

**P49.02**

Mental symptoms in victims of sarin poisoning 5 years after the Tokyo subway attack

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Mental symptoms were evaluated in 34 victims of sarin poisoning 5 years after the Tokyo subway attack (20 males and 14 females; mean age, 43.9 years). Seven victims developed PTSD due to the sarin disaster. Twenty-one victims (61.8 %) showed non-specific mental symptoms (post sarin poisoning mental symptoms: PSPM symptoms), including restlessness and irritability, lack of concentration, diminished interest and apathy, forgetfulness, and lethargy. The score of PSPM symptoms correlated significantly with the severity of posttraumatic stress disorder (PTSD) evaluated with IES-R (Impact of Event Scale revised) and serum cholinesterase level at the disaster. These results indicated that the effects of sarin poisoning last long after the acute intoxication. The symptomatic similarity with those of Gulf war syndrome suggested a common etiology of the two diseases.

**P49.03**

Longterm effects of traumatic experiences in refugees after World War II

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**Background:** Expulsion or flight from one's own country due to warfare is a traumatic experience for those afflicted. According to UN data today 22 million people are refugees from war. Empirical data show that a large number of refugees develop PTSD. However, little is known about the outcome of PTSD in later life. Expellees after World War II were examined for somatic and psychological effects of traumatic experiences that date back several decades.

**Methods:** Via a mailing expellees from former German territories were asked to fill in questionnaires about their somatic (SCL-90-R) and psychic (PTSD-questionnaire) complaints. Clinical interviews were carried out in order to validate the results.

**Results:** 150 returned questionnaires were analysed. 70% of all participants had experienced symptoms of PTSD during the last month. 10% reached DSM IV criteria of PTSD.

**Discussion:** We could show that flight and expulsion frequently mean traumatic experience to those afflicted. We could also demonstrate that without adequate therapy, trauma related symptoms may last for more than fifty years. The study indicates the necessity of adequate care for expellees and other psychologically traumatised people.

**P49.04**

Prophylaxis by mexidol of the behavior disturbances after sound stress

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The ultrasonic signals have the large meaning in the life of mammal, in particular rats. It is known that among Wistar rats 40–60% of the individuals gave the audiogenic seizures (AS) as a result of compound sound stimulus (CSS) with ultrasonic components (from 13 till 85 kHz) influence. The purpose of this work was to investigate the influence of CSS on higher nervous activity

and synaptic transfer in Wistar rats with and without AS. Some experiments were performed on antioxidant mexidol background.

It is shown that the presentation of CSS within 90 sec only is a powerful stressor for Wistar rats. It breaks the rat behavior in "open field", inhibits or disturbs the elaboration of the defense conditioned reflex to ton in shuttle box, food reflexes to ton and to time at least within 7 days. This effect does not depend on presence AS at rats. Analysis of redistribution of the vesicles in synapses of hippocampus in one day after CSS has shown that synaptic transfer is destroying too. All this changes are not developed on the mexidol background.

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**P49.05**

A psychosocial model of posttraumatic stress after childbirth

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The aim of this presentation is to suggest a theoretical model for psychological distress after childbirth. According to DSM-IV, criteria A for PTSD indicate that the stressor must involve direct personal experience of an event that involves actual or threatened death or serious injury, or a threat to physical integrity of self or others. The response includes intense fear, helplessness and horror. In spite of the normative occurrence of childbirth, certain women may experience the birth as a traumatic event, as it sometimes poses a threat to their life or their infants and might include feeling of intense fear etc. The purpose of the model is to predict posttraumatic symptoms following childbirth in a multidimensional prospective framework. The model includes pre and post-natal variables; personality characteristics, perceived social support, posttraumatic and depressive symptoms. It is implied that women after traumatic childbirth often are diagnosed incorrectly as suffering from postpartum symptoms, when in fact, some of them suffer from posttraumatic symptoms. This model may assist in improving correct diagnosis of psychological distress after traumatic childbirth.

**P49.06**

Previous trauma, personality dimensions and psychological symptoms after a stressful event

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Various factors determine individual reaction to a stressful event and psychological consequences on individuals' mental health. The objective of our study was to assess the previous trauma, personality dimensions and current symptoms after a stressful life event (air attacks). The assessment procedure consisted of the following instruments – Life Stressor Checklist, Millon Clinical Multiaxial Inventory, Impact of Events Scale and List of stressors. 107 medical students from the University of Belgrade that have experienced air attacks during 1999 were included in the study which was carried out nine months after the attacks. Our results stress the importance of personality organisation as a protective or risk factor in development of stress-related mental disorders. The interaction effect of personality dimensions with both previous and recent type of stressful event is also important in determining

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