

**Objectives:** The goal of our study was to devise and validate an innovative multidisciplinary approach to obesity and binge eating disorder, based on the synergy between the medical-psychological field and assistive technology.

**Methods:** We developed “TERESA” (Therapeutic Educational Robot Enhancing Social interActions) (fig. 1), a social humanoid robot, and implemented it to collaborate in a TE programs in order to enhance social interactions, improve knowledge acquisition and adherence to treatment. The specific TE intervention, called Education towards Choice and Awareness, was based on 3rd generation cognitive-behavioral approaches and consisted in eight informative and experimental meetings.



**Results:** Taking part in the TE-TERESA integrated protocol determined and improvement in psychopathological domains (anxiety, negative mood, quality of life) and a stronger concordance to the therapeutic protocol.

**Conclusions:** Our research paves the way for the clinical use of Assistive technology (AT), highly promoted by the WHO to help people with numerous disabling clinical conditions improve their quality of life and acquire self-management skills.

**Keywords:** therapeutic education; obesity; binge eating disorder; assistive technology

## EPP0622

### Childhood traumatic experiences and functioning of both neurobiological components of the endogenous stress response system in adult people with eating disorders

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**Introduction:** A large body of literature suggests that childhood trauma exposure is a non-specific risk factor for development of eating disorders (EDs) later in life. One potential mechanism through which early traumatic experiences may increase the risk for EDs is represented by long-lasting changes in the body stress response system.

**Objectives:** We investigated the activity of the hypothalamus-pituitary-adrenal axis and of the sympathetic nervous system in adult ED patients with or without a history of childhood trauma exposure.

**Methods:** We recruited 35 women with EDs, admitted to the Eating Disorders Center of the Department of Psychiatry of the University of Naples “Luigi Vanvitelli”. Participants filled in the Childhood Trauma Questionnaire (CTQ), to assess exposure to childhood trauma. They were instructed to collect saliva samples at awakening and after 15, 30 and 60 minutes, in order to measure cortisol levels and salivary alpha-amylase (sAA), a marker of the sympathetic nervous system activity.

**Results:** According to the CTQ cut-off scores, 21 ED women were classified as maltreated (Mal) participants and 14 women as no-maltreated (noMal) ED participants. Compared to noMal ED women, Mal ED participants showed significantly decreased cortisol awakening response (CAR) and sAA morning secretion.

**Conclusions:** Present findings confirm that childhood trauma exposure impairs the CAR of adult patients with EDs and show that also the morning secretion of sAA is decreased in childhood maltreated adult ED patients. Therefore, our study shows for the first time a dampening in the basal activity of both components of the endogenous stress response system in childhood maltreated adult ED women.

**Keywords:** childhood trauma; eating disorders; alpha-amylase; stress

## EPP0623

### Eating disorders and diabetes: A meta-analysis

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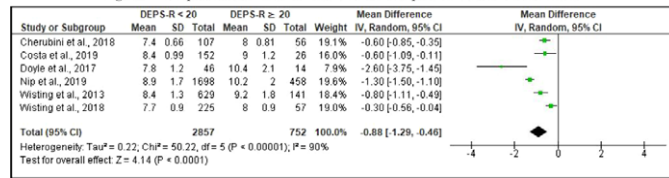
**Introduction:** Diabetic patients are asked to focus on their eating habits and calories intake. Together with individual factors, this could increase the risk of developing Eating Disorders (ED) associated with diabetes. A score of 20 points at the Diabetes Eating Problem Survey-Revised (DEPS-R) scale is considered as a valid threshold to identify Disordered Eating Behaviours (DEB) in diabetic patients. DEB can be considered as altered eating behaviours not fully meeting criteria for ED. As DEB are not formally recognised as specific ED in DSM-5, there is a great risk of not detecting them, thus underestimate their consequences.

**Objectives:** To meta-analyse literature on ED and DEB, when in comorbidity with Type 1 and Type 2 Diabetes Mellitus, focusing on pathological medical consequences.

**Methods:** PRISMA guidelines were followed for this meta-analysis. Articles were identified in literature by searching into PubMed, PsycINFO and Embase.

**Results:** 1141 records were identified through database search. Figure 1 shows six studies comparing HbA1c % values for 2857 diabetic patients versus 752 diabetic patients with DEB. HbA1c % levels appear to be higher in patients with DEPS-R  $\geq$  20, compared to those with DEPS-R scores below 20.

**Figure 1.** Comparison of HbA1c % values for diabetic patients with and without DEB



**Conclusions:** Routine screening for DEB using DEPS-R scale could favour early identification of diabetic individuals, at risk for progression into a proper ED. Clinicians should be vigilant about potential DEB when patients show poor long-term glycaemic control; similarly, patients with a DEPS-R score over 20 points may require more frequent glycaemic checks. This could help prevent serious medical complications.

**Keywords:** eating disorders; disordered eating behaviours; diabetes

## EPP0624

### Eating disorder examination-questionnaire – 7: Construct validity in a sample of portuguese overweight women

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**Introduction:** Although the Eating Disorder Examination Questionnaire (EDEQ; Fairburn et al. 2008) is the most used instrument worldwide for the assessment of eating disorders symptoms, its factorial structure considerably varies, which limits its construct validity. Using exploratory factor analysis in data from a sample of overweight women, our group found a three-factors structure of the EDEQ Portuguese version (Peixoto et al. 2013). Although it was in accordance with other psychometric studies (eg. Peterson et al 2007), it was different from the original matrix. Further investigation regarding its factor structure has been conducted, with studies supporting a modified seven-item-three-factors structure (dietary restraint, shape/weight overvaluation, body dissatisfaction) with improved psychometric properties (Grilo et al. 2013, 2015), including with Portuguese samples (Machado et al. 2018; Santos et al. 2019).

**Objectives:** To analyze if the EDEQ version composed of seven items and three factors is replicated in a Portuguese sample of overweight women.

**Methods:** The EDEQ was administered to an outpatient sample of 276 women (Mean age= 43.85±11.89 years; Mean BMI=32.82±5.43

Kg/height<sup>2</sup>) attending a weight loss treatment consultation in a public hospital.

**Results:** Confirmatory factor analysis (CFA) revealed an adequate fit of the EDEQ-7 second order model with three dimensions ( $\chi^2/df=1.5497$ ; RMSEA=.0452, CFI=.9955, TLI=.9914, GFI=.xxx; p<.001). The EDEQ7 Cronbach's alphas for the total and its dimensions were  $\alpha < .70$ .

**Conclusions:** Given its good psychometric properties, the overlap of the measurement model with those found with different samples and the reduced number of items, the EDEQ7 will be very useful both in research and clinical settings with/for overweight women.

**Keywords:** eating disorders; overweight; confirmatory factor analysis; EDEQ7

## Emergency psychiatry

### EPP0625

#### Factors of psychiatric emergencies affecting boarding time in the emergency department

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**Introduction:** Psychiatric emergencies are acute disturbances in thought, behavior or mood which require immediate medical intervention. As a substantial number of patients with mental illness present as psychiatric emergencies, the sustainability and management of psychiatric emergency services becomes significant.

**Objectives:** In this study we aimed to examine the factors associated with psychiatric emergency care, taking the boarding time in the emergency department as primary outcome measure.

**Methods:** Charts of 466 psychiatric emergency cases admitted to the Hacettepe University Emergency Department (ED) between December 2018 – September 2019 were evaluated. Boarding time (BT) in the ED, presence of self-harm, psychotic symptoms and agitation were noted.

**Results:** In the examined period, number of patients admitted increased with time significantly ( $r=0.562$ ,  $p<0.01$ ). However, increase in the number of patients was not correlated with an increase in BT. Patients with psychotic symptoms had greater BT compared to non-psychotic patients (7.01 hours vs. 11.24 hours,  $T=-2.796$   $df=182.717$   $p<0.01$ ). Patients with self-harm also had greater BT (7.47 hours vs. 9.85 hours,  $T=-2.013$   $df=433$   $p<0.05$ ). Patients with self-harm in relation with previous suicidal ideation displayed significantly a longer BT when compared with patients admitted due to self-harm without any suicidal plan ( $U=2572.5$   $p<0.01$ ).

**Conclusions:** A significant increase in BT with psychosis and self-harm due to a suicidal plan supports the need of intermediate facilities between the ED and inpatient units, as such facilities would create a positive impact in the care of psychotic and suicidal patients.

**Keywords:** Psychiatric Emergency Services; Quality of Care; Suicide; psychosis