

**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

F. Pellegrino<sup>1\*</sup>, G. Cascino<sup>2</sup>, E. Barone<sup>3</sup> and A.M. Monteleone<sup>1</sup>

<sup>1</sup>Department Of Psychiatry, University of Campania “Luigi Vanvitelli”, Naples, Italy; <sup>2</sup>Department Of Medicine Surgery And Dentistry - Section Of Neuroscience, University of Salerno, Salerno, Italy and <sup>3</sup>Department Of Psychiatry, University of Campania “Luigi Vanvitelli”, Naples, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.962

**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

T. Mastellari<sup>1\*</sup>, M. Speciani<sup>2</sup>, F.F. Gelati<sup>2</sup>, D. De Ronchi<sup>2</sup>, F. Panariello<sup>3</sup> and A.R. Atti<sup>2</sup>

<sup>1</sup>Faculté De Médecine Henri Warembourg, University of Lille, Lille, France; <sup>2</sup>Department Of Biomedical And Neuromotor Sciences, University Of Bologna, Italy., University of Bologna, Bologna, Italy and <sup>3</sup>Mental Health, AUSL Bologna, Bologna, Italy

\*Corresponding author.

doi: 10.1192/j.eurpsy.2021.963

**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.