# S92

# Interplay of gut microbiota, body mass index and depression scores in anorexia nervosa: Preliminary data

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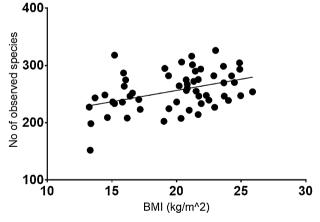
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Introduction Anorexia nervosa (AN) is a lethal psychiatric disease with only narrow treatment possibilities. Recent study results point out, that gut microbiota might be a contributing factor in the development and persistence of AN through effects on the gut-brain-axis. *Methods* We used 16SRNA sequencing to characterize the composition and diversity of the gut microbiota of 18 AN patients, 19 normal weight controls and 19 athletes matched by age using stool samples. The QIIME-pipeline was used to assess the sequencing result. All participants completed an activity-questionnaire (IPAQ) and inventories to measure depression (BDI, HAMD).

*Results* Kruskal-Wallis test identified significant differences in alpha-diversity (Chao-1-estimator [P=0.013], number of observed species [P=0.027]) between groups. Spearman-Correlation revealed a significant correlation of number of observed species (r=0.366, P=0.006) Chao-1-estimator (r=0.352, P=0.008) and BMI (Fig. 1). Furthermore, a higher BMI was related to lower depression scores (r=0.351, P<0.001). Although there was a tendency of a negative correlation of BDI-scores and alpha-diversity (r=-0.180, P=0.059), correlations with depression scores and IPAQ-scores did not reach significance level (Fig. 1).

*Conclusions* Our preliminary data demonstrate correlations of alpha-diversity and BMI. Further studies are needed to provide further insights in AN gut microbiota and its influence factors.

Scatterplot of BMI vs. No of observed species





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#### 0066

# The different effect of childhood trauma on amygdala and hippocampus in patients with bipolar disorder and healthy controls

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*Introduction* Childhood trauma (CT) is a relevant environmental stressor for bipolar disorder (BP). Amygdala and hippocampus are key areas involved both in the pathophysiology of BP and in mediating the biological response to stress.

*Objectives* Structural neuroimaging studies help clarifying neural correlates of the relationship between BP diagnosis and CT.

*Aims* To verify the impact of CT on amygdala and hippocampus and hippocampal subfields volumes in BP patients and healthy control (HC).

*Methods* We assessed 105 outpatients, diagnosed with BPI or BPII according to DSM-IV-TR criteria, and 113 HC subjects. History of CT was obtained using the childhood trauma questionnaire (CTQ). High-resolution magnetic resonance imaging was performed on all subjects and volumes of amygdala, hippocampus, nucleus accumbens, caudate, pallidum, putamen, thalamus and hippocampal subfields were measured through FreeSurfer.

*Results* All deep gray matter structures were smaller in BP than HC. CT modulated the impact of the diagnosis on bilateral amygdala and hippocampus, in particular on subiculum, presubiculum and cornu ammonis CA1. It was associated with bilateral decreased volumes in HC and increased volumes in patients with BP.

*Conclusions* Childhood trauma impacts on the amygdala and hippocampus, brain areas involved in response to stress and emotion processing, and specifically on the hippocampal subfields most implicated in learning trough positive/negative reinforcement. *Disclosure of interest* The authors have not supplied their declaration of competing interest.

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#### 0067

## Prevalence of psychopathological features in intellectual diability: The Italian SPAID-G multicentric study

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*Introduction* Despite increasing awareness of high prevalence of psychiatric disorders in people with intellectual disability (ID), diagnostic tools are few and scarcely used in daily practice. SPAID-G (psychiatric instrument for the intellectually disabled adult-general version) is the first Italian for carrying out psychiatric diagnostic orientations in adults with ID. It was designed to be easy and quick instrument for daily clinical practice.

*Objectives/Aims* The present study was aimed at evaluating psychometric and psychodiagnostic characteristics of the SPAID-G and at supplying new data on the prevalence rate of psychiatric disorders in a multicentric Italian sample of people with ID living in different settings.

*Methods* The SPAID-G was consecutively administered to more than 800 persons with ID attending residential, rehabilitative or

clinical services across Italy. A part of the sample was also assessed for psychopathology through the use of DASH-II, PDD-MRS and clinically diagnosed in accordance to DSM-IV-TR and DSM-5 criteria.

*Results* SPAID internal consistency, inter-rater reliability and concordance with DASH-II and PDD-MRS resulted to be good. Around 40% of the sample was assessed to have a cluster of psychopathological symptoms that could be consistent with a psy-chiatric diagnosis. Autism, impulse control disorder and personality disorder resulted to be the most frequent over threshold scores.

*Conclusions* The SPAID-G seems to be a valid and cost-effective screening tool for the psychiatric assessment within the Italian population with ID.

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### 0068

## Traumatic experiences affect negative emotion processing in bipolar disorder

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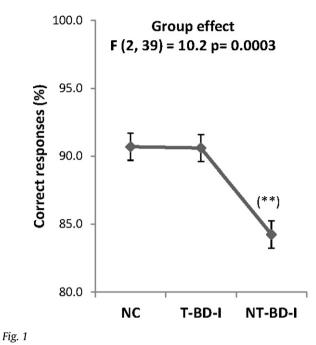
*Introduction* Patients affected by bipolar disorder type I (BD-I) show a significant emotional impairment during both acute and euthymic phases of the illness, but the influence of negative life experiences is not yet fully understood.

*Objectives* Aim of the present study was to investigate the role of previous traumatic events on negative emotion processing in euthymic BD-I patients.

*Methods* Eighteen euthymic BD-I patients, 7 reporting past traumatic events (T-BD-I), but free of post-traumatic stress disorder (PTSD) symptoms at the moment of the evaluation and 11 never exposed to traumas (NT-BD-I), were compared to 24 not traumatized controls (NC). All participants performed a IAPS-based emotional task: they were required to identify vegetable items (targets) among neutral or negative pictures. Accuracy (percentage of correct responses) and mean reaction times (RT) were recorded.

*Results* T-BD-I performed similarly to NC and significantly better than NT-BD-I in terms of accuracy (Fig. 1). No significant between-group effects were observed for mean RT.

*Conclusions* A previous history of traumatic events, without current PTSD symptoms, may significantly impact the negative emotion processing in euthymic BD-I. Interestingly, traumatized patients showed a better accuracy when processing both neutral and negative images, thus suggesting that paying more attention to external stimuli may be a successful compensatory mechanism to cope with potential environmental threats.



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#### 0069

## A simple composite dynamic digital tool to communicate complex physical and mental health needs and measure outcomes: The Cornwall health radar

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*Introduction* Clinician-patient communication is a major factor in influencing outcomes of healthcare. Complexity increases if an individual has multiple health needs requiring support of different clinicians or agencies.

*Aim* To develop and evidence a simple dynamic computerised tool to capture and communicate outcomes of intervention or alteration in clinical need in patients with multiple chronic health needs. *Method* A MS Excel algorithm was designed for swift capture of clinical information discussed in an appointment using predesigned set of evidenced based domains. An instant personalized single screen visual is produced to facilitate information sharing and decision-making. The display is responsive to compare changes across time. A prototype was conceptually tested in an epilepsy clinic for people with Intellectual disability (ID) due to the unique challenges posed in this population.

*Results* Evidence across 300 patients with ID and epilepsy showed the tool works by enhancing reflective communication, compliance and therapeutic relationship. Medication and appointment compliance was 95% and patient satisfaction over 90%.

*Conclusion* To discuss all influencing health factors in a consultation is a communication challenge esp. if the patient has multiple health needs. A picture equals 1000 words and helps address the cognitive complexity of verbal information. The radar offers an evidenced based common framework to host care plans of different health conditions. It provides individualised easy view person centred care plans to allow patients to gain insight on how the dif-