- 3) They have the chance to "talk" with the "significant others" of their life to understand and to reframe their problematic relationships.
- 4) They give to the members of the group a role in their life, so they increase and improve the dynamics of the group.
- 5) They concentrate into their life and they realize it as a "whole".

P0032

Fetal alcohol syndrome and its neuropsychological consequences

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Background: Children of alcohol addicted mothers often present deficits of memory, attention, hyperactivity, difficulties in understanding abstract terms, low control of impulses.

Aims: The aim was to assess the cognitive dysfunction level, and following that to estimate the optimal adjustment of the school environment for particular patients.

Methods: We recruited to our study patients aged between 9 and 18, being taken care of by a psychiatrist, and, partly, from a group of patients participating in a special adjustment rehabilitation program for children with FAS and FAE. The patients were examined with a computerized tests included in the VTS (Vienna Test System): COGNITRON, CORSI, RT (REACTION TEST) and, additionally SIGNAL and DAUF in patients matching age requirements.

Results: Qualitative and quantitative deficits were found. In most patients the most significant were deficits in COGNITRON and CORSI tests, which presented a highly disturbed resistance to distractors, and deficits in working memory. The less characteristic were deficits in the RT test measuring reaction time to simple and complex stimuli. The most difficult to perform turned out to be SIGNAL and DAUF tests. Most of the patients did not manage to do the whole task because of a too low resistance to distractors.

Conclusions: The results of the studies confirmed the reports of teachers and caregivers about great problems that this group had with concentration, sustained attention, and vigilance. However they did not confirm or sometimes contradicted the reports concerning the problems with memory presented in school conditions, and when learning at home.

P0033

Problems with the evaluation of reaction time data: Developing flexible assessment tools to account for time-series effects

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Background and Aims: Computerised measurement of reaction times is state of the art in many fields of research and clinical examinations. Usually, these examinations employ only measures of central tendency (median, mean), deviation (standard deviation) and correct reactions (false reactions). The time course (i.e., sequence) of the individual reaction times has hardly been considered so far.

Methods: Using an assessment software recently developed for scientific purposes (Procalysis®)the attentional performances of multiple drug users are assessed in the context of time series analyses

regarding specific effects of comorbidity (e.g. schizophrenia) or the respective drug use profile.

Results: In addition to the main affects of multiple drug abuse, comorbid schizophrenia is another significant cause of fluctuating reaction times. Besides generally reduced mean reaction times, the time course analyses also indicate comorbidity-dependent specific stage characteristics, which in turn are related to task complexity.

Conclusion: Both in research and the clinic, time series analysis of reaction times should be considered. They can help reveal stage characteristics over time, which can give the clearest indication yet of the extent of subtle brain dysfunctions. This also applies to the ecological validity of single case assessments, such as for determining the ability to drive or operate machinery.

P0034

Neurocognitive function deficits and drug abuse: Specific forms of intoxication

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Background and Aims: So far, research on the long-term effects of chronic multiple drug abuse regarding specific neurocognitive function deficits has been only tentative. However, also regarding rehabilitation of mostly young long-time addicts, studies are urgently needed (e.g., ability to drive or operate machinery) which are directed at the typical abuse clusters (e.g., alcohol and cannabis) of subgroups in a heterogeneous cohort of drug users.

Methods: A group of 750 drug users was examined and the cognitive function deficits in various attentiveness systems compared against the retrospectively detected drug use pattern. Type, extent and stability of drug use were followed back for 10 years.

Results: The study subjects used drugs of different effects: While morphine was hardly associated with serious cognitive function deficits, with cannabis both the cumulative lifetime dosage and the duration of use correlated with subtle disorders of multimodal stimulus processing and control of eye movement. Cumulative use of alcohol also had a negative effect on the cognitive functions, particularly working memory and the frontal executive functions. The effect of amphetamines, methamphetamines and cocaine varied depending on which other drugs were used. Comorbidity (e.g., schizophrenia) also was important.

Conclusions: These neurocognitive function disorders can lead to impairment of cognitive functions which may be needed professionally. The implications of these results for diagnosis and therapy of comorbid multiple drug users are discussed by means of cases typically seen in rehabilitation centers.

P0035

Clinical-morphological signs of chronic Opioid intoxication

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Considerable number of latent drug users is testified by increase of lethal outcomes because of drug overdosing. We have analyzed lethal outcomes when cause of death was opioid overdosing. We have considered 98 cases among them in 86 cases – men died, in 12 - women. Lethal outcome of drug overdose has occurred at the age of $20,6\pm1,12$ years. Diagnosis of somatic pathology in opioid addicts shows clinical-morphological consistence in chronic hepatitis of viral and toxic etiology (77,5%). Identification