

the intensity of posttraumatic stress disorder symptoms. Early identification of the individuals whose personality is predisposed to development of stress disorders after traumatic events and timely psychological assistance might reduce complications and long lasting psychological sequelae.

#### P49.07

Personality dimensions in persons with PTSD diagnosis

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The aim of this paper is to establish the relationship between, personality dimensions and posttraumatic stress disorder (PTSD). The sample included 274 refugees who consented to participate in our study from 1996–1999. The assessment procedure comprised of the following instruments: Semi-structured Clinical Interview based on DSM-IV classification for the assessment of PTSD symptomatology, War Stressors Assessment Questionnaire for screening the occurrence and distress of war related traumatic events and NEO-PI-R for the assessment of personality. Most subjects have experienced multiple severe traumas, but 102 persons experienced war-related trauma, which is classified under criterion A in DSM-IV classification for PTSD. Within this group 58 cases were diagnosed as PTSD, while 44 did not meet the criteria. Statistical analysis applied was multivariate one-way ANOVA. A significant difference between PTSD and non-PTSD group was identified on NEO-PI-R scales defined as neuroticism (positively,  $p < 0.001$ ) and openness to experience (negatively,  $p < 0.05$ ). These results suggest that some personality dimensions could be risk or protective factors in the PTSD development.

#### P49.08

Relationship between defence, mechanisms and current symptoms after war experience

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The sample consisted of 223 patients from the Stress Clinic of the Institute of Mental Health in Belgrade that experienced combat and/or forced migration in ex-Yugoslavia. The aim of the study was to "assess the relationship between current symptoms and type of predominant defence mechanisms. The assessment procedure comprised of the following instruments: Symptom Check List and Impact of Events Scale for current symptomatology, Defence Style Questionnaire and War Stressors Assessment Questionnaire used to screen the occurrence and distress of war related traumatic events. Statistical analysis applied was partial correlation. Results show that Global Severity Index that indicates severity of psychological disturbance significantly correlates with neurotic and immature defences, while intensity of avoidance symptoms significantly correlates with immature defences. We found no significant correlation between intrusive symptoms and defence styles. Our results suggest importance of defence styles as potential risk/protective factor in development of stress related disorders.

#### P49.09

Bombing of Yugoslavia: stress, personality and traumatic reactions

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**Aim:** To investigate the relationships between personality, severity of stress and various types of post-traumatic symptoms.

**Method:** Number and severity of stressors experienced during the bombardment, personality variables and post-traumatic symptoms were examined in a sample of 434 (age 38 „b 10,8) civilians from several municipalities and employees of a big hospital in Belgrade. Self-report of number and severity of stressors were assessed by the Questionnaire designed for that occasion, post-traumatic symptoms by the PTSS-10 scale, anxiety by STAI-S and personality by the EPQ-38. Four multiple regression analysis have been done with number and severity of stressors, Neuroticism, Extraversion and Psychoticism as predictors and PTSS, anxiety, helplessness and somatic symptoms, respectively, as dependent variables.

**Results:** In all four regression analysis aforementioned set of predictors accounted between 19,6% and 30,2 % of variance in dependent variables. The most important predictor was Neuroticism. The role of number of stressors and severity of stressors was insignificant.

**Conclusions:** In spite of the fact that bombardment is considered to be one of the heaviest stressor, personality has much stronger impact in prediction of traumatic reactions.

#### P49.10

Stability to sound stress and changeability in intestinal microflora

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Stress reaction takes part as a rule alongside with disbacteriosis and disbiosis of gastro-intestinal tract. And these disorders leads to cascade of negative reactions in organisms that leads to development of infectious diseases.

The objective of present study is to learn the influence of different probiotics on rat resistance to emotional painless stress. We developed the original easy-to-perform model of acute acoustic stress at Wistar rats. It was estimated a general condition of animals and their ability to elaboration of a defense conditioned reflex after stress. Was shown, that rats on a background of course probiotic application lost in weight after stress and at them, instead of normalization intestinal biocenosis, was observed the dysfunction of intestines. Besides these animals leaned not only worse, than in norm, but also worse, than rats after stress only. This effect was depending from dose of drugs.

Basing on the results of this and future experiments, we suggest to elaborate optimal schemes on each of tested probiotic and approaches to their application for prophylaxis and correction of stress-reaction, which appear under activity of emotional stressors.

#### P49.11

Aerial bombing of Yugoslavia: coping styles and traumatic reactions

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**Objective:** To study influence of coping styles on traumatic reactions during bombing of Yugoslavia in 1999.

**Methods:** 1049 subjects (civilians of both sexes from Serbia that had been convenient to approach (38.9 „b 10,4 of age) were given a set of questionnaires during the bombing with purpose to measure coping styles (VMA-CS) and various types of traumatic

reactions (Post-traumatic symptom scale – PTSS-10; State anxiety scale; Beck's helplessness scale and Scale of somatic symptoms). Factor analysis revealed the existence of five major coping styles: Optimism, Information-seeking, Confrontative coping, Escape-Avoidance and Hyperactivity. Several multiple regression analysis has been done with coping styles as predictors and post-traumatic symptoms, anxiety, helplessness and somatic symptoms, respectively, as dependent variables.

**Results:** In all four regression analysis aforementioned set of predictors accounted between 17, 4% and 22, 6 % of variance in dependent variables. Among coping styles the most important predictor was the Confrontative coping. Escape-Avoidance plays some role in reducing anxiety and Optimism in reducing helplessness.

**Conclusions:** Confrontative coping (loss of control and acting out) has strong and systematic influence on intensity of traumatic reactions.

#### P49.12

Chronic pain in the wives of the Croatian war veterans treated for PTSD

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Among the consequences of the war in Croatia is a series of psychological and social disturbances. Due to numerous traumatic experiences a certain number of the Croatian war veterans became ill with posttraumatic stress disorder. With its specific symptoms PTSD has a significant effect on the usual social functioning of the veterans. It is especially obvious in the family, which, on one side, should offer emotional support to its sick member, and on the other side suffers most because of the condition of one of its members.

The wives of the veterans are in most cases those who try to maintain the earlier family balance.

In the present investigation the authors considered mental consequences of life with a husband suffering from PTSD.

Two groups of wives of the veterans were examined: the group of wives with husbands suffering from PTSD, and the group of wives with husbands free of PTSD. The instruments used were M-PTSD scale for PTSD, HSCL-25 for depression and anxiety, questionnaires about demographic data and chronic pain.

The results reveal that the wives of the veterans suffering from PTSD are significantly more depressive and anxious, express more often symptoms of vicarious traumatization, and have more often painful syndroms where the usual medical treatment achieves no results, in comparison with the group of wives of the veterans without PTSD.

It can be concluded that PTSD of a veteran affects significantly psychophysical condition of his wife and that she suffers considerably by his illness.

#### P49.13

Coping styles: a hopelessness and suicide risk

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A total of 30 psychiatric in-patients admitted because of suicidal behavior were compared with 30 non-suicidal psychiatric in-patients and 30 healthy controls on the association between level of hopelessness with stress and coping style. The three groups were similar with regard to demographic variables, but the suicidal

group scored higher on the suicide risk scale. Suicidal patients were significantly more likely to use the emotion-focused coping but not problem-focused coping, and they also showed high levels of hopelessness. Higher levels of hopelessness were found to be associated with higher levels of stress. Analyses of the interaction between stress and coping style suggested that these variables influence the level of hopelessness in an independent and linear fashion. They were unable to de-emphasize the importance of a perceived problem or source of stress. They also lacked the ability to obtain new information required to resolve stressful life events. These findings may have important implications for therapists, and might offer recognition of the role played by coping styles in predicting suicide and its use for cognitive intervention in these high-risk patients.

#### P49.14

Hostility and depression in diabetic patients

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Aim of the study: Insulin dependent diabetes mellitus is a psychologically demanding disease showing higher rates of psychopathology, especially depression. Diabetics with good metabolic control are often very good adapted to the disease and free of psychological problem. The aim of the study was to establish whether the higher rates of psychopathology could be attributed to the subgroup of patients with long-term metabolic problems.

**Method:** We studied 75 insulin dependent diabetics divided into two subgroups: 1/ 32 patients with long-term good metabolic control and 2/ 43 diabetics with long-term poor metabolic control. The control group consisted of 30 healthy volunteers. All diabetics and controls completed two self-rating questionnaires: the Symptom Check List (SCL-90) and the Interpersonal Check List (ICL).

**Results:** The diabetic group as a whole showed significantly higher scores for anxiety, depression and hostility (in SCL-90) than the control group. Nevertheless when divided in the two subgroups according to metabolic control, only poorly controlled diabetics showed higher rates of psychopathology. Patients with long-term good control did not differ significantly from controls. According to self-estimated interpersonal characteristics (ICL) diabetics with poor metabolic control show higher scores for dominance or submission and lower ones for affluence than diabetics with good control. There was a positive correlation between submission and depression. In healthy controls no such correlations were found.

**Conclusions:** 1/ In insulin dependent diabetics there is a higher rate of depression, anxiety and hostility. These findings can be attributed to the subgroup of diabetics with long-term poor glycemic control. Patients with good glycemic control did not show a significant difference from healthy controls. 2/ Poorly controlled patients showed different interpersonal attitudes when compared to fairly controlled diabetics: higher scores for submission and dependence and lower ones for affiliation. 3/ Patients who experienced themselves as submissive demonstrated higher rates of depression. We conclude that the subgroup of diabetics with long-term poor metabolic control possibly represents a target group for consultation psychiatrists.