of re-education measure. It also provided a tool for monitoring their attitude towards the re-education measure and its implementation and the transfer of inmates with the expert team.

The authors hope this study will contribute in promoting visual arts therapy to the status it deserves and its introduction as a full-scale discipline in the implementation of individual prison sentence execution programme.

P399

Forensic evaluation of psychiatric disorders in epilepsy

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Objective of the study: Elaboration of the methodology of forensic psychiatric assessment and development of the system of expert evaluations of psychiatric disorders in epilepsy.

Material: 200 male offenders suffering from epilepsy.

Methods: Clinical, EEG and statistical analysis.

Results: The 4-stage of psychiatric disorders in epilepsy evaluation has been proposed: 1. Diagnosis. The choice of expert approach is determined by individual clinical picture and course of the disorders; character of prevailing psychiatric disorders - personality disorders, psychoses, dementia, paroxysmal states; 2. Finding out the cause and effect relationships. Revealing the psychopathological mechanisms of an offence and qualification of a principal syndrome at the moment of offence. 3. Situational analysis. Evaluation of an adequacy of perception of the situation by a patient, his chances to choose other ways of behavior; capability to foresee a result of his behavior; 3 Building an expert conclusion: comparing of the current clinical picture and psychopathological disorder at the moment of crime with medical and juridical criteria of the formulas of irresponsibility, diminished responsibility and criteria for involuntary hospitalization.

Conclusion: The proposed algorithm distinguishing different types of the relationships between psychopathological condition and criminal situation gives a possibility of precise evaluation of persons suffering from epilepsy. It takes into consideration the clinical diversity of psycho-pathological conditions that can differently contribute to the persons' responsibility.

P400

Diminished responsibility: some current issues in Russia

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The aim of the study: to evaluate the 10-years practice of forensic psychiatric assessment according to diminished responsibility in Russia.

Material: Accused offenders considered to be partially responsible for their actions under forensic psychiatric assessment in Serbsky Centre in 1996-2005.

Methods: Psychopathological, follow up.

Results: Diminished responsibility was introduced into the Russian legislation ten years ago only. The current experience demonstrates its active assimilation. Besides that, there is a distinctive specificity of its use determined by peculiarities of the object of assessment, i.e. by non-psychotic level of disorder and therefore not clearly apparent in evaluation. It became clear that in many cases all involved persons including the offender are not interested in this legal norm equally. It is a good possibility for officials (experts, judges, barristers) to take into consideration during investigation every important issue of legal case (psychological abnormality first of all). The advantage of being partially responsible for offenders is not so evident. Moreover according the follow up results this fact can be the discrediting information for a prisoner. The label of mental illness is well known obstacle and especially in custody where human values are rather specific and distorted.

Conclusion: In situation when a forensic psychiatrist realizes probability of labeling the person due making his own decision of partially responsible one more specific problem can arises for him - is it proved from ethical point of view to make such of decision or not? It can influence negatively the expert's professional activity in some cases.

Poster Session 2: BIOLOGICAL MARKERS AND BRAIN IMAGING

P305

Renaissance of quantitative electroencephalography (QEEG) in psychiatry

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Hundreds of QEEG-related papers brought new information about the temporal dynamics of complex neuronal interactions that underlie impaired processing in many psychiatric diagnoses. Besides this fact, many researchers, clinical psychiatrists and neuroscientists prefer new imaging techniques (Positron Emission Tomography, PET; and functional Magnetic Resonance, fMRI) even if they are based on an indirect index of brain computing as metabolic or hemodynamic measurements which are blind to millisecond phenomena. We present the results of our studies provided with QEEG techniques (Low Resolution Electromagnetic Tomography, LORETA; EEG coherence, EEG cordance) in: 1) more than 60 patients with schizophrenia examined by means of QEEG and PET. We found significantly lower EEG coherence values, mainly from the left frontotemporal derivations in patients group and there was also significant correlation between the decrease of frontotemporal EEG coherence and elevated glucose metabolic uptake in the limbic structures (posterior cingulate and hippocampus). LORETA analysis showed almost the same results as analysis of PET images, not only in basal disease process, but also after successful application of rTMS in the subgroup of patients with treatment-resistant auditory hallucination. 2) in more than 30 patients with resistant depressive disorder we computed the new EEG indicator value (EEG cordance), and we showed, that the decrease in prefrontal EEG cordance in theta frequency band may indicate early changes of prefrontal activity and can become a useful tool in the prediction of response to antidepressants.

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Endophenotypic measures of altered inhibitory brain processes in ADHD

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