S10. Suicide prevention

**Chairs:** D de Leo (I), R Jenkins (UK)

**S10-1**
**EFFECTS OF ADEQUATE LITHIUM PROPHYLAXIS ON SUICIDALITY AND MORTALITY OF PATIENTS WITH AFFECTIVE DISORDERS: RETROSPECTIVE AND PROSPECTIVE STUDIES**

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Based on serotonin-agonistic and antiaggressive effects of lithium, both well-documented in animals and humans, we hypothesized that properly performed lithium long-term medication might have specific antisuicidal effects. Support for this assumption came from our findings that in a high risk group of the Berlin lithium clinic suicidal behaviour was significantly higher in patients having discontinued lithium than in those with regular uninterrupted medication. In the context of a large prospective multi-centre German study (MAP), in which patients were allocated at random to either lithium, carbamazepine or amitriptylin long-term treatment, it could be demonstrated that suicides and parasuicides occurred exclusively in the non-lithium groups.

Since death due to suicide is the most important cause of the 2–3 times elevated mortality of patients with affective disorders, a reduction of suicidal behaviour should result in a lowering of the excess mortality. Such an effect of lithium long-term treatment could be shown by various groups, e.g. Coppen in the U.K. and Nilsson in Sweden, but has been particularly demonstrated by the large collaborative study of IGSLi. It could be shown in a large international patient group equaling 5,600 patient years that the mortality during lithium long-term treatment is normalized, i.e. is no more different from the normal population, and that it rises again when lithium is discontinued. Such an effect has not been demonstrated so far for any other alternative prophylactic treatment in affective disorders.

It is concluded that lithium should remain the prophylactic agent of first choice, particularly in patients with a history of suicide attempts and that doctors should be extremely cautious when considering a discontinuation of lithium in alleged non-responders.

**S10-2**
**WHO PROGRAMME ON THE PREVENTION OF SUICIDE: A GLOBAL INFORMATION NETWORK FOR MONITORING SUICIDE TRENDS**

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This paper will describe the WHO global information network for monitoring suicide trends, as part of its programme on the prevention of suicide. The components and procedures will be described in detail, as well as the way of accessing the appropriate information through the internet.

**S10-3**
**ARE THERE BIOLOGICAL PREDICTORS OF SUICIDE?**


Studies of biological factors related to suicidal behaviour have so far revealed two current lines of correlational evidence: monoamines and other factors related with the hypothalamic-pituitary-adrenal (HPA) axis. When evaluating biochemical studies, there are several confounding factors to be considered. Apart from questions dealing with definitions of suicidal behaviour, suicidality needs to be disentangled from diagnostic issues. Original findings of high cortisol levels in body fluids or low concentrations of the serotonin metabolite 5-hydroxyindoleacetic acid (5-HIAA) in cerebrospinal fluid (CSF) were shown in studies of patients with depressive disorders. The most marked deviations of serotonergic measures have since then been found in depressed patients with recent suicide attempts or who later presented with suicidal behaviour. It is self-evident that monoamines are affected by psychotropic drugs. Hence, study populations should be drug-free. This in turn leads to extremely selected patient materials, from which it becomes difficult to draw general conclusions. In our view, the very issue of wash-out periods therefore needs to be studied.

Biological parameters vary during the day, month (menstrual period) and season. Also there could be correlates with sex and body height. Furthermore, being aware of the impact of diet on monoamine metabolism, researchers run into apparent problems when interpreting their results. A careful approach is thus needed when searching for biological markers predicting suicidal behaviour.

Evidently, we have not yet reached the stage for introducing biological factors in clinical routines for evaluation of suicidal behaviour. Bearing in our minds that there are indeed markers for different phenomena in somatic illnesses, we hopefully will find markers in psychiatry. Maybe by use of challenge paradigms or brain imaging we will be successful.

**S10-4**
**THE FALL downs of the WHO/EURO MULTICENTRE STUDY on PARASUICIDE**

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The WHO/EURO Multicentre Study on Parasuicide was introduced in the frame of the WHO programme "Health for all by the year 2000". In this programme the European region of WHO identified the prevention of suicidal behaviour as a main target. As part of the action in the implementation of target 12 of the WHO European strategy the project was designed to collect comparative data on rates and trends in attempted suicide in various European countries; epidemiological data, data about special risk groups, data about precipitating and causal factors as well as the use of services. In 1989, 16 centres in 13 European countries started to assess "real" suicide attempt rates and trends as well as the epidemiology of suicide attempts. The study as a whole increased the awareness...