

The equation that establishes the probability of IP for the set of factors is: $\text{Log}(P/1-P) = -1.20 + 0.36(\text{AP}) + 0.20(\text{NB}) + 0.28(\text{H}) + 0.21(\text{DU}) - 0.32(\text{MD})$

Conclusions: To grow without mother (odds ratio 4.6), to have many brothers (o.r. 1.21) without importing the place that between them is occupied, lived in a capital (o.r. 3.29), to suffer a Personality Disorder (o.r. 3.88) and to consume cannabis & heroine & cocaine (o.r. 6.96), they are the prevailing factors in the youths in prison before fulfilling 19 years.

Mon-P17

PSYCHOLOGICAL PARTICULARITIES OF COMPUTERIZATION IN POSTTOTALITARIAN SOCIETY (10-YEARS FOLLOW-UP STUDY)

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Change of social-economic conditions in countries of former USSR has caused the intensive expansion of modern products and technologies to concrete consumers. Computerization in such countries has explosive nature. For several years, avoiding intermediate stages, users have gained access to the most modern computer models and computer programs. Great amount of information, received in a short time presents increased requirements to psychological adaptation of users. In ditto time this process is accompanied by the absence of forecasting and studying of the psychological consequences of the given phenomena. With the purpose of studying the nature of influence of computer activity on the mental health, pupils at an age from 10 to 17 years were examined in one of the schools of Odessa (720 teenagers in 1987 and 582 in 1997). The features of computerization spreading were determined. Psychological particularities of interaction with the computer were studied by means of 10-years dynamic observation on 38 teenagers, who have an access to computers. Main methods - questioning, observation of the behavior, investigation by means of specially developed questionnaires, experimental psychological tests. Signs of pathological dependency on computer activity were discovered in 28.6% of teenagers having access to computers, that is statistically more, than in the society with the consequent development of computerization - 6.0% (Fisher S., 1994). Discovered high risk of development of addictive disorder indicates the need of undertaking preventive psychotherapeutic programs in the described contingent.

Mon-P18

A STUDY ON INJECTING BEHAVIOUR IN SUBSTANCE USERS

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The main aim of the study was analyses of the behavioural mechanisms of transition from non-injecting to injecting pattern of drug use. A total of 150 drug users have been studied in Bulgaria and compared with a control group of 30 drug users in London. The data were analysed by SPSS for Windows with implementation of different statistical methods, mainly factor analyses.

Results: A number of mechanisms of the transition from non-injecting to injecting use of drugs has been detected. The factors associated mainly with behaviour, such as curiosity, feeling of belonging to the group, etc. were found as more significant than factors, associated mainly with neurobiological mechanisms of the dependence, such as seeking of more expressed effect of the drug due to increased tolerance.

Conclusion: The injecting route of administration of drugs could be viewed as a specific behavioural phenomenon, rather than a way of drug use only. Accordingly, preventive and harm minimising

strategies should be addressed mainly towards motivational and behavioural aspects of drug use as leading mechanisms of such a transition.

Mon-P19

LERIVON EFFICACY IN ALCOHOLISM

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Antidepressants, as anticraving drugs, become now a common item of the programs for treatment of alcohol dependence. Our goal was to study the anticraving efficacy of lerivon, in comparison with that of amitriptyline and relanium, in the treatment of alcohol withdrawal and postwithdrawal syndromes. Besides, the influence of lerivon on metabolism of biogenic amine neurotransmitters was studied and clinico-biological correlations were obtained. 60 patients with alcohol dependence syndrome (DSM-IV) were included in the study. 30 patients were given lerivon (60 mg, during 30 days), 15 - amitriptyline (50 mg, during 30 days), and 15 - relanium (10 mg, during 7 days). Psychotherapy also was included in the therapeutic program. The catamnestic examination of all patients was made in 3 months. The results obtained permit us to conclude that lerivon has a pronounced anticraving, anxiolytic, antidepressive, hypnotic, sedative, and vegeto-corrective action. Positive clinico-biochemical correlations were found.

All said above permit us to recommend lerivon as an anticraving drug that may be given to alcoholic patients to achieve stable remission and to prevent relapses of the disease.

Mon-P20

CHOLECYSTOKININ IN THE TREATMENT OF ALCOHOL AND OPIATE WITHDRAWAL SYNDROMES NEUROCHEMICAL MECHANISMS

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Our previous studies have demonstrated that alteration of dopamine (DA) system functions in the brain mesolimbic structures is the main mechanism by which alcohol and opiate withdrawal syndromes develop. A neuropeptide, cholecystokinin (CCK), coexists, at a synaptic level, with DA in the nucleus accumbens and other brain limbic formations and modulates DA neurotransmission. Administered to rats with alcohol and opiate dependence CCK-8 reduces voluntary alcohol consumption and arrests alcohol and opiate withdrawal syndromes. The changes observed are accompanied by the normalization of the brain DA functions.

The i.v. and opiate injection of CCK-32 to patients with alcohol withdrawal syndrome causes fast disappearance of psychovegetative disturbances, reduces pathological craving and normalizes the level and metabolism of dopamine in the blood.

It is assumed that CCK is involved in the biological mechanisms of alcohol and opiate dependence and that the normalization of brain DA functions is the main mechanism of the CCK therapeutic efficacy in alcohol withdrawal syndrome.

Mon-P21

ALCOHOLIC CONSUMPTION, ALCOHOL-RELATED CONSEQUENCES AND ALCOHOLIC POLICY IN RUSSIA (1945-1996)

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As compared with 1950, consumption doubled in 1958, tripled in 1965. The important source of consumed alcohol was "samogon".

Next stage (1980–1984) may be considered the stage of stabilizing of alcohol consumption and of a number of alcohol-related variables. On June 1, 1985, the anti-alcoholic campaign was launched out. The State sales of alcoholic beverages decreased by 62.9% and real consumption decreased by 24.1% (1987). There was a decrease in all alcohol-related variables. 1987 was a crucial point after which real alcohol consumption started to rise by way of samogon production and consumption growth gradually. All alcohol-related variables also started to grow. Next stage began in 1992 which was marked by the start of market reforms. The new growth of consumption was result it. The more important characteristic for this period was the sharp increase of all alcohol-related variables. Last stage can be judged only with the help of indirect data: in 1995–1996 there was a decrease of all alcohol-related phenomena. This last period is characterized by a sharp increase of State activity in the sphere of alcoholic policy.

Mon-P22

DRINKING PATTERNS IN DIFFERENT PROFESSIONAL GROUPS IN THE EUROPEAN NORTH OF RUSSIA (EPIDEMIOLOGICAL STUDY)

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According to the data of the WHO, Russia holds the first place in the world in the level of consumption of pure alcohol per year, which made 14.5 litres per person in 1995.

The aim of the present research was to study the epidemiological situation in different professional groups in the European North of Russia including workers of industrial enterprises, pilots of the Aeroflot Co., drivers of the city transport, railway workers, seamen and others.

Different rates of alcoholism prevalence were discovered (10%–39.7%).

The analyses or the received findings allowed us to systematise the main causing factors, the leading social and psychological mechanisms of alcoholism development and different drinking patterns in different professional groups.

Mon-P23

HYPERBARIC OXYGENATION EFFECT AND THE MECHANISMS OF ACTION IN ALCOHOL ABUSE AND DRUG ADDICTION

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Introduction: A long-term alcohol abuse and drug addiction are associated with homeostasis impairments and with the development of a somatic pathology complicating the course of disease and restricting psychopharmacological treatment. In this connection, it is necessary to undertake a complex treatment aimed at correction of metabolism, improvement of CNS and visceral organ condition.

Methods: A comparative study including 552 patients randomized into two groups was undertaken. The 1st group included 367 patients (311 patients suffering from alcohol abuse and 56 patients with drug addiction) who received sessions of hyperbaric oxygenation (HBO) treatment: 100% oxygen in monoplace chambers under hyperbaric conditions (sessions for 40 minutes at 0.2–2.0 ATA maximal pressure). The 2nd group included 185 patients who received a standard pharmacological therapy. We performed the following investigations: EEG, ECG, cerebral blood flow (CBF), biochemical studies.

Results: A comparative clinico-psychopathological and functional studies of the patients in the HBO group and the control groups has shown that irrespective of the intoxication and abstinence types, the HBO effect manifested in a significantly accelerated reduction of somatovegetative, psychoneurological and asthenic disorders. In HBO group the period necessary for the control of withdrawal syndrome decreased average two times from 5 ± 0.2 to 2 ± 0.4 days ($p < 0.001$). The use of HBO prevents the development of complications and contributes to normalizing neurochemical processes. The monitoring of systemic and cerebral hemodynamics, lipid peroxidation undertaken within the course of treatment demonstrated their optimization under the effect of a HBO session and the total HBO course. We also noted a stabilizing hypnotic and anxiolytic effect of HBO sessions.

Conclusions: The use of HBO posing detoxication, antihypoxic and metabolic effects in complex treatment of alcohol abuse and drug addiction is justified from the point of pathogenesis and allows to improve the outcomes.

Mon-P24

SEROTONIN CONTENT IN PLATELETS AND IN BLOOD PLASMA IN THE DYNAMICS OF ALCOHOL DELIRIUM DEVELOPMENT

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Objective: The lowering of reuptake velocity of serotonin by platelets (which is expressed by the decrease of imipramine receptor density, reduction of V_{max} , lowering of intracellular serotonin level) is sufficiently often revealed in depression, obsessive-compulsive disorder, psychopathies and other mental disorders. The interest to such phenomenon is explained by the fact that serotonergic substances are principle means of medication of the above-mentioned states. This study dealt with the measuring of serotonin concentration in thrombocytes and blood plasma in heavy alcohol delirium states.

Material and Methods: 20 patients were examined thrice - in psychosis state, recovery onset, and after complete recovery. A content of serotonin in the blood plasma and in platelets by means of HPLC-ECD were determined.

Results: Result showed that one of the ways to intensify central monoaminergic functions in the alcohol withdrawal consists in the adaptation of mediator reuptake systems. If in the psychotic state serotonin level in platelets (index, directly associated with reuptake velocity) didn't differ from the control ones (425 ± 89 ng/ 10^9 plat.), this index in the process of patients recovery was decreasing (365 ± 99), achieving a level typical for some groups of our patients with affective disorders (280 ± 10 , $p < 0.05$, comp. to delirium tremens) to the moment of the recovery from psychosis.

Conclusion: Reduction of platelet serotonin level during alcohol delirium means that to the moment of recovery the velocity of serotonin reuptake may decrease and therefore a mediator concentration in brain synaptic clefts and in extracellular space increases, and the indoleamine postsynaptic function is intensified.