

**S16.4**

Preventing recidivism among schizophrenic patients with a history of crime

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**Problem:** There is some evidence that specialized forensic community treatment does prevent recidivism among patients with a history of crime. Studies have consistently shown that alcohol and drug abuse significantly increase the likelihood of violence in this population, while results are contradictory as to the role of psychotic symptoms as precursors of violent behaviour.

**Method:** One hundred and sixty-five men with schizophrenia were followed for 12 months after discharge from forensic and from general psychiatric hospitals. Patients' symptoms were assessed before discharge and twice during this period. Each patient and a collateral provided information on alcohol and drug use, aggressive behaviour, and all forms of informal and formal treatments and social services received by the patient.

**Results:** Sixteen of the 165 patients assaulted another person at least once during the 12-month period. Positive psychotic and depressive symptoms were strongly associated with aggressive behaviour. Neither a history of alcohol and/or drug abuse/dependence or alcohol use were linked to assaultive behaviour.

**Conclusions:** Among men with schizophrenia and a history of crime, the rate of assaultive behaviour was found to be much lower than that reported in previous investigations. This suggests that aggressive behaviour in this population may be associated with the intensity of community treatment and supervision. Also, contrary to previous studies, the present results indicate that symptoms and not substance use was associated with aggressive behaviour.

**S16.5**

Using urine and hair to assess drug and medication use in mentally ill patients

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The objectives of the current study were to compare hair and urine for the detection of drug abuse, and to evaluate hair for compliance monitoring of certain medications. The evaluations reached into both the practical issues such as sampling and cost as well as interpretation.

Hair and urine samples were obtained at biannual interviews with patients in after care. Toxicological analysis was performed in two steps. First, screening of drugs of abuse was done using immunoassays, then positive screening results were confirmed using gas GC, GC-MS or LC-MS. Selected medications were analyzed with LC-MS-MS.

Results from both urine and hair samples showed that most patients had stayed away from drugs of abuse. The results indicated that hair was a better matrix than urine to detect some drugs, especially cocaine. Sampling of both urine and hair was sometimes troublesome, with patients refusing to supply a sample or having to short hair. Retrospective hair analysis proved useful to evaluate compliance in medication.

We conclude that hair might be a suitable alternative to urine when assessing drug use, especially over long time periods, and that hair analysis can be used to assess medication use.

## SES05. AEP Section Epidemiology & Social Psychiatry – Gender differences in major mental disorder – Part I

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**SES05.1**

Gender differences in the prevalence of affective disorders

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**Objectives:** to demonstrate the varying gender ratios in subgroups of affective disorders.

**Methods:** In the Zurich cohort study the health status of 591 subjects was assessed by interview carried out by clinical psychologists or psychiatrists six times over a period of 20 years between the ages of 20 and 40. Atypical depression was assessed during the last four interviews (ages 28 to 40). New, non-hierarchical definitions of hypomania and of atypical depression were applied.

**Results:** The gender ratio F/M was as follows: BP-II 1.6, MinBP 2.3, hypomania 0.4, MDD 1.7, MinD 1.2, RBD 1.1. The gender ratio F/M for atypical major depressive episodes (MDE) was 7.0; however, for non-atypical MDE it was only 1.3. In 88% (derived from weighted prevalence rates) atypical MDE was a women's disorder.

**Conclusions:** The gender ratio F/M of bipolar I disorder is known to be about 1.0. In addition, our data suggest that BP-II and minor bipolar disorders are more prevalent among women but that hypomania (without a diagnosis of depression) is more common among men. Future analyses of gender ratios must take account of atypical depression, because it would seem largely to explain the well-established gender differences in prevalence of major depressive disorders.

**SES05.2**

Gender differences in first episode schizophrenia

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Sex differences in schizophrenia have been described on various levels mostly with inconclusive results. We compared men and women in the same stage of illness retrospectively until onset, cross-sectionally at first contact and prospectively over 5 years with an epidemiological sample (N=232). For women showing 3 to 4 years higher mean age at all milestones of the development of the first episode, a second peak of onsets emerged around menopause. It can be explained by the neuromodulating effect of estrogen on D<sub>2</sub> and 5-HT<sub>2A</sub> receptors. Postmenopausal schizophrenia is more frequent and more severe in women, social course of premenopausal schizophrenia is more severe in men – due to their socially adverse illness behaviour and lower stage of social development at onset.

The estrogen effect is in balance with the strength of illness disposition: a higher familial load and pre- and perinatal complications weaken the protective effect and reduce age at onset in women.

Onset, symptomatology and course of schizophrenia seem to be governed by interaction between biological disease variables, neurohormonal factors and age and gender related behavioural and social determinants.