according to the clinical data, citalopram in contrast to amitriptyline does not become proarrhythmic even under hypoxic conditions of cardiac tissue. However, there are very promising but still little clinical and therapeutical data evaluating the safety and a contingent antiarrhythmic effect of citalopram in patients with serious heart disease including post-myocardial infarction.

P02.264

ANTIDEPRESSANT THERAPY AND HEART ELECTRIC FIELD: QUANTITATIVE ASPECTS

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Some antidepressant drugs influence the ECG parametrs, especially the tricyclic (TCA) ones (prolongation of intraventricular conduction - Quinidine-like effect). The aim of this work was to compare the effect of TCA (Amitriptylin, Dosulepin), the inhibitors of SSRI (specific serotonine re-uptake inhibitors - Citalopram) and Lithium on the heart electrical field parameters in ambulatory patients with depression in remission (HAMD less than 10). The electrocardiologic parameters (ECG, VCG, Body surface mapping - BSM) have been measured by diagnostic system Cardiag 128.1. Twenty nine parameters were measured and statistically evaluated. The duration of therapy was 4-7 weeks (TCA, Citalopram) and 1-22 years in lithium patients (depression prophylaxis). Daily doses (mg): TCA 50-250, Citalopram 20-80, Li serum levels 0.66 + 0.08 meq/l. In the group of patients on TCA the tachycardia and the decrease of depolarization rate was observed. Citalogram did not provoke tachycardia but the rate of repolarization was slightly decreased. The effect of Lithium was similar as in Citalopram patients. We conclude that TCA provoked tachycardia in all patients (anticholinergic and alfa-adrenergic effect), while both in Citalopram and in Lithium patients this effect was absent except of small quinidine-like effect.

P02.265

EFFICACY AND TOLERABILITY OF REBOXETINE USED BY ELDERLY DEPRESSED PATIENTS

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Objectives: To assess clinical efficacy and tolerability of reboxetine, a unique selective noradrenaline reuptake inhibitor, in the treatment of depressed patients in an open-label, non-comparative naturalistic study in depressed elderly patients in the psychiatric setting in Spain.

Design and Methods: Outpatients older than 65 years with a diagnosis of major depression according to DSM-IV were included in this open-label, non comparative study. Patients received an average daily dose of 7.4 mg of reboxetine divided in two doses. Clinical efficacy was assessed after 1, 2, 4, 6 and 8 weeks of treatment by the HAMD17 and CGI (severity, improvement and therapeutic index) scales. Tolerability was assessed by registering treatment-emergent adverse events.

Results: A total of 280 patients were included in the study. The age interval was 65 to 86 years. Sixty five percent of the patients were women. At inclusion, 25.5% of the patients had a diagnosis of major depressive disorder, single episode, while 74.5% had a recurrent episode. The mean HAMD17 score was 24.5. Forty percent of the patients had a total HAMD17 at inclusion higher than 26. The mean HAMD17 (LOCF) at week 8 was 7.04. Based on the HAMD17, 78.5% of the patients were in remission (HAMD) <

10) after 8 weeks. Reboxetine was well tolerated. Any treatmentemergent adverse event were reported by 29.5% of the patients at week 1, and after 2 months of treatment, the incidence decreased to 10.8%. The most common adverse events (all reported with an incidence lower than 5%) were dry mouth, constipation and somnolence.

Conclusion: Despite the methodological limitations, the results of this naturalistic study are consistent with the results of randomised, double blind studies of reboxetine, where it proves to be a safe and effective antidepressant in an elderly population.

P02.266

WHY IS LENGTH OF STAY IN PSYCHIATRIC CLINICS EXPONENTIALLY DISTRIBUTED? AN ANALYSIS OF CONTRIBUTING FACTORS

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Objectives: Direct illness costs in psychiatry are strongly related to the length of inpatient stay (LOS). Prior studies have shown that LOS depends upon many factors, however there is no systematic work on their interrelation and relative contribution.

Methods: A detailed statistical analysis of the factors explaining LOS for n = 4706 consecutive admissions to the Psychiatric Hospital of the University of Tübingen is presented.

Results: The distribution of LOS follows an exponential decay function, rather than a normal distribution, suggesting an essentially risk-based process. Cox Regression indicates that the probability of discharge and hence LOS is modulated by a number of illness-related and other factors, and their relationship is explored.

Conclusion: In contrast to a widely held belief, LOS data are not normally distributed and may not be described by mean values, such as used by German Public Health for reimbursement and for comparison of services. LOS in psychiatry seems actually governed by a risk-based process. Many factors contribute to it, many of them have non-trivial effects and are interrelated with other measures.

As a tool in quality management, LOS data for psychiatric hospitals might be routinely analyzed and the effects of non-illness-related factors minimized.

P02.267

UNIMPAIRED PERCEPTION, BUT IMPAIRED WORKING MEMORY AND MOTOR RETARDATION IN BORDERLINE PATIENTS

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Objectives: Deviant behavior in borderline patients may be due to a disturbance of processes occurring before action, such as impaired perception or inability to maintain relevant information in the working memory. The present study was aimed to assess stimulus perception, working memory and initiation of reaction in 22 borderline patients compared to 25 age- and education-matched controls.

Methods: A visual backward masking paradigm was used to test perceptional speed and accuracy, and a series of visual and auditory delayed-matching to sample (DMS) tasks of graded difficulty to test working memory. Detailed psychometric scores were acquired and correlated with the results.

Results: In the backward masking experiment, patients required equal SOAs as controls to perceive the target, but were significantly slower to react. In the DMS experiment, the patients under all conditions produced more errors than controls, mainly false alarms

and premature responses. While they reacted slower than controls in the easy versions of the tasks, they took less time in the difficult conditions, most prominently so in the combined auditory and visual modality, and much more errors.

Conclusion: We conclude that primary sensory function is unimpaired, but the following process of stimulus comparison (working memory) and the initiation of motor response both seem impaired. When faced with increasingly difficult tasks, they speed up responses disproportionally at the cost of less accuracy.

P02.269

ATTITUDES AND PERCEPTIONS RELATED TO DRUG ABUSE IN A SAMPLE OF GREEK USERS, EX-USERS AND PROFESSIONAL WORKERS

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Objective: This study describes the attitudes and perceptions of a sample of Greek users, ex-users and professional workers towards the nature and the etiology of drug addiction problem.

Material - Method: A sample of 120 users (U) and 84 ex-users (EU), randomly selected from the outpatient drug free drug addiction clinic of Athens University Psychiatric unit, were interviewed using a structured interview. An other sample of 80 medical doctors (MD) and 85 police and probation officers (P & PO) were also interviewed using a similar questionnaire.

Results: Among the findings of interest were views as follows:

- a. 50% of the users and 45.2% of ex-users cite fashion as a primary cause for their starting using drugs. Other reasons reported by the users, as a cause for their initial drug involvement were "personal problems" (U = 35%, EU = 45.7%) and "others" (U = 38.3%, EU = 29.4%).
- b. The vast majority of users and ex-users consider themselves responsible for their involvement with drugs (U = 95%, EU = 90.5%).
- c. The majority of the medical doctors and the police and probation officers believe that drug addicts consist a medical patient population (MD = 81.2%, P & PO = 80.9%).
- d. According to the perception of the second sample the two main factors responsible for the initiation of drug addiction are immediate family (MD = 68.7%, P & PO = 89.2%) and addicts personality (MD = 86.2% P & PO = 84.5%)
- e. Approximately three-quarters of the members of the first sample believe that the other people view them as "ill" (U = 73.3%, EU = 67.8%) and to a lesser extend as "foolish" (U = 48.3%, EU = 46.4%)

Conclusion: Findings from this study show that different groups involved in drug addiction phenomenon hold different attitudes and perceptions about its nature and etiology. The findings are discussed in terms of treatment implications and the need for attitudinal education in the training and selection of health professionals for work with substance abusers is emphasized.

P02.270

ATTITUDES AND PERCEPTIONS OF PROFESSIONAL WORKERS FACING DRUG ADDICTION PROBLEMS

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Objective: This study describes the attitudes of a sample of professional workers towards various aspects of drug addiction

problem. These subjects work in the field of drug addiction in various activities.

Material - Method: A sample of 80 medical doctors (MD) in hospital units and 85 police and probation officers (P & PO), were interviewed using a structured questionnaire.

Results: Individuals support views as follows:

- a. The majority of those sampled concern that drug addicts consist a medical patient population (MD = 81.2%, P & PO 80.9%, p = 0.000).
- b. The two main factors responsible for the initiation of drug abuse are immediate family (MD = 68.7%, P & PO 89.2%, p = 0.001) and addicts' personality (MD = 86.2%, P & PO 84.5%, p = 0.5).
- c. The most effective type of therapeutic facility are therapeutic communities (MD = 86.2%, P & PO 75%, p = 0.05) and to a lesser extend outpatients clinics (MD = 42.5%, P & PO = 33.3%, p = 0.1).
- d. Half of the members of both groups report that the treatment modalities provided by the state are effective enough (MD = 42.5%, P & PO = 54.7%, p = 0.1) but the vast majority of the sample concern that much more treatment modalities are needed to be established in order to face drug related problems. (MD = 97.5%, P & PO = 99.4%, p > 0.5)
- e. 82.5% of medical doctors and 57.6% of police and probation officers believe that it is possible for drug addicts to reach and maintain abstinence for the rest of the ir life (p < 0.001).

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PHARMACOKINETIC DRUG INTERACTION POTENTIAL OF RISPERIDONE AS ASSESSED BY THE DEXTROMETHORPHAN, THE CAFFEINE AND THE MEPHENYTOIN TEST

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Two published case reports showed that addition of risperidone (1 and 2 mg/day) to a clozapine treatment resulted in a strong increase of clozapine plasma levels^{1,2}. As clozapine is metabolized by cytochrome P450 isozymes (mainly CYP1A2 and CYP3A4), a study was initiated to assess the in vivo interaction potential of risperidone on various cytochrome P450 isozymes. Eight patients were phenotyped with dextromethorphan (CYP2D6 and CYP3A4), mephenytoin (CYP2C19) and caffeine (CYP1A2) before and after the introduction of risperidone. Before risperidone, all eight patients were phenotyped as being extensive CYP2D6 and CYP2C19 metabolizers. Risperidone, at dosages between 2 and 6 mg/day, does not appear to significantly inhibit CYP1A2 and CYP2C19 in vivo (median plasma paraxanthine/caffeine ratios before and after risperidone: 0.65, 0.69; p = 0.89; median urinary (S)/(R) mephenytoin ratios before and after risperidone: 0.11, 0.12; p = 0.75). Although dextromethorphan metabolic ratio is significantly increased by risperidone (median urinary dextromethorphan/dextrorphan ratios before and after risperidone: 0.010, 0.018; p = 0.042), risperidone can be considered as a weak in vivo CYP2D6 inhibitor, as this increase is modest and as none of the eight patients was changed from an extensive into a poor metabolizer status. With regard to CYP3A4, although the dextromethorphan/methoxymorphinan metabolic ratios were increased (median urinary dextromethorphan/methoxymorphinan ratios before and after risperidone: 4.55, 8.88; p = 0.068) in the four patients for whom ratios could be measured (levels of methoxymorphinan were below the limit of quantitation in four patients), this increase was only marginally significant (p = 0.068). Another study with another marker of CYP3A4 activity and with a larger number of subjects is needed