

**Conclusions:** We have found significant correlation between anxiety and depression. Correlations of anxiety and depression are different with other variables (except with suicidal tendencies). Abnormal levels of emotionality, hyperactivity and SDQ in total resulted with significantly higher levels of depression and anxiety. Normal self-esteem and higher hopelessness resulted with significantly higher levels of depression but not anxiety.

**Keywords:** *Anxiety, depression, adolescents, correlations*

#### T4-04-01 Characteristics of NSSI in an in-patient sample

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**Introduction:** In adolescence, non-suicidal self injury (NSSI) can occur without any psychiatric disorders, but is often associated with a number of diagnoses (e.g. depression or anxiety disorders). Community studies show an onset age between 12 and 14 years and a higher risk for girls than boys to engage in NSSI.

**Objective:** To investigate characteristics of psychiatric adolescent patients with and without NSSI.

**Method:** In-patients ( $N = 93$ ) from 3 departments of child and adolescent psychiatry in Germany (Ulm, Heidelberg, and Berlin), aged 13–18 years ( $M = 14.9$ ), were interviewed using the German version of the Self-Injurious-Thoughts-And-Behaviors-Interview (SITBI-G) and completed a questionnaire concerning NSSI (SHBQ). Data about their diagnoses and overall psychosocial functioning, as well as general demographics, were obtained.

**Results:** Adolescents engaging in NSSI were more often diagnosed with a depressive or an anxiety disorder, as well as a combined disorder of conduct and emotions. Average age of onset was  $M = 12.2$  years ( $SD = 2.5$ ). More girls than boys engaged in NSSI. No association with levels of intelligence or overall psychosocial functioning was found.

**Conclusion:** Results of this clinical German sample are in line with previous international findings. In an in-patient sample of adolescents, NSSI seems to be most often associated with depressive or anxiety disorders. Also, it seems to be more prevalent in girls than boys. Age of onset was at the younger end of the average onset age in international community samples (12 years), which could either be due to the sample being psychiatric inpatients or could be following the trend of NSSI being reported to start earlier in life in recent studies. In this study, NSSI was not associated with levels of intelligence or overall psychosocial functioning, which is discussed controversially in literature.

**Keywords:** *NSSI, clinical sample, SITBI*

#### T4-04-02 A randomised controlled trial of a programme for parents and full-time carers of young people with self-harm or suicidal behaviour.

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**Background:** The SPACE Programme is an eight-session group programme for parents and carers of young people with deliberate self-harm (DSH) or suicidal behaviour, which aims to improve parental well-being and participants' satisfaction with parenting. Initial evaluation in an uncontrolled study showed it to be effective, leading to evaluation by a randomised controlled trial (RCT) in the present study.

**Method:** Participants were 147 parents and full-time carers of young people with suicidal behaviour or DSH. Having completed a socio-demographic questionnaire, general health questionnaire (GHQ-12), Kansas parenting satisfaction scale (KPS), strengths and difficulties questionnaire (SDQ), multimodal scale of perceived social support (MSPSS), and the General Functioning Scale of the McMaster Family Assessment Device (FAD), they were randomly allocated to the next space programme (SP), or to a waiting-list control group (WLC). Measures were repeated at comparable time points for both groups after completion of the SPACE programme and at 3 month follow-up. The primary outcome was improvement in parental mental well-being as measured by the GHQ-12.

**Results:** Over 80 % of participants across both groups scored within the 'caseness' range on the GHQ-12 at baseline. A mixed between-within subjects ANOVA for those who completed all three assessment blocks ( $n = 65$ ) showed significant improvement in parental well-being across both groups over time, with gains maintained at 3-month follow-up,  $F(2, 126) = 24.11, p = 0.00, \eta^2 = 0.277$ . The interaction effect of intervention X time was significant,  $F(2, 126) = 4.75, p = 0.01, \eta^2 = 0.07$ , as was the main effect of intervention,  $F(1, 63) = 8.66, p = 0.005, \eta^2 = 0.121$ , which indicated a significantly greater improvement in well-being for the SP group. Although significant improvement occurred over time across both groups for parenting satisfaction and for participants' rating of their young person's difficulties, there was no significant difference between SP and WLC groups for either factor. There was no significant change in perceived social support or family communication over time for either group.

**Conclusions:** Parents and carers of young people with self-harm or suicidal behaviour who completed the SPACE Programme had significantly greater improvement in well-being than controls, which was maintained at three-month follow-up, indicating that the programme may be a beneficial means of support to such individuals. Further studies are necessary to clarify the specific factors which contribute to this improvement.

**Keywords:** *Suicidal behaviour, DSH, RCT, parent support*

#### T4-04-03 Effect of comorbid attention deficit hyperactive disorder on the onset of first depressive episode and suicide behavior in Hungarian youths with major depressive disorder

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**Background and aims:** It is documented, that the comorbid condition of major depressive disorder (MDD) with attention deficit hyperactive disorder (ADHD) leads to more serious impairments and poorer prognosis of MDD. We aimed to explore the effect of ADHD on some specific features (onset, suicidal behavior) of MDD in a sample of

depressed Hungarian children. We also investigated the prevalence rates of the different ADHD subtypes in this sample.

**Subjects and methods:** The study sample ( $N = 593$ ) was selected from a larger Hungarian sample of children with MDD in order to evaluate depressed children without ADHD and other externalizing disorder ( $n = 472$ ; 219 boys) and children with comorbid MDD and ADHD ( $n = 121$ ; 101 boys). The mean age of the sample at the assessment was: 11.75 years (sd: 2.02). For the diagnoses, the age of onset of MDD and the suicidal behavior, subjects were assessed by a comprehensive, DSM-IV based semistructured interview (Interview Schedule for Children and Adolescent P, L) as it was administered to the parent and separately to the youth. To measure the severity of the suicide behavior we created a DSM-IV symptom based suicidal scale (range 0–5).

**Results:** Children in the comorbid group were significantly younger at the first MDD episode ( $9.61 \pm 2.25$  years) than MDD children ( $10.78 \pm 2.25$  years;  $p < 0.000$ ). Both girls and boys were also significantly younger in the comorbid group comparing to the girls and boys in the MDD group respectively. The majority of the kids in comorbid group were diagnosed with combined subtype of ADHD ( $n = 90$ ). However, there were only 6 patients in the hyperactive/impulsive type (4.95 %), they were the youngest on average at their first depressive episode ( $8.15 \pm 3.03$  years). Both girls ( $2.35 \pm 1.69$ ) and boys ( $2.02 \pm 1.78$ ) showed higher score on the suicidal scale in the comorbid group comparing to the girls ( $2.14 \pm 1.92$ ) and boys ( $1.65 \pm 1.79$ ) in the MDD group. Still, there was no significant difference between the comorbid and MDD group ( $2.07 \pm 1.76$  and  $1.91 \pm 1.87$  respectively) on the suicidal scale.

**Conclusions:** ADHD not elevated significantly the severity of suicide symptoms in our considerably large depressed sample of Hungarian children. Nevertheless, our results contribute to the literature that is reported the negative effect of ADHD on the onset of major depression in children and adolescent. Moreover, children diagnosed with hyperactive/impulsive subtype of ADHD were the most vulnerable to earlier MDD onset in our sample.

**Keywords:** Major depression, ADHD, comorbidity

#### T4-05-01

### Attention network dysfunction in patients with bulimia nervosa—an fMRI study

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**Introduction:** Patients with bulimia nervosa (BN) have an increased comorbidity with ADHD and share key symptoms such as impulsiveness and maybe inattention. The underlying neural network for executive control (impulse inhibition) has previously been shown to be hypoactive compared to healthy controls (HC) (Marsh et al. 2009, 2011). The neural correlates of more basic attentional networks, however, have not been studied before in patients with BN, albeit their potential importance for a better understanding the underlying pathophysiology.

**Methods:** We conducted an fMRI study with 20 BN and 20 matched HC (aged 15–23) using a modified version of the Attention Network

Task (mANT, Fan et al. 2002). Participants also completed interviews and questionnaires regarding the degree of impaired eating (EDI-II, SIAB), comorbidities (BDI-II, SCL-90, SKID) and especially ADHD-like symptoms (ADHD-SBB, WRI, WURS-K).

**Results:** As shown before, our patients with BN had increased impulsivity- and inattention-scores compared to HC. Surprisingly, we could show hyperactivity in BN for the more basic alerting network, while the more complex reorienting and inhibition networks showed hypoactivation. Also, primary visual and basic motor areas were found to be hyperactive, while “higher order” fronto-striatal and parietal areas showed hypoactivity.

**Conclusion:** Patients with BN appear to be more fundamentally impaired on a neuronal level than previously thought. We discuss the hypothesis, that these patients potentially need more neuronal resources for basic tasks. This might leave less capacity for more complex inhibition tasks, possibly responsible for the increased impulsivity found in these patients.

**Keywords:** Eating disorder, Bulimia nervosa, fMRI, attention, impulsivity

#### T4-05-02

### Outcome of early-onset anorexia nervosa

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**Introduction:** Recent studies found evidence for increasing incidence rates especially in early-onset AN (age of onset  $\leq 13$ ) (Favaro et al. 2009; Nicholls et al. 2011). This finding is alarming as onset of AN during childhood often has detrimental and even irreversible effects by interrupting physical and psychological development such as alterations in linear growth, impaired bone mineral accretion, and structural and functional brain changes (Katzman 2005). However, there is a lack of knowledge on prognostic relevance of age of onset on long-term outcome and also on the parameters influencing outcome of early-onset AN.

**Methods:** In a multisite follow-up study on the early-onset form of anorexia nervosa, we reexamined 75 % of 69 former patients who had developed anorexia nervosa at the age of 13 years or younger. We made a standardized assessment of eating disorder symptomatology and psychiatric comorbidities with structured interviews based on the criteria of DSM-IV and self-report questionnaires.

**Results:** According to the general outcome classification (Morgan-Russell scales) about 40 % had a good, one-third an intermediate and about one-fourth a poor outcome. More than 20 % of the former patients met the diagnostic criteria for a current psychiatric disorder according to DSM-IV. Univariate analyses revealed BMI at admission and at discharge as relevant prognostic factors for BMI at follow-up.

**Conclusion:** The results of our follow-up study are comparable to those of prior investigations on long-term outcome in childhood and adolescent AN. However, future research is needed to investigate the factors that might improve long-term prognosis in these patients.

**Keywords:** Early onset anorexia nervosa, outcome