

**P117 Neurosciences, psychopharmacology and biological psychiatry****THE USE OF VIRTUAL REALITY TECHNIQUES IN NEUROSCIENCE AND PSYCHIATRY**

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The technique of virtual reality (VR) is a new electronic tool which makes it possible to create an artificial computerised world which can influence human mental life in a hitherto unprecedented way. VR is a computer programmed reality. Almost anything a person may imagine may nowadays be realized in cyberspace - computer space i.e. by a computer existing in a cybernetic world, thanks to refined programming and special sensors and monitors.

With the introduction of VR totally new opportunities have appeared, allowing in an almost total and perfect manner the saturation of the three most important senses: sight, hearing and touch, and giving a person access to almost 100% of the data from the surrounding world. Devices such as display screens, filling the human visual field, make it impossible to distinguish between virtual reality and the real world.

Simultaneous seeing, hearing and touching may increase *ad absurdum*, the perceived feeling of reality. The cumulative effect of the simultaneous use of all three perceptions creates a situation of cheating the central nervous function almost totally of realizing judgement. The brain (mind) theoretically cannot deal with interpreting a situation such as the world of cyberspace. VR technology does not enable the simple ability of understanding the reality of the situation. The VR may become a new tool for the study of perception processes and data processing in the CNS and may therefore be useful in experimental psychology and clinical psychiatry. The state of VR consciousness may become a model tool in research into the structure of night dreaming and related processes and into productive symptoms such as delusions and hallucinations.

**P118 Neurosciences, psychopharmacology and biological psychiatry****OVERHEAD HIGH-VOLTAGE TRANSMISSION LINES AND PSYCHIATRIC SYMPTOMATOLOGY**

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**Objective:** Numerous reports suggest a relationship between increased incidence of depressive and neurotic symptoms in humans with exposure to extremely low frequency electromagnetic fields (EMF) in their homes.

**Method:** The study took place in a suburban, low socioeconomic status neighbourhood in Cracow, adjacent to an easement containing two 400 kV high-voltage transmission lines (up to 50m from the line). 35 males and 35 females exposed to EMF since 1986 were investigated. A control group (without exposure to EMF) was also tested. The intensity of EMF was measured by special devices and assessment was made using the Anamnestic Data Questionnaire, Neurotic Symptoms Questionnaire "O", Spielberger Self-rating Questionnaire and Beck Self-Rating Scale.

**Results and conclusions:** Electric field levels taken at the front walls of the buildings examined averaged much higher than normal values of safety exposure. 87% males and 77% females had higher psychopathological values in the Neurotic Symptoms Questionnaire "O". 75% EMF population showed an increased anxiety score and anxiety as a condition and anxiety as an attribute were significantly greater than in the control group. Depressive symptomatology was estimated at 68% of the examined group and 10 people showed signs of major depression. The results seem to support the hypothesis that EMF produced by external power lines may enhance the occurrence of neurotic symptoms and depression.

**P119 Philosophy, ethics and psychiatry****DRUG LICENSING AND MARKETING IN EASTERN EUROPE: ETHICAL ISSUES**

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In Western Europe and North America, the development, licensing and marketing of pharmaceuticals are carefully regulated. In contrast, controls are less developed in Eastern Europe including the former Soviet Union which is potentially a very large market. The situation there resembles in some ways that of the "third world" where drug promotion even by 'ethical' companies can be unethical. In Eastern Europe there are ethical problems in research for instance, where the concept of 'informed consent' is still new both for doctors and patients, and the design of drug trials is less stringent than in the West. The Licensing Bodies may not be adequately informed and advertising and promotion may be uncontrolled.

All these problems can eventually be resolved and the main reforming force should be pharmaceutical companies themselves. However their records as 'reformers' in other developing countries has not been uniformly encouraging.

**P120 Philosophy, ethics and psychiatry****ECLECTIC APPROACH IN PSYCHIATRY: WORK OF SILVANO ARIETI**

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Although Leonardo's many sided genius has become a melancholic renaissance myth, the example of Silvano Arieti and his scientific curiosity in neurology, function neuroanatomy, phenomenology, psychopathology and psychodynamics are especially inspiring. The analysis of Arieti's research passions point towards the need for a synthetic and holistic approach in investigating the central nervous system and its disorders (bearing in mind Arieti's talent for a conceptual framework to transform a series of isolated perceptions into a discovery). Arieti's cognitivist approach has constructively resisted orthodox behaviourism and psychoanalysis not only in the interpretation of ethiopathogenesis of some nosologic entities, but also in specific treatment approaches.

The authors consider psychosomatic hermeneutic and analogues of the Arieti model of schizophrenia and depression in the light of modern neuropathological, biochemical and psychodynamic evidence. In Arieti's interpretation, eclecticism is not just a sum of biopsychosocial landmarks but it is a way to original, synthetic models which optimise the strata of the human being, his normality, creativity and suffering too.