

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)

Alexei Kalinin\*, Pavel Sidorov. *State Medical Academy, Arkhangelsk 163061, Russia*

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

N. Epifanova\*, M. Romasenko, I. Epifanov. *Dep. of Psychosom. Disord., Sklifosovsky Research Institute Moscow, Russia*

**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  $5 \pm 0.2$  to  $2 \pm 0.4$  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

A.Z. Drozdov\*, B.M. Kogan. *Serbysky National Research Centre for Social and Forensic Psychiatry, Moscow, Russia*

**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 ( $425 \pm 89$  ng/ $10^9$  plat.), this index in the process of patients recovery was decreasing ( $365 \pm 99$ ), achieving a level typical for some groups of our patients with affective disorders ( $280 \pm 10$ ,  $p < 0.05$ , 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.