## P03-226

## EPIDEMIOLOGY OF ALCOHOL USE DISORDERS: OVERVIEW AND EXPECTATIONS

M. Osain Welcome, V. Alekseevich Pereverzev

Belarusian State Medical University, Minsk, Belarus

Following the establishment of the disease concept of alcoholism, many attempts, as well as achievements have been made in alcohol research. The genetotrophic, endocrine, genetic, stressor, psychoanalytic, cultural, behavioral and abnormal brain metabolites theories have been used to explain various mechanisms of alcohol use effects. Cultural and social factors in alcohol use and related problems are supported by both Durkheim's and Leighton's theories. With recent advances in radiological, spectroscopic analyses, it is now possible to study the effects of alcohol and other drugs (at various levels of use) on the brain's function and structure. MRI techniques have been used to trace the changes that occur when the brain is exposed to alcohol. Through such studies, specific alcohol-related changes in the brain, their duration, effects on behavior and the compensational mechanisms for these changes have been largely explored. The use of iterative testing approach, using computer models to test complex neuropsychophysiological and physicobiological mechanisms, including electrophysiological waveforms analysis in alcohol use problems are prospective area of alcohol research that might totally solve the problems of alcohol predisposition. PET in visualization and measuring the electrical activity of the brain may help explain the mechanisms and solve individual differences in the problem of alcohol related blackouts and memory lapses.

## References

- 1. Anne-Marie Wall et al. Addict Behav 2003: 28; 1271-1283
- 2. Raul Caetano et al. Alcohol Health Res World. 1998: 22 (4); 233-234