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Telomere length is associated with childhood trauma in patients with severe mental disorders

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Background: Reduced Telomere Length (TL) and structural brain abnormalities have been reported in patients with Schizophrenia (SZ) and Bipolar Disorder (BD). Childhood traumatic events are more frequent in SZ and BD than in Healthy individuals (HC), and based on recent findings in healthy individuals could represent one important factor for TL and brain aberrations in patients. **Methods:** The study comprised 1,024 individuals (SZ [n=373]; BD [n=249], and HC [n=402]). TL was measured by polymerase chain reaction, and childhood trauma was assessed using the Childhood Trauma Questionnaire (CTQ). Diagnosis was obtained by the Structured Clinical Interview (SCID) for the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV). FreeSurfer was used to obtain regional and global brain volumes from T1-weighted magnetic resonance imaging (MRI) brain scans. All analyses were adjusted for current age and sex. **Results:** Patients had on average shorter TL ($F=7.87$, $p=.005$, Cohen's $d=.17$) and reported more childhood trauma experiences than HC ($\chi^2=148.9$, $p<.001$). Patients with a history of childhood sexual, physical or emotional abuse had shorter TL relative to HC and to patients without a history of childhood abuse ($F=6.24$, $p=.01$, Cohen's $d=.16$). After adjusting for childhood abuse, no difference in TL was observed between patients and HC ($p=.27$). Our analyses revealed no significant associations between TL and clinical characteristics or brain morphometry. **Conclusions:** We demonstrated shorter TL in SZ and BD compared to HC and showed that TL was sensitive to childhood trauma experiences. Further studies are needed to identify the biological mechanisms of this relationship.

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Social dreaming matrix and dream icons

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This work represents a way to observe the imaginary in cancer patients using the principals of social dreaming matrix in psychotherapy and “dreams icons”. Social dreaming has the following characteristics: allows rapid access to the unconscious and the subliminal thinking of the system; it is easy to learn and apply; leads to unexpected discoveries; is based on the self-management of the participants; is oriented towards systems. In this sense, every dream is a metaphor and a communication used to connect the representation and the affects between the therapist and the patient. Dream icons are visual images of dreams, which represent and condense fundamental unconscious meanings. Peculiarity of the icon is to visually construct the object, or psychological theme, which represents and is its origin, since it has the same nature and substance. The Social Dreaming Matrix is used in specific settings to map the share matrix in with therapists and clients work. The principal idea is to map the dreams icons that are generated into the field of work of the therapy. Because the cancer is a double the hypothesis is to create through the therapeutic relationship a way to represent it using dreams and metallization process. As the SDM creates a semantic space that is linked with the mind and the body space of the dreamers, this work in psycho-oncology could be a way to find the possible connection of the psychosomatic point of view of the work.

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No evidence for particular association between HLA-haploidentical hematopoietic stem cell transplantation and psychological distress

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Background: The psychological distress experienced by patients scheduled for hematopoietic stem cell transplantation (HSCT) is of clinical concern. However, that experienced by patients scheduled for HLA-haploidentical HSCT (haplo-HSCT) vs. that of patients scheduled for other types of matched HSCT is unknown. We conducted a retrospective

discussed considering also the contribution of affective neuroscience in clarifying these results.

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The efficacy of Brief Psychodynamic Psychotherapy for fibromyalgia: a pilot study

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Background: Fibromyalgia (FM) is a chronic pain condition characterized by widespread pain, fatigue, sleep disorder and psychological distress. Although the efficacy of psychological interventions such as cognitive-behavioural therapy is well-known, there are few studies investigating the efficacy of Brief Psychodynamic Therapy (BPT) in FM. Therefore, we conducted a randomized controlled trial comparing an individual BPT, inspired on the Brief Dynamic Interpersonal Therapy model, versus an individual Cognitive Therapy (CT). **Methods:** Thirty female patients with FM were recruited in an Italian hospital setting and randomized to receive either BPT (16 sessions, 1 session/week) or CT (16 sessions, 1 session/week). Outcome measures, administered before (T0) and after the psychotherapy treatment (T1), included the Fibromyalgia Impact Questionnaire-Revised (FIQ-R), the Hospital Anxiety and Depression Scale (HADS), the Metacognitive Functions Screening Scale (MFSS), the Toronto Alexithymia Scale (TAS-20), the Relationships Questionnaire (RQ) and the health-related quality of life (SF-36). **Results:** Both treatments were equally effective in reducing the FIQ-R ($p=0.018$) and the HADS total score ($p=.015$) and in improving the health-related quality of life, both in the mental ($p=.001$) and physical ($p=.004$) component of the SF-36. No significant changes emerged, instead, in the MFSS, RQ and TAS-20 questionnaires after the treatments. **Conclusions:** The brief psychodynamic therapy showed to be equally effective as the individual cognitive therapy in lowering the psychological distress level, and in improving fibromyalgia-related symptoms and patients' health-related quality of life.

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Predicting health outcomes from time series features of affect dynamics: a machine learning approach

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Background: The ebb and flow of our daily experiences leads to both moments of pleasurable emotional states (i.e., happiness, joy, excitement, enthusiasm, contentment), or Positive Affect (PA), and moments of aversive emotional states (i.e., sadness or anger), or Negative Affect (NA). Both theory and empirical research have shown mixed evidence for

the relationship between PA and desirable life outcomes (e.g., marital satisfaction) – with some work showing poor health outcomes, such as risky health behaviors, from enduring high PA. **Methods:** Roque et al present data from a national study of midlife adults in the US (MIDUS), linking affect dynamic time series features (dispersion, instability, and inertia) to biological correlates, including diabetic status, through use of an exploratory machine learning approach. **Results:** Results demonstrate that affect dynamic time series features are predictive of health outcomes, and of particular interest – the features extracted from an exploratory algorithm align with features previously implicated to be important in the affect dynamics literature (MSSD, autocorrelation, coefficient of variation). **Conclusions:** This inquiry led to an understanding that positive affect features are more numerous in predicting two-class diabetic status (non-diabetic vs diabetic), and both positive and negative affect are equally important in predicting three-class diabetic status (non-diabetic, pre-diabetic, diabetic). Further, affect instability features (i.e., MSSD, mean change) were more numerous, in predicting the three-class status, compared to the two-class status.

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Collaborating with patients, families, and healthcare teams to provide biopsychosocial care: clinical service and training models

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A growing evidence base supports that patients and families with behavioral health needs fare better when mental health and biomedically-oriented providers partner together. This approach attends to all aspects of health-including health behaviors, life stressors, and stress-mediated physical symptoms, and views all these aspects as linked, interrelated, and recursive. Biopsychosocial and collaborative approaches to healthcare that integrate behavioral and biomedical interventions are more likely than siloed approaches to enhance patient outcomes, patient experience of care, and clinician satisfaction. However, many in the health professions do not receive systematized, interprofessional, and competency-based training that adequately prepare them for the work of integration. The recognition is growing for specific and targeted training for these models. This presentation will highlight the importance of collaboration among interprofessional healthcare teams, families, and patients in the service of enhancing both the quality and experience of care. It will begin with a description of several innovative clinical programs designed to serve the total health needs of patients and families across a variety of medical settings, including discussion about the importance of both effective clinical teams and partnership with families as key facilitators to health promotion. Second, it offers a description of unique approaches to training for care provision within this model of care delivery, including bringing together professionals across disciplines and across levels of training for shared learning and shaping perspective on shared patients. We will share data derived from program evaluations of this training in order to demonstrate satisfaction as well as impact on practice.