The International Stress and Behavior Society (ISBS)
The Ukrainian Society for Biological Psychiatry (USBP)

PROGRAM

The 3rd International Neuroscience and Biological Psychiatry ISBS/USBP Symposium
"TRANSLATIONAL BIOLOGICAL PSYCHIATRY"

Kyiv, Ukraine
May 23, 2019
The 3rd International Neuroscience and Biological Psychiatry ISBS Symposium "TRANSLATIONAL BIOLOGICAL PSYCHIATRY"

Venue: Great Conference Hall of the National Academy of Sciences of Ukraine, 55 Volodymyrska Street, Kyiv, Ukraine

08.45-16.00 REGISTRATION DESK OPEN

MORNING SESSION

09.00-09.20 WELCOMING REMARKS: 22 YEARS TO ISBS CONFERENCES – BRIDGING THE "BIOLOGICAL" AND "PSYCHIATRY"
Prof. AV Kalueff (China), Chair, ISBS and USBP President
Prof. OG Syropyatov (Ukraine), RSBP President
Prof. GYa Pilyagina (Ukraine), LOC Chair

09.20-09.30 INDUCTION OF 2019 ISBS FELLOWS

09.30-09.55 ISBS LECTURE 1. PSYCHOGENESIS OF A SELF-DESTRUCTIVE BEHAVIOUR AND DEPRESSION IN ADOLESCENTS. GYa Pilyagina, Shupyk National Medical Academy of Postgraduate Education, Kyiv, Ukraine

09.55-10.20 RSBP LECTURE 2. ALGORITHMS FOR DIAGNOSIS AND TREATMENT OF PTSD IN COMBATANTS. OG Syropyatov, NA Dzeruzhinskaya and EYu Marushchenko, Russian Society for BioPsychiatry, Bogomolets National Medical University, Ukrainian Military Medical Academy, Kyiv, Ukraine

10.20-10.55 USBP LECTURE 3. THE INFLUENCE OF CLINICO-SOCIAL FACTORS ON BUILDUP OF COMPLIANCE IN PATIENTS WITH PARANOID SCHIZOPHRENIA. NA Dzeruzhinskaya and VA Lomtiev, Bogomolets National Medical University, TMO Psychiatry, Kyiv, Ukraine

10.55-11.10 COFFEE BREAK

11.10-11.35 ISBS LECTURE 4. DEVELOPMENT AND PRACTICAL APPLICATION OF GLIAL FORMULA (GF) AND QUANTITATIVE GLIAL INDICES (QGI1-3) TO STUDY CELLULAR STRUCTURE OF THE BRAIN. OM Makarenko, YuB Chaikovsky, Fl Petrov and MA Eldomiaty, National Medical University, Kyiv, Ukraine; Department of Human Anatomy and Embryology, Tanta University, Egypt; Taibah University, Saudi Arabia

11.35-12.00 USBP LECTURE 5. PSYCHOSOMATIC RESOURCES IN MANAGEMENT OF ACUTE STRESS: PRACTICAL EXPERIENCE. J Parkhomenko, Shupyk National Medical Academy of Postgraduate Education, Kyiv, Ukraine

12.00-12.25 USBP LECTURE 6. ENGAGEMENT IN AMATEUR SPORTS REDUCES THE LEVEL OF EMOTIONAL BURNOUT AND INDUCES PLASTIC STRUCTURAL CHANGES IN THE BRAIN. S Tukaiev, Laboratory on Theory and Methodic of Sport Preparation and Reserve Capabilities of Athletes, Research Institute, National University of Physical Education and Sports of Ukraine, National Taras Shevchenko University of Kyiv, Institute of Journalism, Kyiv, Ukraine

12.25-12.45 COFFEE BREAK

AFTERNOON SESSION

12.45-13.05 USBP LECTURE 7. WHEN PROFESSIONAL COMMUNICATION IS BECOMING A STRESS (EXPERIENCE OF THE 3RD ANS 6TH-YEAR STUDENTS). O Khaustova, Bogomolets National Medical University, Kyiv, Ukraine
SELECTED ABSTRACTS

ALGORITHMS FOR DIAGNOSIS AND TREATMENT OF PTSD IN COMBATANTS. OG Syropyatov, NA Dzeruzhinskaya and EYu Marushchenko, Russian Society for BioPsychiatry, Bogomolets National Medical University, Ukrainian Military Medical Academy, Kyiv, Ukraine. Post-traumatic stress disorder (PTSD) in combatants is significantly different from that in other categories of patients. The National Vietnam Veterans Readjustment Study (NVVRS) revealed that 30% of 3.1 million of veterans developed PTSD at some time after the war. Moreover in 15% of cases, the disorder persisted 15 years after the end of the war (Foa E.B., 2005, etc.). A study using ICD-11 identified PTSD in combatants as a disorder that develops after exposure to an extreme threatening or terrifying event or series of events, and characterized by 3 "core" manifestations: reliving of the traumatic event(s) in the present time as vivid, haunting memories accompanied by fear or horror, flashbacks, or nightmares; avoidance of thoughts and memories of the event, or avoidance of activities or situations reminiscent of the event; the state of subjective feeling of continuing threat in the form of Hyper-vigilance or increased reactions of fright. Modern studies of PTSD are characterized by the use of a comprehensive evaluation strategy using standard psychometric techniques (MPPI-2; SCL-90-R, etc.), as well as the level of social and professional functioning. Currently, psychophysiological and neuroimaging methods take an increasing role in the diagnosis of PTSD. The acute combat stress relief model emerged as a medical system during the First World war and was then re-formulated during the Second world war. It is based on three principles: proximity, urgency, and hope, as described by Kardiner and Spiegel (1947). During World War II, American General Marshall used and described the debriefing procedure (Marshall, 1944). His research made it possible to create narratives — verbal representations of combat traumatic experience. However, debriefing, as experience has shown, has created additional trauma to combatants.

In Caplan and Lindemann crisis intervention (1944), the therapist helps the patient structure the traumatic experience and develop problem-focused coping skills. The use of elements of cognitive behavioral therapy (CBT) in debriefing has two aspects. These are desensitization as a method of reducing the symptoms of avoidance immediately after posttrauma and changing cognitive patterns associated with psychotraumatic memories. In general, the use of CBT for the treatment of PTSD involves many different techniques. The earliest approaches (systematic desensitization, relaxation training, biofeedback) are based, generally, on the two-factor theory of conditioning the emotions of fear and operant avoidance, created by Mowrer. With the advent of later approaches, such as prolonged exposure psychotherapy, cognitive psychotherapy, cognitive-procedural psychotherapy, emotional information theory of PTSD began to prevail over the theory of learning. There is no doubt that meaningful cognitions of a patient with PTSD operate within a social context, so there is an integration of therapeutic approaches, which are demonstrated, for example, in the theory of double representation of Brewin. Thus, the diagnosis and treatment of PTSD is a multidimensional phenomenon and requires a systematic approach. From the standpoint of a systematic approach, we examined and selected 50 male combatants-servicemen of the Armed Forces of Ukraine aged 30±0.5 years using the following research algorithm: 1) all respondents - combatants were tested using the Lüscher Color Test for screening for emotional disorders. 2) In the selected group of respondents with emotional disorders, a clinical and psychopathological study was conducted with the additional use of SCL-90-R to clarify the main and additional symptoms of PTSD and comorbid psychopathological symptoms. The following variants of PTSD were distinguished: anxious, depressive, dysphoric, and somatoform.

The anxious type of PTSD is characterized by a high level of somatic and mental unmotivated anxiety on a hypochondriaffective background with emotional experience, at least several times a day, involuntary, with a touch of obsession, reflecting the psychotraumatic situation. Sleep disorders are characterized by difficulties in falling asleep with the dominance of disturbing thoughts about their condition, fears for the quality and duration of sleep, fear of painful dreams (episodes of fighting, violence, often killing of the patients themselves). Characteristic paroxysmal evening-night state — panic attack feeling short of breath, rapid heartbeat, sweating, chills or hot flashes. Patients independently seek help and seek to communicate, getting relief from physical and social activity. Asthenic (astheno-apathetic) type of PTSD is characterized by the dominance of feelings of lethargy and weakness. The mood background is reduced with the experience of indifference to previously interested events in life, indifference to family problems and social issues. Behavior is characterized by passivity, with indicative experience of loss of sense of pleasure from life. Dominated by thoughts of their own inadequacy. Typical flashbacks episodes of the military situation. However, representations are devoid of brightness, detail, emotional coloring and have elements of obsession. Sleep disorders are characterized by hypersomnia with the inability to get out of bed, painful slumber, sometimes throughout the day. Avoidance behavior is unusual, patients rarely hide their experiences and seek help on their own.

Dysphoric (explosive-dysphoric) type of PTSD is characterized by a constant experience of internal discontent, irritation, up to outbursts of anger and rage, amid the background of oppressed-gloomy mood. Patients note a high level of aggressiveness, the desire to vent on others irritability that overwhelms them and short temper. Representations of aggressive content dominate in mind in the form of paintings of the punishment of alleged offenders, fights, disputes with the use of physical force that scares patients and makes them reduce their contact with others to a minimum. Often they can not restrain themselves and give violent reactions to the comments of others, which later regret. At the same time the involuntary representations of stressful situations of scenic character appear. There are cases of scenes of violence with the active participation of the patients themselves. Externally, patients are grim, facial expression with a hint of discontent and irritability, and behavior features estrangement. Typical avoidance behavior, isolation, unconversational. Such patients don't make active complaints and come to the attention of specialists in connection with behavioural disorders, on the initiative of relatives or colleagues of the combatant.

Somatoform (somatoform-dysthmic) type of PTSD is characterized by massive somatoform disorders with predominant localization of bodily sensations in the cardiological, gastroenterological and cerebral anatomical areas, combined with psychovagetic paroxysms. Typical alexithymia and ceneesthesia, with the difficulties in describing bodily sensations. "As if" comparisons are used. The actual symptoms of PTSD occur in these patients after 6 months after a psychotraumatic event, which allows these cases to be designated as a delayed variant of PTSD. Typical is the formation of avoidance behavior amid the background of panic attacks - and the symptoms of emotional torpor and the
phenomena of "flash-back" are quite rare and are not so emotionally painful. Depressive affect is represented by undifferentiated hypotonia with a distinct anxious-phobic inclinations or dysthymia. The ideational component of the symptom complex is more represented by hypochondriac fixation on bodily sensations and paroxysmal attacks with a pronounced anxiety of waiting for their occurrence than by symptoms of hyperexcitation and the experience of a psychotraumatic situation.

The study of the PTSD clinic in servicemen-combatant indicates a complex psychopathological picture, which can be considered not only as a complete picture of PTSD, but as PTSD, complicated by comorbid mental disorders of the anxiety and affective spectrum with the formation of post-traumatic personality changes. Treatment of such a complex clinical state – PTSD with comorbid disorders, as well as diagnosis, requires a systemic approach. To implement the principle of a systemic approach to the treatment of comorbid PTSD, we used the principles of short-term multimodal psychotherapy, proposed by A. Lazarus (2001). The patient BASIC ID (behavior, affect, sensations, imagery, cognitions, interpersonal relationships, drugs/biological functions) was evaluated. The following important principles are used in therapy:

1) determine if there are significant problems in each of the seven basic ID modalities;
2) together with the client choose three or four main problems that require special attention;
3) if necessary, conduct a medical examination and prescribe the necessary psychotropic and other drugs;
4) if possible, the most adequate, empirically proven effective techniques for working with problems are used.

Successful solution of the problem in one of the modalities causes improvement in other modalities. This approach allows: 1) to influence the multifaceted structure of symptoms of PTSD, manifested in different modalities of human life; 2) to structure the use of methods of psychotherapy related to different modalities, within a single psychotherapeutic process; 3) to simplify and systematize the choice of psychotherapeutic technologies in accordance with the principle of "correspondence of modality of the problem with modality of the method"; 4) develop an individual strategy and flexibly change the tactics of psychotherapeutic influence depending on the current state of the patient and the dynamics of the treatment process; 5) significantly reduce the likelihood of undesirable side effects of therapy and improve the effectiveness of psychotherapeutic care.

Example No1. The modal profile in explosive-dysphoric type of PTSD

<table>
<thead>
<tr>
<th>Modality of BASIC ID</th>
<th>Proposed treatment plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>deterioration of performance of official duties, irritability, affectability</td>
<td>mask therapy, sand therapy, art therapy</td>
</tr>
<tr>
<td>low mood, dissatisfaction with own behavior, self-recrimination, guilt</td>
<td>relaxation, anchoring of resource States</td>
</tr>
<tr>
<td>no pleasure from activities that used to be enjoyable</td>
<td>concentration on the most pleasant, visual, auditory and tactile images, affiliation</td>
</tr>
<tr>
<td>ideas about the war, the death of comrades</td>
<td>projection in time, representation of yourself in the future, filled with positive emotions and pleasant activities</td>
</tr>
<tr>
<td>negative self-esteem and dissatisfaction with others.</td>
<td>elimination of cognitive errors (&quot;always&quot;, &quot;all&quot;), use of modal verbs (&quot;should&quot;)</td>
</tr>
<tr>
<td>isolation, reduction of social contacts. Home - service</td>
<td>role playing, social skills training</td>
</tr>
<tr>
<td>fibromyalgia</td>
<td>The increase in physical activity, walking, herbal sedative analgesics, the rate of valproate, SSRI antidepressants</td>
</tr>
</tbody>
</table>

Thus, PTSD and comorbid mental disorders in combatant soldiers are complex clinical formations that require systemic and differentiated treatment, including psychopharmacotherapy and a variety of types and techniques of psychotherapy. A systematic approach and the principles of short-term multimodal psychotherapy, used by authors, allowed to develop an algorithm for the diagnosis and treatment of this category of patients.


THE INFLUENCE OF CLINICO-SOCIAL FACTORS ON BUILDUP OF COMPLIANCE IN PATIENTS WITH PARANOID SCHIZOPHRENIA. NA Dzeruzhinskaya and VA Lomtleva, Bogomolets National Medical University, TMO Psychiatry, Kyiv, Ukraine. The interest in the problem of compliance is quite high, since, despite the achievement of pharmacology, the constant entry into the market of new and more advanced medicines, data on compliance with medical prescriptions remains unsatisfactory. This problem is particularly relevant in situations where patients need a long-term treatment. There are a number of pathological conditions in which violation of the treatment regime can lead to severe consequences. These diseases include schizophrenia. The purpose of the work was to study the clinical and social factors that affect the level of compliance to further consider them in the development of psycho-educational programs. Materials and methods: 109 patients with paranoid schizophrenia of TMO "Psychiatry" were conducted with the help of clinico-psychoanalytical method, structured interview method, PANS scale, questionnaire for assessing social functioning and quality of life mentally of patients (Gurovich I.Ys., Shmukler O. B., 1998), the scale of medical compliance, which was developed in the NRPN of VM Bekhterev. Data processing was performed using SPSSstatistics 20. The Pearson coefficient (χ2-square), the significance level (p <0.05), odds ratio (OR) was calculated. Based on the data obtained in the study, three levels of compliance were distinguished: low (14-21 points), middle (22-31 points) and good (32 and more points). After that, the influence of clinical and social factors on the quality of the compliance was studied. It could be distinguished: managed and non-managed factors that affect the compliance. Managed - factors that can be influenced (the severity of clinical manifestations, walks, reading, nutrition, relationships with relatives, communication with others) and not managed