDISCIPLINARY INTERVENTION FOR TREATMENT OF EATING DISORDERS AND OBESITY PERFORMED TO VILLA PIA IN GUIDONIA (RM)

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**Key Words:** Eating Disorders, Obesity, Multidisciplinary Treatment, Follow Up

**Background:** Research shows that Obesity (O) and Eating Disorders (ED) have been difficult to maintain an efficient treatment. The main goal of the treatments is to have an effective long-term maintenance of the improvement<sup>1,2</sup>.

**Aim:** We conducted a randomized retrospective study to verify the effectiveness after 1 year of an intensive and multidisciplinary intervention held at Villa Pia in Guidonia (RM), the centre of Italian Hospital Group accredited by Lazio region for treatment of ED and O.

**Methods:** From June 2011 to June 2014, 511 patients with ED (n 70; 14%) or O (n° 441; 86%) were admitted to Residential (R: n° 173; 34%), Semi-Residential (SR: n° 306; 60%) or both (R+SR n° 32; 6%) treatments. Each patient had a personalized plan aimed to increase physical and mental conditions and to improve food intake and life style. 186 (36.7% of total) subjects were enrolled retrospectively 1 year after discharge. A semi-structured interview was conducted by telephone to investigate motivation to their own care, self-perception of well-being, food management skills, social contacts, weight changes following the dismissal. Answers were scored from 1-3 (1: worsened; 2: stabilized; 3: improved) and the data were analysed.

**Results:** The 186 subjects enrolled were a representative sample of all for diagnosis (ED 13.7%, O 86.3%), admission type (R: 32.2%, SR 60.7%, R+SR: 8.1%), gender, age, and duration of plan (data not shown). Global data analysis shown an improvement (i) in 37.1%, a stabilization (s) in 13.4%, a worsening (w) in 22.6%. The improvement is also confirmed by splitting the sample for diagnosis (ED: i:39.4%, s:12.1%, w:48.5%; O: i:36.6%, s:14.4%, w:49.0%) and type of admission (R: i:32.8%, s:13.8%, w:53.4%; SR: i:39.4%, s:13.3%, w:46.9%; R+SR: i:33.3%, s:20.0%, w:46.7%).

**Discussion:** The data demonstrate that the multidisciplinary intervention was effective in 51.1% of interviewed patients after one year dismissal regardless of the diagnosis or type of admission.

**Conclusions:** This preliminary work demonstrates that an intensive multidisciplinary intervention is able to increase the motivation to treatment and to improve the quality of life in patients with ED or O after one year.

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## **P29. THE EFFECTS OF AN ASSERTIVENESS TRAINING PROGRAM IN AN OUTPATIENT TREATMENT SETTING FOR BULIMIA NERVOSA PATIENTS**

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**Key words:** Training, Assertiveness, Bulimia Nervosa, Social Insecurity, Self-esteem.

**Background:** Body image disturbances and altered eating patterns are issues to manage in Bulimia Nervosa (BN) treatment. In fact these features combined to difficulties in interpersonal relationships have been reported as potential factors in the development and maintenance of low self-esteem and social insecurity in eating disorders. In this regard the specific group therapy Assertiveness Training Program (ATP) which improves the expression of the emotions, self-esteem and interpersonal abilities, by reducing mood intolerance and fear of failure.

**Aim:** This study evaluated the effectiveness of ATP, a structured therapeutic group treatment.

**Method:** The sample of this research consists of two clinical groups: an experimental group (EG-BN) and clinical control group (CG-BN). Each group consists of 30 outpatient females with Bulimia Nervosa (DSM IV-R) with low self-esteem and social insecurity (EDI-II, Insecurity Questionnaire U-FB, PWB). EG-BN group followed a 20 weeks structured ATP after an initial treatment of 4 CBT + 4 Psycho-Nutritional Rehabilitation (PNR) assessment sessions and 12 CBT + 12 PNR individual interdisciplinary treatment sessions. CG-BN group had the same initial treatment (4 CBT+4 PNR assessment + 12 CBT + 12 PNR treatment) and continued with 20 CBT + 20 PNR individual treatment sessions, being on the waiting list for the ATP. Both clinical groups were compared with a second control group of 64 healthy subjects (GC-H)

**Results:** The EG-BN group emerges significant differences change in the dimensions of social insecurity, low self-esteem and psychological well-being as well as in the eating pathology symptoms.

**Conclusions:** Preliminary results support the inclusion of a structured Assertiveness Training Program in the treatment plan, especially in BN patients with high levels of social insecurity and marked low self-esteem. It could be interesting to extend this evaluation to patients with other diagnoses as Anorexia Nervosa and Binge Eating Disorders and in ED patients with specific comorbidities (Anxiety Disorders, Personality Disorders).

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## **P30. EFFECT OF LIRAGLUTIDE 3 MG/DIE ON BODY WEIGHT IN NON-DIABETIC OBESE SUBJECTS**

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**Key words:** Liraglutide, GLP-1, obesity, overweight.

**Introduction and background:** Obesity treatment guidelines recommend the use of pharmacologic therapy in adults who have BMI  $\geq 30$  kg/m<sup>2</sup> and in patients with a BMI  $\geq 27$  kg/m<sup>2</sup> who have at least one weight-related comorbid condition. Liraglutide, a glucagon-like peptide-1 analogue, has been successfully used in the treatment of type 2 diabetes for several years. It also has been shown to have potential benefit for weight management at a once-daily dose of 3.0 mg, injected subcutaneously.

**Aim:** The aim of this study is to investigate the effects of liraglutide on body weight in non-diabetic obese patients.

**Materials and methods:** 5 obese non-diabetic patients were included in this study (4 female and a male) with age of the patients between 32 and 67 years. BMI, HbA1c and HOMA were examined on admission and BMI monthly. No diabetes patients were enrolled in this study (HbA1c < 42 mmol/mol). The patients were subcutaneously injected with liraglutide once daily for 10 weeks starting from 0.6 mg to 3 mg and increasing every in adjunct to diet and exercise.

**Results:** Liraglutide treatment caused significant reduction of the mean body weight, resulting in body weight loss of 4,5% in 4 patients and body weight loss above 3% in 1 patient. The most frequently reported adverse events with liraglutide were mild or moderate nausea (all patients) and diarrhea (2 of 5 patients).

**Discussion and conclusion:** In our small experience liraglutide significantly reduces body weight in our patients. Patients with apparent visceral obesity and insulin resistance may have greater body weight loss. The most common adverse effects were gastrointestinal from mild to moderate in intensity. The cost of therapy is high, averaging € 350/month for out-of-pocket expenses because insurance coverage is not available. Liraglutide is also available for delivery only by subcutaneous injection, which may represent a barrier for patients.

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### P31. OUTCOME EVALUATION IN YOUNG PATIENTS WITH ANOREXIA NERVOSA AFTER INPATIENT TREATMENT IN A PEDIATRIC WARD

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**Key words:** anorexia, childhood, outcome study, pediatric ward, hospital treatment

**Abstract:** Eating Disorders (ED) are important diseases in childhood and adolescence, both for their frequency and the consequences on health at a delicate stage of growth, pubertal maturation, psycho-affective and cognitive development. At this stage of age we find more diagnostic difficulties because the clinical expression changes with age and the disease has a stronger impact on the body. The earlier the age of onset, the greater the risk of permanent damage secondary to malnutrition. For these reasons we need an early recognition of the disorder and prompt initiation of effective treatment. The site of choice for the care of ED is the outpatient setting, however, a part of patients need more intensive care, particularly the pediatric patient with anorexia nervosa (AN). Therefore admission to hospital may be more frequently needed.

Despite the recognized impact of AN, the literature does not report many works that evaluate the course and outcomes of AN in childhood and adolescence; in particular studies in Italy are lacking.

We conducted a retrospective observational study with the aim to assess the outcome (good, intermediate, poor) of young patients with AN admitted to a pediatric ward, and to compare the results with those reported in the literature.

The obtained results (complete recovery in more than half of patients) agree with the studies in which the outcome was more favorable. Other data highlighted by the study confirm a lowering of the average age of onset of AN and the correlation between the presence of psychiatric co-morbidity and poor prognosis.

### P32. MINDFUL EATING: A PRACTICE SUPPORTING OVERWEIGHT PATIENTS' MANAGEMENT

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**Authors' affiliation(s):** Freelance Biologist specialized in Food Science, <sup>1</sup>SIAN – ASL Lecco

**Key words:** Overweight, Obesity, Mindfulness, Mindful eating

**Introduction and background:** Recent studies have highlighted the importance and applicability of mindfulness in managing overweight. *Mindfulness*, in particular *mindful eating*, has proved its effectiveness in reducing food desire in groups of overweight people, if compared to control groups, in managing greediness and in making it easier to identify the inner pangs of hunger and satiety. Though the interest in adopting *mindfulness* nutrition is recent, results seem to be promising.

**Aim of the work:** The aim of this work is to present a pilot project of out-patient diet intervention integrated with a *mindful eating* programme.

**Materials and methods:** We suggest a path leading to establish a less judging relation with ourselves and a less anxious relation with food, less conditioned by emotional situations, thanks to meditations about personal

motivations, strategies adopted to face the most critical situations and wider knowledge about food choice and portions.

*Mindfuleating* practice is used as a support to acknowledge physical hunger, to distinguish it from other needs and to live meals time fully.

**Results:** Preliminary figures show an improvement in the capacity to manage the relation between eating and emotional situations or external stimuli. Patients acknowledge an improvement in fullness sensation, though eating smaller portions of food and, globally, less calories during the day. Reaching a higher level of consciousness helps them to face personal, social and emotional situations, which were previously strictly connected to eating, less anxiously.

**Discussion and conclusions:** Studies evidence that it is necessary to provide a behavioural therapy in order to obtain longer lasting results. We have tried to go beyond the prescriptive diet approach, starting instead from patients' real needs, in order to define a consciousness path to be lived as a practice to face emotional situations strictly linked to eating more confidently.

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### P33. EATING DISORDERS IN PRESCHOOL AGE: CLINICAL AND TEMPERAMENTAL VARIABLES

**Authors:** L. Notarbartolo, V. Mini, C. Lanzarone, G. Noto A. Bongiorno SISDCA Sicilia

**Key words:** eating disorders, childhood, temperament, mother.

**Introduction and Background:** it seems like there is an increment in the demand neuropsychiatric examination aimed to preschool age children whom show dysfunctional eating patterns and atypical eating behaviours (refusal, restrictions, food selectivity, hyperfagia, etc).

Literature has taken in consideration the multiplicity of the factors implicated in the genesis of these disorders.

**Aim:** with this essay we set out to highlight the correlation between early eating disorders and some of the variables related to the mother-child relational system and to the care-giving within nutrition behaviours.

**Resources and methods:** 12 mother-child couples (4 females and 8 males between the ages of 2 and 6 years), referred to the Department of NPI because of eating food disorders in the absence of an organic cause, were compared with a control group. The protocol envisaged the analysis of eating behaviours, psychopathological problems and temperamental aspects of children and mothers implementing the following tools: CBCL (Child Behaviour Check-list); QUIT (Italian Temperament Questionnaire); Adult Temperament Questionnaire; SCL-90 (Self-Report Symptom Inventory); EAT (Eating Attitude Test); Drawing Test.

**Results:** significant differences have emerged between the two groups for some of the variables examined. CBCL scores describe a sample where eating disorders are accompanied by an aggressive-impulsive attitude; Significant differences were also highlighted among some maternal temperamental dimensions e.i. rhythm in the psycho-affective sphere and the approach to food which appeared more confrontational and disorganised in the clinical group. Significant correlations result between maternal mood and positive emotional responses of the child; level of mother's alertness and infant eating behaviours; atypical maternal dietary attitudes and behavioural problem of the child; breastfeeding and behavioural patterns.

**Conclusions:** In early childhood disorders is evident an interactive dysfunctional condition caregiver-child which has effects on the whole behavioural and psycho-affective sphere of the infant.

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### P34. EATING DISORDERS PREVENTION: AN INTERVENTION BASED ON COGNITIVE DISSONANCE IN PREADOLESCENT GROUPS

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**Key words:** Preadolescents, prevention, eating disorder, cognitive dissonance

**Introduction:** More than 5% of adolescents living in western countries develop an Eating Disorder, and the age of onset has become increasingly premature. The main risk factors leading to the onset of this kind of disorders are psychological and social such as internalization of the thin-ideal and social pressure to conform to aesthetic standards.

**Objective:** The aims of this preventive intervention are: to promote a critical thinking about the ideals of beauty/thinness and a discussion about how they evaluate themselves and others and how this may influence nutritional choices [among preadolescents; and to empower the parents and the teachers with adequate information and coping skills knowledge about Eating Disorders.

**Materials and Methods:** The intervention involved 147 students of age 11 to 13 (7 classes) from 2 Secondary schools. It consisted of one psychoeducational meeting with their parents and teachers and a serie of 4 meetings for each class lead by a Psychotherapist and a Dietitian using the method of Cognitive Dissonance. The food experiences have been discussed starting from a multi-sensory tasting experience. Each student also compiled two surveys: "What I think about myself" and "Nutritional habits and sport".

**Results:** 57% of the sample shows low self esteem in the scholastic, corporeal, familiar and interpersonal areas. 45% also has low self esteem linked to their own body and 61% of them shows low interpersonal and scholastic self esteem. At the end of the preventive intervention the students show reinforced divergent thinking about the ideal of beauty/thinness and had an increased awareness of their evaluation criteria for self and others. Adults developed specific knowledge regarding Eating Disorders and health services in the region.

**Discussion & conclusions:** This specific intervention for preventing Eating Disorder, based on cognitive dissonance, has been effective in achieving the stated objectives.

The high presence of risk factors to the onset of ED observed in the sample of students, reinforces the need for this kind of programs since middle schools.

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### **P35. DEVELOPMENT OF AN EVALUATION SHEET FOR THE MEAL SESSION IN THE TREATMENT OF EATING DISORDERS**

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**Key words:** Eating Disorders, evaluation sheet, meal session, dysfunctional behaviors

**Abstract:** This work is based on the development of an evaluation sheet that allows to quantify the dysfunctional behavior during a meal in patients with eating disorders. This tool allows to assign patients cared for a score in three different moments of the therapeutic program: at baseline (T0), during treatment (T1) and at discharge (T2). The evaluation table is structured as follows: in the first column the dysfunctional behaviors, most frequently observed during the meal session, are highlighted [1- too slowly; 2- excessive speed; 3- chop the food; 4- separate the food; 5- mixtures of food; 6- small pieces; 7- inadequate chewing; 8- inappropriate posture; 9- environmental interaction (lack of dialogue); 10- environmental interaction (poor eye contact); 11- excessive worry]. Each behavior will have a score from 0 to 2 depending on the severity of the problem. The evaluation table was tested on five female patients with eating disorders, aged 16 to 40, who followed a rehabilitation program at the Center for Eating Disorders of ASL3 Genovese. The program was administered on an outpatient basis, for a period of 6 to 16 weeks.

At the end of the study, the evaluation of parameters at T0 and T2 showed a turnaround (T0: zero score 13, two score 31; T2 zero score 33, two score 5). Improvement in T2 was relevant to: separate the food, environmental interaction (language), inappropriate posture, and environmental interaction (poor eye contact).

This evaluation sheet, easy to use, helps to quantify the severity of impairment of each dysfunctional behavior and monitor their evolution over time. The results, although from a limited sample, are encouraging. The evaluation sheet gives operators the possibility to monitor the problem behaviors and build programs suitable for each patient. Never-the-less, it demonstrated the effectiveness of the considered rehabilitation program.

### **P36. REDUCED SLEEP DURATION AFFECTS BODY COMPOSITION, DIETARY INTAKE AND QUALITY OF LIFE IN OBESE SUBJECTS.**

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**Key words:** Sleep, body composition, dietary intake, quality of life, obesity

**Introduction:** Sleep duration has emerged as a crucial factor affecting body weight and feeding behaviour. The aim of our study was to explore the relationship between sleep duration, body composition, and quality of life (QoL) in obese subjects.

**Methods:** Body composition was assessed by DXA. "Sensewear Armband" was used to evaluate sleep duration. SF-36 questionnaire was used to evaluate quality of life (QoL). A 3-day dietary record was administered. Subjects were divided in 2 groups: sleep duration > or ≤ 300 min/day.

**Results:** 137 subjects (105 women and 32 men), age:49.8±12.4 years, BMI:38.6±6.7 kg/m<sup>2</sup>, were enrolled. Sleep duration was ≤ 300 minutes in 30.6% of subjects. Absolute and relative fat mass (FM) (40.52±8.99 vs 36.86±5.57 kg; 40.17±4.67 vs 36.86±5.57 %), and truncal FM (19.23±6.06 vs 16.56±4.99 kg) were higher in subjects sleeping ≤ 300 min when compared to their counterparts (all p<0.05), whereas just a tendency towards a higher BMI was observed (p=0.077). Even though energy intake was not different between groups, subjects sleeping ≤ 300 min reported a higher consumption of carbohydrate (53.1±5.1 vs 48.3±9.3 %, p=0.038). SF-36 total score was lower in subjects sleeping ≤ 300 min (34.16±17.81 vs 41.43±12.93, p=0.025). Sleep duration was negatively associated with FM (r=-0.250, p=0.010) and SF-36 total score (r=-0.309, p=0.000). The inverse association between sleep duration and SF-36 total score was confirmed by the regression analysis after adjustment for BMI and FM (R=0.434, R<sup>2</sup>=0.188, p=0.012).

**Conclusion:** Reduced sleep duration negatively influences body composition, macronutrient intake, and QoL in obese subjects.

### **P37. THE AWARENESS**

**Author:** Giuliana Porzio, dirigente medico ASL TO3, Pinerolo (TO)

**Key words:** mentalization, anorexia

This article is written for remembering to the writer which kind of experience it was. The beginning of the therapy with the patient described in the present studying, was characterized by an effort of treatment of the depression, very evident to the different doctors who had to manage the case.

The patient was an almost fortyfourth woman, appeared very thin and exhausted, cause of the anorexia and of the loss of weight.

The first diagnosis was of "Borderline disturb of personality", but in the other different recovers were chosen many other diagnosis, related to her heavy depression and to the changing of mood (with auto - lesionism).

The woman used to eat a big quantity of metal "clips", or almost ninety capsules of purge pills (named "confetti Falqui") per day, or to drink mouse poison when she was very anguished. She also felt herself coarted to put an acid substance on the left arm and the purpose of the present studying is to follow the phasis of the disease, and, step by step, punctualize in which way the anguish disappeared.

The patient was followed by two doctors, both accorded to keep a good "holding" around her, in respect of the exigence of psychotherapy and in respect of the pharmacotherapy. From the CCDA she passed to the Health Service, in which she started to absome Olanzapine, and to get better. It was necessary, in my point of view, to put a diagnosis of "Bipolar disturb (of second type)" in order to understand the "phasis" in which she used to apply the acid on her arm: she was really angry in those periods.

So, according to my opinion, she was experiencing mood disturbance: an alternance between her depression and a sort of an upper mood in which she could not treat with her herself impulses and to express them.

She used to repress her aggressivity towards the other people and, on the other side, to depict the same aggressivity against herself.

After she was brought for many times to the acute- Department of Mental Service, in the last period she was recovered in a mental care institute for average cases and she is and she is now much more able to mentalize her problem and to control her syntomes.

### **P38. PRELIMINARY RESULTS OF A PILOT STUDY ON THE EFFICACY OF A PROTOCOL OF THERAPEUTIC EDUCATION AD HOC DEVELOPED AS PART OF A MULTIDISCIPLINARY APPROACH TO OBESITY TREATMENT**

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**Keywords:** obesity; binge eating; quality of life; therapeutic education.

**Background:** The results of obesity treatment are to date disappointing. As obesity is a multifactorial disease, many reasons may be supposed. Recent reviews suggest that the weight loss brings a significant improvement in quality of life (QoL) in physical domain but not in mental domain of Short Form Health Survey (SF-36). According to WHO definition (1998), the Therapeutic Education (TE) could be a useful tool to improve or maintain the QoL in chronically ill subjects, including obese.

**Aims:** To evaluate in a pilot study on a sample of obese the results of an ad hoc developed TE program and to analyze the predictive issues related to QoL improvement.

**Methods:** Obese subjects were enrolled in a prospective study at the C.A.S.C.O. (EASO Collaborating Centers for Obesity Management [COMs]) of our University Hospital, and followed a TE program based on a cognitive behavioral approach, organized in 8 biweekly group sessions, which address the body, diet, physical activity, senses, mind, emotions areas. Socio-demographic data (structured interview), anthropometric (weight, height and BMI) and psychopathological data (Binge Eating Scale, BES; Symptom Checklist-90-Revised, SCL-90-R; Short Form Health Survey, SF-36) were recorded at the enrollment and at the end of ET. Statistical analysis was performed using the T-test for paired samples,  $\chi^2$  test and univariate and multivariate analysis, setting statistical significance at  $p < 0.05$ .

**Results:** 153F (age  $48.1 \pm 10.9$  y, BMI  $40.1 \pm 7.8$  kg/m<sup>2</sup>) and 40M (age  $46.6 \pm 9.8$  y, BMI  $43.9 \pm 8.8$  kg/m<sup>2</sup>) were recruited and 82.4% completed the TE program; 52.2% patients had a BES score  $>17$  (obese binge eaters – OB). The weight loss is  $3.4 \pm 5.3$  kg and the BMI change is  $1.2 \pm 1.7$  kg/m<sup>2</sup>. SF-36 scores improve in both somatic and mental domains (+16% and +36% respectively in OB and +18% and +11% in non-OB). An improvement in both depression and anxiety SCL-90 scales is observed. The BES score is improved and normalized in 67.5% of OB. The main predictive factors of SF-36 improvement are the shorter duration of obesity and the lower number of diets in physical domain, and the lower anxiety and depression in mental domain. All these results are significant ( $p < 0.05$ ).

**Conclusions:** TE, as part of a multidisciplinary approach, may be useful to improve physical and mental domains of QoL, eating behaviour and psychological status; the knowledge of the predictive factors related to QoL improvement may further increase the effectiveness of the TE.

**Conflict of interests:** For this study the authors declare no conflict of interest.

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### **P39. MAIN SOCIO-DEMOGRAPHIC AND PSYCHOPATHOLOGICAL CHARACTERISTICS OF OBESE PATIENTS WITH AND WITHOUT BINGE EATING DISORDER: A CONCEPTUAL FRAMEWORK FOR THERAPEUTIC PATIENT EDUCATION**

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**Keywords:** obesity; binge eating; quality of life; therapeutic education.

**Background:** Obesity is a widespread chronic disease with health care-related financial burden and long-term ineffectiveness of current therapies. The WHO defined Therapeutic Education (TE) as a useful tool in the treatment of chronic diseases, including obesity. TE could be a key intervention for weight management, awareness improvement, and lifestyle changes. Its effectiveness is influenced by several factors, including patients' socio-demographic and psychopathological features, especially Binge Eating Disorder (BED).

**Aims:** The study is aimed at analyzing the socio-demographic and psychopathological characteristics of obese patients and at comparing those of patients with and without BED. This analysis can be useful to derive a conceptual framework in order to set up a specific TE protocol for obesity.

**Methods:** A sample of obese patients was enrolled in a prospective study at the C.A.S.C.O. (EASO Collaborating Centers for Obesity Management [COMs]) of our University Hospital. A structured interview was carried out to gather socio-demographic data, whereas psychopathological data were obtained through completion of the Binge Eating Scale (BES), the Symptom Checklist-90-Revised (SCL-90-R) and the Short Form Health Survey (SF-36). A total of 214 patients was recruited, in order to provide an 80% power ( $\alpha=0.05$ ) to estimate the difference between obese patient with and without BED in terms of SF-36 and SCL-90-R scores, as well as socio-demographic and other psychopathological characteristics. The variables were compared by using the T-test and the  $\chi^2$  test. Statistical significance was set at  $p<0.05$ .

**Results:** Of the enrolled 214 obese patients ( $F=66.7\%$ ; age range=18-35 years; mean BMI:  $M=41.2\pm 7.1$ ,  $F=40.7\pm 6.8$  kg/m<sup>2</sup>), those with BED (53.3%) differ significantly from those without BED (46.7%): the former are mostly females, practice less physical activity, undergo more diets and both non-clinical and clinical interventions, tend to attribute more frequently their weight gain to their behavior, report less self-efficacy, have higher BES and SCL-90-R scores and lower SF-36 scores, mostly in the psychological and social domains.

**Conclusions:** TE with its focus on reinforcing self-management and coping can be envisaged as an effective intervention for improving obesity treatment and quality of life of our study patients, due to their specific characteristics.

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### **P40. A MODEL OF MULTIDISCIPLINARY CASE FORMULATION FOR EATING DISORDER PATIENTS: THE PSYCHOPATHOLOGICAL SECTION**

**Authors:** Schumann R., Fasoli V., Mazzoni C., Pozzi L., Tieghi L., Zini D., Giaquinto E., D'Alessandro G., Manzato E. - Società Italiana per lo Studio dei Disturbi del Comportamento Alimentare (SISDCA) Emilia-Romagna Section

**Key words:** Multidisciplinary Approach, Eating Disorders, Case Formulation, Case Report



**Background:** Eating Disorders (EDs) include a range of psychiatric disorders characterized by persistent disturbance of eating habits, that significantly impairs physical health or psychosocial functioning. These patients require a well-structured and multidimensional assessment and treatment as indicated by the main international guidelines. The involvement of different and specialized professionals is needed. Case formulation (CF) collects and structures assessment data and facilitates the interdisciplinary team in sharing treatment decisions. CF describes the course of treatment and by reporting outcome measures becomes a useful instrument for interdisciplinary supervision.

**Purpose:** The purpose is to encourage the use of multidisciplinary CF to integrate different strands of clinical information and explain the development and maintenance of EDs, in order to discuss and share each therapeutic choice among all the specialists in the different levels of care. We present in this work the psychotherapeutic section with psychopathological issues of the multidisciplinary CF.

**Methods:** A group of professionals in the field of medicine, nutrition, psychiatry and psychotherapy, affiliated to an integrated and multidisciplinary scientific association (SISDCA), assembled several models of case formulation based on cognitive and cognitive-behavioral theories referring contents to the updated scientific research for EDs.

**Results.** The psychotherapeutic section of CF focuses on the presentation, description and discussion of ED cases based on psychotherapeutic assessment and diagnosis (descriptive and explanatory), functional analysis and objectives of the treatment.

**Conclusions:** The multidisciplinary treatment of EDs requires the discussion of clinical cases in the single treatment team as well as between different teams. This procedure, guided by a structured model of CF, could help to develop this shared approach. The definitive purpose is to present a multidisciplinary case formulation which includes also nutritional, medical and psychiatric areas in order to improve an integrated and multidisciplinary therapeutic project. Further research might include to test this model of CF in the specific setting of intra/inter-professional supervision.

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#### **P41. COPING WITH DENIAL OF ILLNESS OF THE PERSON WITH AN EATING DISORDER BY TAKING CARE OF FAMILY MEMBERS. A TRAINING COURSES BASED ON THE NEW MAUDSLEY MODEL, FOR SPECIALIZED TEAMS, IN EMILIA ROMAGNA - ITALY**

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**Keywords:** Denial of illness, New Maudsley Model, Training courses, Specialized team.

**Introduction:** The New Maudsley Model is can be applied to family members of people with eating disorders, right from the early stages of the disease and also without direct involvement of the patient. This can allow you to start indirect intervention on the denial of illness from the person with ED and then engage him in treatment. It is important that services for mental health can provide these interventions.

**Background:** Emilia Romagna (Italy) is organized in network system for Eating Disorders in each Local Health Services with specialized teams and specific training on ED during years. In 2015, in Bologna and Ravenna, the training was "Parents' support based on the New Maudsley Model", it was conducted by a team with experience on the model, working in Child and Adolescence Psychiatry Meyer Hospital, University of Florence.

**Methods:** 2 courses of 16 hours each. The contents included lectures with slides, operational experience and role playing, videos, etc. Material utilized: specific tests, books and worksheets for operators.

**Results:** 63 participants. Profession: Child and Adolescence Psychiatrist 9, Psychologists 31, Educators 3, Psychiatrists 6, Pediatricians 3, Dietitians 8, Parents(associations) 3. Questionnaires rating: 63.9% the highest; 30% high, 5.5% discreet.

**Discussions:** The training gave good results for the active involvement of operators; several teams plan family groups conducted with this model. The project includes a follow up from 3 months to assess the results with the operators who have applied the model. The model is simple and feasible with the resources in services for mental health. After the training with carers we will evaluate the compliance of the patient and family.

#### **P42. REHABILITATION IN THE BODY SCHEMA AND BODY IMAGE IN EATING DISORDERS A STRATEGY FOR INTERVENTION**

**Authors:** Prof. Turrini G., Arnone F., Scita F., Chierici M.L., Guigli S., Artoni P., Hamati A., Ibatici G.

**Introduction:** Over the last few years, body image disorders have proved their significant role in the insurgence and maintenance of Eating Disorders. A problematic relationship with body image is the psychopathological core that precedes abnormal eating behaviors and weight loss. This often remains unchanged although there are significant improvements in eating behavior and body weight. (Cuzzolaro).

A validation of this tendency is proved by the relapses of Eating Disorders, whose effect is explicable on the basis of a lacking or inadequate treatment of the alteration of body image.

The treatment presented in this study is mainly based on Michel Probst's works called Body-oriented therapies (BOT). We present results of the preliminary study.

**Objectives:** The aim of the study was to evaluate the effectiveness of a specific body image treatment designed for ED patients. In the first phase of the treatment the focus is on the rehabilitation of body schema, then the focus moves on to body image and body schema at the same time.

**Methodology:** Such intervention is structured in two phases during the recovery period: the former, the Body Perception Treatment (BPT), which is preliminary to the latter, is based on the acquisition of an adequate body schema; the latter, the Body Expressiveness Treatment (BET), is aimed to the stabilization of a conscious body scheme and acquisition of a functional body image.

**Method:** The measuring of data related to the treatment's effectiveness has been carried out through self-monitoring forms, completed weekly by patients, for an evaluation of the perceived body image and emotional correlations.

**Results:** We found an improvement of the Conscious Body Schema in both AN and BN patients and BED patients. This is highlighted by an improvement in the graphical representation of their body. At the beginning of the treatment, these patients had serious impairment of body schema, showed altered perception of body shapes or no perception of body parts. AN and BN patients frequently overestimated their body shapes, while BED patients underestimated them. In both cases there wasn't a Conscious Body Schema. The BPT showed a gradual improvement and a more realistic representation of the body shapes for all kind of patients. Anxiety caused by the body perception, high at the beginning, decreases over time accompanied by an improvement in the body perception itself. In a group of patients it has been observed, in the early stages of the treatment, the avoidance of the body perception and low levels of anxiety.

Body Emotional Treatment (BET), using body expression of emotions and psychological and physical contact, pointed out a gradual improvement in the relationship with the body. During the BET, with the use of a specific self-assessment questionnaire, we found a rise of positive emotions values and a reduction of the negative ones in both AN and BN patients and BED patients. In BED patients, in particular, we have observed a lowering of the levels of shame.

**Conclusion:** Integrated treatment for the body schema and the body image seems to be effective for the treatment of body image disorders for AN, BN and BED patients. In fact it improves both the perception of the body, and the relationship with it, and the emotions connected to the body itself. We believe that the combined use of BPT and BET is a promising treatment model but needs further study.

#### **P43. LOCAL NETWORK AND INTEGRATED NUTRITIONAL INFORMATION SYSTEM FOR THE PREVENTION, TREATMENT AND REHABILITATION OF OBESE PATIENTS: FROM THEORY TO PRACTICE**

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**Key words:** obesity, network, empowerment, motivational counseling, nutrition information system.

**Introduction:** WHO promotes interventions that are aimed to counteract and modify behavioural, environmental and metabolic risk factors for NCDs and obesity, providing a holistic, multi-dimensional and life-course approach using evidence-based strategies, motivational counseling for changing behaviours and lifestyles, and reducing inequalities.

Regarding obesity, the national scenario is shifting towards the creation of an integrated network model such as that shared by all national scientific associations.

**Aim:** In the Veneto Region, our effort has addressed the creation of an integrated network on different levels to prevent and treat obesity. In the first level, the Food Hygiene and Nutrition Services (SIAN) must play a vital role in the support of professionals, institutions and stakeholders.

**Materials and methods**

SIAN in the Veneto Region have been the core of the primary level in the territory with family doctors and pediatricians for 10 years. Their motivational and ecological approach reflects the etiology of obesity phenomenon, characterized by a complex interaction of psychosocial, relational, motivational and behavioural factors. Validated instruments are used for motivational counseling (manual, tests).

**Results:** In addition to the collective prevention activities, SIAN operates in a territory with 6 nutritional and motivational counseling teams, equipped with highly qualified medical and dietary professionals to support family doctors, pediatricians and other specialists. Their work is dedicated to patients of all ages and particularly to high risk and disadvantaged groups with unhealthy behaviour, nutritional risk factors, weight problems and malnutrition, diet-related diseases, in special physiological situations, and with allergies and food intolerances. In 2015, the multidisciplinary teams visited 1.354 new patients and performed 4.462 controls. Patients visited in ULSS of Vicenza were 11% under 16 years of age, 65% adults and 24% over 65 years of age.

**Discussion and Conclusions:** The evidence suggests that local integrated and multiprofessional networks with nutritional and motivational counseling teams might be a realistic and affordable solution for the Italian Health Service and indispensable for a life course prevention and care at all levels in the population especially for high risk and disadvantaged groups.

The network must be supported by an integrated system of nutritional information (SIN) throughout the territory to maintain an epidemiological surveillance system and database monitoring of obesity and overweight. Validated manual and tests to promote and evaluate motivation for change toward healthy nutrition and regular physical activity must be used.

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#### P44. EATING DISORDER AND CANNABIS USE

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**Key Words:** Adolescents, Cannabis use, Eating disorder

**Objective:** Cannabis is the most widely used illicit drug in the world, also among Italian adolescents. The mesolimbic dopaminergic system mediates the processing of incentive stimuli by modifying their motivational value, which is modulated by endocannabinoid signalling; dopaminergic dysfunction and reduced dopamine synthesis are associated with chronic cannabis use. The reduced capacity to synthesis striatal dopamine associated with chronic cannabis use may underlie the reduced sensitivity to reward and lack of motivation associated with chronic cannabis use. CB1 receptors are widely expressed in brain regions that control food intake, reward and energy balance. Evidence has led us to hypothesis a link between defects in the endocannabinoid system and eating disorders. Exogenous marijuana can certainly affect mood and eating behaviour. An obsessive interest in food coupled with an inappropriate emotional response is consistent with a dysfunction in the brain's endocannabinoid system.

**Clinical case:** Six months ago a 15-year old schoolgirl, an only child, began to reduce her calorie intake and has lost 10 kg in weight in the past 3 months, amenorrhea, fear of putting on weight, body image distortion, lack of appetite, sporadic loss of subjective control with self-induced vomiting; serious sleep disorder. The patient underwent a physical check-up, blood tests and metabolic and functional exam, along with nutritional and psychological evaluation (clinical interviews and administration of EDI-3 and graphic tests: human figure, tree, family). The request for help came from the family. The following advice was given: - clinical nutritional

rehabilitation; - invitation to join a psychotherapy group; - family therapy.

**Result:** the patient demonstrated a low ability to understand herself, extreme confusion in appropriately recognising and responding to emotional states, intense fear and misunderstanding of some strong emotions she perceived as beyond her control. She could not define her own needs and did not link her emotions to her own actions; estrangement, lack of trust in relationships, the feeling of not being understood or loved by others. Good therapeutic relations established; during the nutritional rehabilitation and psychotherapy group the following emerged:

- the patient did not feel comfortable with the compliments she received from her friends;
- she had difficulty in communicating with her parents (they seem to speak different codes, the family environment is extremely confused);
- the occasional use of cannabis had become increasingly frequent as a way of belonging to her peer group;
- she has increased her calorie intake and has started to put weight back on.

She has suffered from some episodes of bullying by some companions when she refuses to buy cannabis for the group (anonymous phone calls to her mother and grandmother)

**Conclusions:** an interesting association of the two disorders (use of cannabis and bulimic anorexia). What is the role of cannabis consumption and to what extent does this affect her partial weight gain and her state of dysphoria. It is however considered that it is the high level of confusion and emotional dysfunction and her inability to relate to this, preferring action (the eating disorder and cannabis addiction), which may help her to manage her anxiety (a kind of “self-help”) and overcome the moments deriving from difficulties in her family and in her peer group.

#### **P45. ANOREXIA IN ADOLESCENCE AND LIMITATIONS OF CATEGORICAL DIAGNOSIS**

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**Key Words:** Adolescents, BMI, ANOREXIA

**Introduction:** Adolescents with a BMI within the normal range present symptoms and criteria falling partially within the categorical diagnosis in these cases of anorexia: fear of putting on weight, an impulse towards thinness, body image distortion, phobia towards some types of foods. Fairburn’s transdiagnostic theory suggests that we consider the symptoms of Eating Disorders transversally in order to identify an appropriate therapy. We present one case in which the diagnosis of anorexia cannot be made, as the BMI falls perfectly within the normal range despite meeting some criteria of serious anorexia.

**Clinical case:** Female student 16y. with good school performance, began to weigh food and keep her diet in check in order to lose weight, as she thought she was fat. If she did not follow the diet she has decided on, she felt guilty. This led her to progressively eliminate many foods. In this way however she felt sick after meals, attributing this to a stomach problem that was reported the year before following a gastroscopy. In 2 months she lost 11 Kg, her BMI falling from 24 to 20 Kg/m<sup>2</sup>. The weight loss worried her (separated) parents, who decided to refer her to our unit in September 2015. They told us that when she returned to school after the summer break she showed signs of anxiety and irritation, her moods had got worse and she suffered some panic attacks. She told us that she studied standing up as she felt “bloated and uncomfortable” after meals, and she decided to go by bike rather than moped so that she could burn the excess calories she felt she consumed. She had begun to suffer from oligomenorrhoea. She felt tired. She complained of epigastric pain, due to which she could not eat regularly, and this symptom had started to appear increasingly frequently, accompanied by abdominal pains. As a result she went to the A&E department, and was admitted to the medicine ward two weeks after our visit. After being transferred to the eating disorders ward, she had a gastroscopy which excluded any organic basis of the symptoms. On being told this, she agreed to undergo intensive rehabilitation therapy, with assisted meals supported by a dietician and a psychologist. From a psychological point of view, she strongly denied any eating disorder and the relative psychic and emotional component. During the hospital therapy she had serious difficulty in exploring her inner emotional world, feared dependency on others, shut herself off and did not communicate, making it difficult for the staff to support her. She stayed in hospital for around 3 months, during which time in addition to the staff-assisted meals she continued her sessions with the psychologist who had worked with her prior to being admitted to hospital. She gained 4 Kg in body weight, the panic attacks disappeared, her mood became stable and she no longer suffered from epigastric pain.

After being released from hospital, the therapy continued on a clinical basis and family therapy began.

**Discussion:** The patient came into observation complaining of gastro-enteric symptoms that were apparently unlinked to the eating disorder, which led to admission to hospital at a BMI that in itself was not sufficient for hospitalisation. This led to intensified therapy, with a positive outcome. This has led us to consider whether we should re-assess the admission criteria for patients presenting rapid weight loss.

#### **P46. A MODEL OF MULTIDISCIPLINARY AND MULTISETTING THERAPY FOR EATING DISORDERS (ED) IN A LOCAL HEALTH UNIT OF THE NATIONAL HEALTH SERVICE**

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**Key words:** Eating Disorders, management model, therapeutical settings, National Health Service

**Background:** According to guidelines, principles of a good management of ED are: specialistic, multidisciplinary and multi-setting treatment; structured assessment and psycho-nutritional rehabilitation (PNR) and psychotherapy (PT) (1-5). Indications about the most appropriate treatment management models are lacking; patients are commonly treated by undefined models in a specialistic inpatient setting or in a general outpatient setting.

**Purpose:** To analyse the management model of ED treatment in the Local Health Unit of Modena and its accordance with guidelines and with the statement of the Regione Emilia Romagna (6).

**Methods:** The Local Health Unit of Modena provides health service to 710,000 people, in a vast territory; the expected prevalence of ED is 3500 patients; the expected incidence is 260 new cases/year. The new management model of treatment has been started in 2014, in order to improve the usual treatment. It consists of PNR based on cognitive-behavioural therapy, according to Fairburn 2008 (7), and of PT. It is provided in four settings: outpatient treatment, one day-care, inpatient care in a specialized Internal Medicine Unit, inpatient treatment in a mental health hospital. The assessment and the treatment of each patient are provided by a specialistic multidisciplinary team, consisting of nutritionist medical doctors, dieticians, psychologists and psychiatrists. PNR is provided by the same medical doctors and dieticians in each setting of treatment, by a multistep approach; each patient is examined at the same time by two medical doctors, who play different roles. Outpatient care is provided in peripheral areas. Inpatient care in the Medicine Unit is performed in order to allow weight restoration and the following outpatient PNR and PT. After high-intensity care, patients are followed up by the team.

**Results and Conclusions:** The analysis of the management model of ED treatment shows that it is in accord to guidelines and to the Regione Emilia Romagna statement. Actually, patients are treated in a specialistic, multidisciplinary, multisetting and multistep way. We are now performing the evaluation of outcomes.

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#### **P47. RESIDENTIAL PROGRESSIVE PSYCHONUTRITIONAL REHABILITATION (RPP™) IN ADOLESCENTS WITH EATING DISORDERS (ED): AN OUTCOME STUDY**

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**Key words:** progressive psychonutritional rehabilitation, eating disorders, adolescents

**Objective:** Recent researches suggest that residential treatment for patients with ED may significantly modify core anorexic thoughts and behaviours, thus supporting clinical recovery and prevention of recurrences. This study aimed to explore the effectiveness of the RPP™ model for adolescents with severe ED admitted to residential and/or hemiresidential treatment program.

**Methods:** The RPP™ consists of stepped and patient-tailored refeeding strategies combined with intensive psychosocial, medical and pharmacological interventions, aiming at progressive reduction of core ED psychopathology, reduction of comorbid psychiatric symptoms and achievement of spontaneous eating. The following outcome measures were used to assess clinical and psychopathological changes from admission (t0) to discharge (t1): Body Mass Index (BMI), caloric intake, Eating Disorder Inventory -2 (EDI-2) and Symptom Checklist-90 (SCL-90) scores.

**Results:** 107 adolescents with ED completed the RPP™ program in residential (68/107) or hemi-residential (25/107) or residential plus hemiresidential (12/107) setting at the CWED. 83 out of 107 patients were affected by Anorexia Nervosa (AN), 14 out of 107 by Bulimia Nervosa (BN) and 10 out of 107 by Eating Disorder Not Otherwise Specified (EDNOS). From t0 to t1, AN showed a significant weight gain ( $p < 0.001$ ) whereas BN and EDNOS showed a substantial weight stabilization ( $p = 0.248$  and  $p = 0.153$ , respectively). Caloric intake significantly increased over time in AN ( $p < 0.001$ ) and EDNOS ( $p = 0.018$ ), but not in BN. From t0 to t1, for AN and

BN there were significant improvements in all EDI-2 and SCL-90 subscales ( $p < 0.001$  and  $p < 0.05$ , respectively). For EDNOS, improvements were found in five of 11 EDI-2 subscales and six of 11 SCL-90 subscales ( $p < 0.05$ ).

**Discussion:** RPP™ program seems to be effective in reducing core ED psychopathology and general psychiatric symptoms as well as weight normalization in the great part of our sample. These results also emphasize that the treatment of adolescent ED patients in a highly specialized unit can be an effective in promoting recovery and avoiding prolonged hospitalization. For this purpose, the University of Udine in collaboration with the CWED organize a second level master dedicated to RPP™ (see [www.disturbialimentari.info](http://www.disturbialimentari.info) and [www.uniud.it](http://www.uniud.it)).

#### P48. COGNITIVE COMPONENTS AND RIGID THINKING IN ANOREXIA NERVOSA

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**Key words:** Eating disorders, Executive functions, rigid thinking, cognitive profiles

**Introduction:** a new trend in psychiatric research aims to identify the criteria for so-called intermediate phenotypes or endophenotypes. they are disease models that can help the understanding of the pathogenesis, the diagnostic assessment and treatment of psychiatric and neuropsychiatric disorders, with complex behavioral and clinical phenotypes (Gottesman e Gould, 2003). Endophenotypes are objective, quantifiable and heritability traits, which are risk factors for polygenic disorders. In recent years, research on eating disorders has begun to shift attention from the analysis of the behavior to the observation of the cognitive processes that may be related to the behavior. This has allowed the identification of typical cognitive profiles (Treasure, 2007; Treasure, Lopez e Roberts, 2008). Among the relevant factors for the identification of a specific cognitive style in AN, the literature has reported cognitive rigidity (set-shifting and flexibility deficits - Roberts et al, 2007; Thanchuria et al, 2005), focusing on details (weak central coherence - Tokley e Kemps, 2007; Lopez et al, 2008; Oldershaw et al, 2011) and lack of understanding and verbalization of emotions (lack of theory of mind - Russel et al, 2009).

**Aims of the study:** we try to systematize the available knowledge on the cognitive components underlying the rigid thinking (Diamond, 2013) with the aim of verify its applicability to the study of functional profiles in eating disorders.

**Methods:** fifteen works including articles and reviews on executive functions in children have been selected. In particular we have considered studies on the development of executive functions that describe, in addition to the different identifiable components, assessment tools for each of these components. Studies have been selected by the search engines "PubMed" and "ResearchGate".

**Results and discussion:** analysis has allowed to identify different components potentially involved in rigid thinking, which may be considered in eating disorders and in particular in patients with a diagnosis of AN. This field of study can improve the understanding of the pathogenesis of these diseases and their treatment, supporting the use of new models of intervention such as Cognitive Remediation Therapy, whose first applications in AN have given positive confirmations of effectiveness (Martinez et al., 2012).

#### P49. ALEXITHYMIA, EMOTIONAL EMPATHY, AND PERSONALITY IN ANOREXIA

Nervosa: incidence and relationship with duration of illness

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**Key words:** Anorexia Nervosa; social alexithymia; empathy; personality patterns, duration of illness.

**Background:** individuals with Anorexia Nervosa (AN) are Known to experience poor awareness of personal emotions (alexithymia) and difficulty understanding others' mental states (cognitive empathy). Despite its important role in social interaction and interpersonal relationships, emotional empathy has been slightly measured in AN.

**Aim of the study:** how alexithymia and cognitive empathy affect AN patients, accounting for the duration of illness and how personality patterns associated with AN affect relationships among alexithymia and empathy, will be investigated.

**Methods:** A sample of 22 outpatients (all women) with AN, devised into two groups - latest onset (patients with a 12 month or less history of illness; N = 9) and chronic onset (patients with more than 1 year history of illness; N=13) were tested and compared to 11 age-matched healthy women. The Toronto Alexithymia Scale 20 (TAS-20) assessed alexithymia and the Interpersonal Reactivity Index (IRI) measured empathy. Personality patterns were assessed using Structured Clinical Interview for DSM-IV (SCID II).

**Results:** Data available refer to an exploratory analysis of a small number of tests, elaborated as yet.

AN participants reported higher TAS-20 total alexithymia scores than healthy comparison participants.

Moreover, relative to comparison participants, AN reported greater personal distress (a domain of emotional empathy assessed by the IRI ). Among AN participants, alexithymia score is expected not to significantly change in the chronic onset group than the latest onset one, while personal distress should worsen in the chronic patient due to the long history of illness.

**Conclusions:** This study provides evidence that alexithymia and personal distress may represent vulnerability features of AN. Higher levels of personal distress in AN are expected in chronic patients and could be a negative predictor of outcome in this category of patients.

#### **P50. EMERGING PSYCHOPATHOLOGICAL HALLMARKS IN PATIENTS WITH ANOREXIA NERVOSA (AN) AND IN THE RESPECTIVE PARENTING PAIRS BY MMPI-2 ASSESSMENT.**

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**Key words:** Anorexia Nervosa; Personality Patterns, Psychopathological Features; Psychodiagnosis; MMPI

**Background:** Patients with AN exhibit peculiar trait and state patterns of personality, strongly related to the duration of illness and long-term outcomes. Previous evidence suggest that dysfunctional individual and interpersonal styles among family members may also influence the course of disease and the prognosis of AN patients.

**Aim of the study:** Which personality patterns are associated with AN, in terms of traits and state features, by psychodiagnostic evaluation of AN patients and their parenting couples.

**Methods:** A sample of 40 outpatients with Restrictor AN and their parenting pairs were tested and compared to age-matched healthy controls. The MMPI-2 (Minnesota Multiphasic Personality Inventory - 2) was administered as psychodiagnostic tool, since it has been widely used as standardized psychometric test of adult personality and psychopathology.

**Results:** In the group of AN patients, the prevailing psychopathological facets were represented by: depression and social introversion, as state variables, and obsessivity, low self-esteem, anxiety, latent depression and altered female gender role, as trait variables. In the group of mothers of AN patients, main psychopathological hallmarks consisted in hysteria, as state feature, and denial of social anxiety, high levels of social responsibility and altered female gender role, as trait features. At last, in the group of fathers of AN patients, psychopathological profile was characterized by hypochondria, as state feature, and denial of social anxiety, high levels of social responsibility and altered male gender role, as trait features.

**Conclusions:** This study provides a peculiar psychopathological profile of patients affected by restrictor AN, according to previous data, which show a prevalence of obsessivity and low levels of self-esteem in this population. Personality features, emerging from MMPI-2 parents' profiles, suggest a link between hysteria and hypochondria, that shares a common background in terms of psychodynamic mechanisms, putatively associated to alexithymia and dysfunctional processing of emotional states.