

presented as well as an evaluation of the effect of psychotherapy at month 12 after the individual onset of the study.

### S14.02

#### PHARMACOKINETICS OF METHADONE AND LAAM, AND THEIR CLINICAL RELEVANCE

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Our knowledge on the pharmacokinetics and pharmacogenetics of methadone and other opioids has considerably increased during the past few years. In particular, it has been demonstrated that isozymes belonging to the cytochrome P450 superfamily play a major role in their metabolism. These isozymes can be inhibited, or induced, by specific compounds. These data allow to explain, and possibly avoid, the majority of metabolic interactions involving methadone. It is also well known that there is a large variability in the activities of these isozymes, a variability which is both genetically and environmentally controlled. We recently demonstrated that a therapeutic response (i.e. no consumption of illicit opiate) was significantly associated with a (R)-methadone (the pharmacologically active form of methadone) blood concentrations of 250 ng/ml (Eap et al., *Drug and Alcohol Dependence*, in press). To obtain this concentration, due to interindividual variabilities in methadone concentrations for the same given dose corrected for the weight of the patient, theoretical doses of methadone could be as low as 55 mg/day and as high as 921 mg/day in a 70 Kg patient. Therapeutic drug monitoring of the active enantiomer could be useful in patients in methadone maintenance treatment who continue to use illicit drugs, and this stresses the importance of individualizing methadone treatment. With regard to levo-alpha-acetylmethadol (LAAM), although few data are presently available on its pharmacokinetics, some possible consequences of the known involvement of cytochrome P450 enzyme(S) in its metabolism will be discussed.

### S14.03

#### USE ABUSE AND DEPENDENCE FROM BENZODIAZEPINES IN METHADONE MAINTAINED PATIENTS – THEORETICAL AND PRATICAL ISSUES

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Ninety-two out of the 550 patients in methadone maintenance (range: 20–90 mg/die) for at least three months in Addiction Treatment Units of Padova at the date of 1.1.97 were randomly selected. They had been studied with the means of a clinical interview and SCL-90 questionnaire. Fifty-eight patients (63.0%) reported a BDZ usage in 1996. We defined as "problematic BDZ users" those patients who showed at least one of the following characteristics: 1) a reported daily diazepam-equivalent dosage larger than 60 mg (14 pts); 2) a use of BDZs to get the "high" or to "boost" the effects of methadone itself (17 pts); 3) a self-administration characterized by binges in some circumstances (7 pts); and 4) i.v. usage in some circumstances (4 pts). Due to the overlap of these criteria, we identified a subgroup of 26 patients (28.3% of the total sample, 44.8% of BDZ users). With respect to the others, these last pts showed a significant higher prevalence of concurrent administration of BDZs with alcohol (63.2% vs. 20.8%,  $p = 0.011$ ), and/or with cocaine (26.3% vs. 0%,  $p = 0.011$ ), and a significant higher lifetime prevalence of cocaine (69.6% vs. 43.3%,  $p = 0.049$ ), amphetamine (52.2% vs. 3.4%,  $p < 0.001$ ) and hallucinogens (34.8% vs. 5.0%,  $p = 0.001$ ) abuse/dependence. On a toxicological basis, this group

is therefore characterized by a poly-substance abuse/dependence. On a psychopathological basis, problematic BDZ users showed, with respect to the others, a profile more disturbed at the SCL-90 (GSI:  $1.12 \pm 0.81$  vs.  $0.59 \pm 0.51$ ,  $p = 0.003$ ), in particular with respect to the Hostility subscale ( $1.12 \pm 0.98$  vs.  $0.41 \pm 0.42$ ,  $p = 0.001$ ). These pts had often been involved in anti-social behaviours as assaults, fights or robbery during BDZ intoxication, and they showed a higher prevalence of present judiciary troubles (47.8% vs 14.0%,  $p = 0.003$ ). This group of patients is therefore characterized by an impulse dyscontrol or even a frank antisocial personality disorder.

### S14.04

#### METHADONE SUBSTITUTION THERAPY (MST): PATTERN OF SERVICE CONFIGURATION ACROSS EUROPE

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Methadone substitution therapy (MST) programmes are largely regarded as physical facilities with resources dedicated to the treatment of opiate addicts using methadone. Consequently, there is no common protocol for administering MST across treatment settings. As protocols are determined by the programme's treatment philosophy, models of treatment delivery and expected outcomes can be different.

Given the increase in the transnational mobility of opiate addicts across EU members states and in order to ensure continuity in the care of this client group across the EU, there is a need to move towards the unification of core policies and practices in MST programmes.

This paper examines the pattern of configuration of MST services in 11 MST programmes in eight European countries. The structure and process of MST in a sample of treatment programmes in these countries were reviewed in a cross-sectional survey. Study variables included staffing establishment, treatment goals and philosophy; programme setting and intensity and national health policies.

The main findings of the study (i) There are different models of MST provision across Europe (ii) MST delivery is significantly determined by the prevailing national health policies and priorities.

The paper discusses the implications of these findings for optimising the requirement for patient-policy-programme matching across Europe.

## S15. Multiple foci in the support of schizophrenic patients

*Chairs: F. Müller-Spahn (CH), H.D. Brenner (CH)*

### S15.01

#### STATE OF THE ART IN PSYCHOPHARMACOLOGICAL THERAPY OF SCHIZOPHRENIA

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Conventional antipsychotics have been found to be efficacious in acute and long-term treatment of schizophrenia. However, between 20%–30% of all patients do not respond adequately to neuroleptic therapy. Their care requires most of the cost of treating schizophrenia. Most of them lack of beneficial effects against deficit