

**Methods:** We performed a systematic comparison of 80 in-patient female and 41 in-patient male heroin users. Heredity, pre-morbid period, beginning of drug use, medical complications and social negative aspects of heroin addiction were assessed.

**Results:** 76,3% of female heroin users were given their first heroin intake by their male sexual partner, 70% of women reported that their partners were drug addicts. About one-third of women (31%) began using heroin right away systematically daily, 35% began using heroin intravenously. All clinical syndromes and complications of the heroin addiction in women developed in shorter terms. Withdrawal syndrome more often manifested in women with psychopathological disorders. Changes of personality with prevalence of behavioral disorders, hysteria, expressed affective lability appeared to form more rapidly. Hyposexuality and lowering of libido were revealed in 63,8% cases. Suicidal tendencies were found in more than a half (56,2%) of female heroin addicts. 72,5% of the women were unemployed. Women's heroin addiction was accompanied by a lower criminal activity.

**Conclusions:** Strong gender differences were found among heroin addicts on every stage of disease.

### P55.08

Heroin addiction and its social consequences in Russia

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**Introduction:** the problem of drug addicts now all over the world is extremely acute in conditions of disorganization of a society, growth of criminality and other social anomalies. In Russia for last 10 years the tendency of growth of number of the persons using narcotic substances among which heroin takes the leader position is marked.

**Materials and methods:** we observed and treated more than 400 patients with heroin addicts. The age of patients was from 17 till 38 years, the duration of drug addiction was from 1 till 6 years.

**Results:** in most of patient affective disorders, mostly observed in withdrawal and post-withdrawal periods were marked. In withdrawal period the syndrome of pathologic craving were manifested in the form of dysphoric, melancholic and apathy depression. The was more expressed a dysphoria, the more often patients tried to interrupt treatment and to leave a hospital. At melancholy depression the condition of patients were characterized by emotional instability, fragility, and hypersensitivity. Such persons developed tendency to react inadequately to non-important psycho-traumatic events. All this promoted actualization of craving for drugs and quite often resulted in a recurrent. In 38,8% of cases the formation of pathologic craving correlates with antisocial behavior. Dynamic development and increase of affective disorders caused by pathologic craving for a heroin promoted to the commitment of different violations of the law: embezzlement, official and other crimes against person. Correlating analysis confirms that more than in half of the cases (67,8 %) of heroin addicts have law condemnations both under articles not related with drugs but being the result of drug use and as well as under article 228 of the Criminal Code of the Russian Federation, related with the illegal circulation of drugs.

**Conclusion:** At heroin addiction in all patients are observed disorders of affective sphere, as depressive, depressively-dysphoric, hypochondria, asthenia conditions. Their manifestation and duration depended on a type of pre-morbid changes in personality and duration of drug use. Social consequences of drug addictions, especially with the early beginning of drug use, are characterized by cessation of studies, acquirement of labor and professional experience by addicts, and professional discipline violations. Most

addicts do not study or work, more than 25% of them join criminal structures. In the late stages of the disease, with the expressed changes of the person even criminal structures reject such patients from their sphere.

### P55.09

Patient or client, what substance misuse attenders want to be called, who they want to be treated with, where they want to be seen

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150 UK substance misuse patients and 75 Spanish substance misuse patients were surveyed. The patients had drug, nicotine, alcohol problems, they were also a mixture of inpatient and outpatients. They were questioned on their preferences for been called patient or client, which patients they wanted to be treated with, which location they wanted to be seen. The author will present the results.

### P55.10

Does cannabinoid exposure sensitize the brain to amphetamine effects?

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Cannabis use may enhance the vulnerability to the addictive effects of other drugs such as amphetamine and is therefore hypothesized as a "gateway-drug".

We studied whether pretreatment with the cannabinoid agonist WIN 55,212-2 alters the response to amphetamine in terms of DA levels in the nucleus accumbens as well as stereotypy and locomotor behaviors. Adolescent rats were treated with WIN 55,212-2 (1.25 mg/kg) once a day for five days. Following a seven-day drug-free period, an injection of amphetamine (0.5 mg/kg) or WIN 55,212-2 (1.25 mg/kg) was given. DA levels were analyzed using in vivo microdialysis. Stereotyped behavior, monitored as number of head-bobbings, were counted manually and locomotor behavior was measured in an activity chamber. Amphetamine caused a marked increase of DA and reduction of DOPAC and HVA levels, with no difference between WIN 55,212-2 pretreated and controls. Stereotyped behavior tended to be higher in animals pretreated with WIN 55,212-2, while locomotor activity tended to be lower in a dose-dependent manner. Overall, pretreatment with the cannabinoid agonist do not affect DA response but causes subtle behavioral alterations in response to amphetamine.

### P55.11

Cocaine mediated dopamine transmission and behavior in depressed rats

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There is a strong comorbidity between depression and drug abuse that suggest a shared genetic vulnerability and a similar underlying neurobiology. Therefore we studied the cocaine response on behavior and on mesolimbic dopamine transmission in the

FSL rats, a genetic animal model of human depression, and their control FRL rats. First, the reinforcing properties of cocaine were examined by using a self-administration paradigm. We found no difference between the two lines in the ability to acquire cocaine self-administration; stable responding was reached within seven days of training. Second, we examined locomotor behavior and in vivo mesolimbic dopamine transmission during novelty and after passive cocaine administration. The FSL rats had a reduced locomotor response to novelty and exhibited more cocaine-induced stereotyped behavior than their controls. Microdialysis sampling from the amygdala and nucleus accumbens shell revealed no significant difference in the dopamine overflow between the rat lines during any condition studied. These findings suggest that depression may not be an initial drive for cocaine seeking behavior and that depressed rats have impaired motor functions that are not correlated to mesolimbic dopamine overflow.

### P55.12

Impaired dopamine-related motivation in nicotine addicts after overnight abstinence

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Nicotine is known to be essential for maintaining tobacco smoking behavior by interacting with the brain's dopamine system. However, the mechanisms how nicotine exerts its reinforcing effects in humans are not yet clear. Therefore, this investigation was performed to study the impact of tobacco smoking on cognition and motivation in nicotine addicts under normal and withdrawal conditions.

Eighteen healthy nonsmokers and 37 dependent smokers were included in the study. Smokers were studied during ad libitum smoking and after an overnight abstinence. All subjects were characterized regarding cognitive performance and motivation. Afterwards neuroendocrine assessments were performed in all subjects using apomorphine injections and measuring blood growth hormone concentration as an indicator of central dopamine function.

As results of the study it was shown that cognitive performance did not decrease in smokers after overnight abstinence; however, in contrast to nonsmokers reward responsivity was not enhanced by incentive stimuli. As blunted growth hormone secretion was recorded in smokers, this finding points to an impaired dopamine function relevant for motivation mediating nicotine addiction.

### P55.13

Treatment of drug addicts – drop out, completion and stages of change

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The study deals with the question, whether completers and drop outs of a residential treatment program for drug addicts represent distinctive subpopulations, and what criteria (socio-economic, clinical, stages of change) might be useful for differentiation.

151 drug addicts were investigated on admission (T1), at the end of treatment (T2) and at follow-up 15 months after discharge (T3), using standardized clinical rating scales.

Cross-sectional results showed that socio-economic variables did not significantly differentiate between the two groups. Completers

showed a slightly higher degree of comorbidity with a standard deviation of depression (BDI) being nearly twice as large as the one for drop outs. Abstinence rates at follow up were 28% (completers) resp. 17% (drop outs). Longitudinal analysis revealed that retention and drop out from treatment were linked to changes in time, with 34% of all drop outs re-entering residential treatment within the follow-up period (as compared to none in the completers). Thus, the concept of stages of change seems to be a much more appropriate framework for the differentiation of subpopulations of drug addicts than a mere cross-sectional analysis.

### P55.14

Feasibility, efficacy and safety issues in pharmacotherapy of opioid addicts

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The presentation is concerned with safety in opioid assisted treatment.

In Switzerland, there are experiences with heroin assisted treatment (HAT) and methadone maintenance treatment (MMT). The Psychiatric University Clinic of Basel has data of patients (N=320) in both treatment settings. Therefore, the speakers will present results of a quantitative and qualitative comparison of both treatment settings (HAT, MMT) with respect to feasibility, efficacy and safety issues.

In addition we will present data of patients who left HAT and how they performed before, within, and after treatment regarding safety issues. Buprenorphine is becoming more and more used in opioid addiction treatment, too. Data will be presented to show that the safety and efficacy of buprenorphine depends upon the context of its administration.

### P55.15

Non-alcohol substance misuse, outcome and intensive case management

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**Objectives:** We aimed to compare outcome in patients with severe psychosis who reported misusing more than one substance in the past year to patients who had not; and examine whether intensive case management had any beneficial effect on this subgroup.

**Method:** We utilised data from the UK700 multi-centre randomised trial (n=708) evaluating the efficacy of intensive case management, defined as a reduced caseload size (1:10–15). Several clinical and social assessments were administered at baseline and at 2-year follow-up.

**Results:** At baseline 48 (6.8%) of patients reported misusing more than one illicit drug. At 2-year follow-up there were no significant differences in clinical and social outcome between users and non-users of more than one drug of abuse, except for unmet needs (means 3.0 vs. 1.9 respectively, p=0.038). There was no beneficial effect of intensive case management on patients who had misused more than one substance compared to those who had not.

**Conclusions:** Patients abusing more than one substance had significantly more unmet needs at follow-up. Intensive case management, however, had no beneficial effect on any of the outcomes measured.