

depending on the age of the participants. Data was then analyzed using multiple linear regressions.

**Results** The total sample comprised of 1027 participants; 675 persons aged 25–50 years and 352 persons aged 51–65 years. The sample contained roughly equal number of men (52.8%) and women (47.2%). The full model explained 59.79% variance and was highly significant  $F(18,1008) = 85.76, P = 0.001$ . Some factors that participants feel like could help them reduce the stress in workplace and subsequently reduce the burnout are longer holidays, lowering the administration burden, better work place conditions and lastly increasing the authority a person has in a given work place.

**Conclusion** The study has shown an association between work-stress and burnout and thus in order to prevent burnout with it related job absence certain precaution steps should be made. The reoccurring theme that would seem to improve the situation is decreasing the administrative work that is unrelated to the profession as well as increasing the powers the employees have in their position.

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**0073**

### **Influence of gender in patients attended in emergency rooms for suicidal tendencies**

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**Introduction** The first time when people attempt suicide first contact is critical. Psychiatrists must decide to hospitalize them or follow-up in mental health units and the bases of a doctor-patient relationship are formed.

**Objectives** An analysis of referrals to psychiatry from the emergency room (ER) was developed. Our objective was to discover if there was a statistical correlation between gender and other variables, especially repeated visits and admissions.

**Methods** Our sample was composed of patients who visited the ER for suicidal tendencies for 20 months. We carried out an observational retrospective study. The variables collected were: age, gender, cause, repeated visit (visit to the ER in the following two months), previous attempts, previous follow-up, method used, use of toxic substances during the attempt, intentionality, referral from the ER, later follow-up and diagnostic impression at the ER.

**Results** A total of 620 patients were sampled. The relationship between gender and repeated visit, previous attempts, dysfunctional personality traits, use of substances and later follow-up was found ( $\chi^2$ ). Although the relationship between admissions and gender were not statistically significant, influence by gender (over all in males) can be observed in logistic regression models. As well as, in patients who visited the ER several times, dysfunctional personality traits seem to be the most common but gender marks significant differences between groups.

**Conclusions** The data obtained is consistent with those reported in previous studies. To know who the riskier groups are can allow professionals to plan protocols and unify admission criteria.

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**0074**

### **Risk of mental disorders and difficulties or conflict in relationships in young adults**

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**Introduction** Higher risk of mental health problems has been linked with problems in relationships, including the experience of relational conflict with significant others and peers. Conversely, positive relations with others have been established as a key factor of psychological well being.

**Objectives** We hypothesized that psychological maladjustment will be related to the number, nature and severity of relational stressors. Furthermore, there would be a higher likelihood of risk of mental disorders for those who experience more relational hardships and of greater severity. Positive relations with others will protect from risk of mental health problems.

**Method** A total of 4461 university students completed a health and well-being survey, including the GHQ-12 (centesimal and 3-point cut-off scores), Ryff psychological well-being scale and a scale of 25 life stressors. Indexes of number and severity of difficulties in relationships were calculated with 10 items including romantic partners, friends, family, and classmates.

**Results** Correlations were significant. Logistic regression showed a risk effect for all stressors with OR values above 1.32. Overall perceived severity had the highest value (OR=2.38, 95% CI=2.16–2.61) and amongst the 10 stressors, gender related abuse/violence was also the highest (OR=1.90, 95% CI=1.73–2.09). Positive relations showed a protective effect (OR=0.60, 95% CI=0.56–0.54).

**Conclusions** Findings can inform health promotion, prevention and therapeutic interventions so as to improve the quality of personal relationship and conflict management skills, and to strengthen well-being associated with positive relations with others. Academic institutions committed to student welfare and the promotion of healthy environments should play a major role in young adults' mental health.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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**0075**

### **Clinical prediction of suicide attempt in schizophrenia using a machine learning approach**

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**Objective** Suicide is a major concern for those afflicted by schizophrenia. Identifying patients at the highest risk for future suicide attempts remains a complex problem for psychiatric intervention. Machine learning models allow for the integration of many risk factors in order to build an algorithm that predicts which patients are likely to attempt suicide. Currently, it is unclear how to integrate previously identified risk factors into a clinically relevant predictive tool to estimate the probability of a patient with schizophrenia for attempting suicide.

**Methods** We conducted a cross-sectional assessment on a sample of 345 participants diagnosed with schizophrenia spectrum disorders. Suicide attempters and non-attempters were clearly identified using the Columbia Suicide Severity Rating Scale (C-SSRS) and the Beck Suicide Ideation Scale (BSS). We developed two classification algorithms using a regularized regression and random

forest model with sociocultural and clinical variables as features to train the models.

**Results** Both classification models performed similarly in identifying suicide attempters and non-attempters. Our regularized logistic regression model demonstrated an accuracy of 66% and an area under the curve (AUC) of 0.71, while the random forest model demonstrated 65% accuracy and an AUC of 0.67.

**Conclusion** Machine learning algorithms offer a relatively successful method for incorporating many clinical features to predict individuals at risk for future suicide attempts. Increased performance of these models using clinically relevant variables offers the potential to facilitate early treatment and intervention to prevent future suicide attempts.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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## Oral communications: Genetics & molecular neurobiology; neuroimaging; psychosurgery & stimulation methods (ECT, TMS, VNS, DBS) and others

0076

### A hybrid effectiveness-implementation trial of wellness self-management program for patients with severe mental illness in an Italian day hospital setting

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**Introduction** Wellness self-management is an adaptation and expansion of the illness management and recovery, an internationally recognized best practice. WSM is a recovery-oriented, curriculum-based practice designed to help adults with severe mental health problems make decisions and take action to manage symptoms and improve their quality of life.

**Objectives** In the present study, the Italian translation of the WSM was implemented and validated. Moreover, the impact of its application in a day hospital setting on cognitive functions, psychopathology, personal resources and real-life functioning with respect to treatment as usual (TAU) was investigated.

**Aims** The study was aimed at assessing the effectiveness of a semi-structured version of WSM in a day hospital setting in patients with severe mental illness.

**Methods** Fourteen patients with a diagnosis of severe mental illness were recruited and randomly assigned to either WSM or TAU. WSM participants attended four 2-hour sessions per week for 1 month, including lessons selected on the basis of the goals of participants. Both groups received weekly planned treatment in the day-hospital setting and continued their pharmacotherapy.

**Results** The two groups of patients were comparable for age, education, cognitive functioning and psychopathological severity.

WSM produced a significantly greater improvement in neurocognition, psychopathology, personal resources and real-life functioning with respect to TAU.

**Conclusions** Our results offer promising preliminary evidence that the use of WSM provides an effective complement to current mental health treatment.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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0077

### The impact of premorbid functioning on outcome indices in a large sample of Italian patients with schizophrenia

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**Introduction** An impairment of premorbid adjustment (PA) has been regarded among poor prognostic indicators of schizophrenia. Some discrepancies in the literature suggest the usefulness of further characterizations of its impact on different aspects of the disease.

**Aims** The present study aimed to investigate the association of poor PA with psychopathology, neurocognition and real-life functioning in patients with schizophrenia recruited within the multicenter study of the Italian network for research on psychoses. functioning during childhood and adolescence (early adjustment) was assessed also in a group of healthy controls (HC) and one of unaffected relatives of patients (UR).

**Methods** Group comparisons were performed between patients with poor and those with good PA. Differences in frequency of poor early adjustment were investigated among patients, HC and UR.

**Results** Patients with poor PA, as compared to those with good PA, showed earlier age of onset, more severe negative symptoms and disorganization, greater impairment on all cognitive domains with the exception of attention/vigilance and worse real-life functioning in the considered areas (interpersonal relationships, community activities and work abilities). The pattern of poor early adjustment was more frequent in patients with respect to UR and HC and, to a less degree, in UR with respect to HC.

**Conclusions** Our findings confirm that poor PA in schizophrenia is associated with poorer illness outcome, and offer a further characterization of PA impact on different psychopathological and cognitive domains. They also suggest that poor early adjustment is a candidate endophenotype of schizophrenia, occurring in patients and their unaffected relatives.

**Disclosure of interest** The authors have not supplied their declaration of competing interest.

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0078

### Electrophysiological correlates of negative symptom domains in schizophrenia

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