

elucidated. Finally, there is worldwide a greater prevalence of tobacco smoking, heavy smoking and high nicotine dependence; and the available data support a theory of shared vulnerability to both smoking and schizophrenia rather than a self-medication hypothesis. The authors, all of whom have been contributors in this area, will discuss each other presentations

### W10.03

Who are the patients with schizophrenia who drink alcohol?

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**Background:** Alcohol use disorders (AUD) comorbidity has a high prevalence in schizophrenia: 21% to 51% of patients with schizophrenia had a lifetime history of alcohol abuse or dependence.

**Methods:** Systematic search of Medline from January 1966 to October 2006.

**Results:** Patients with AUD are more likely to be male and to present cannabis dependence. Conduct disorder, antisocial personality disorder, greater impulsivity and sensation seeking are established risk factors for AUD among patients with schizophrenia. Patients with schizophrenia reported greater euphoria and stimulatory effects in response to alcohol that may contribute to the increased risk for AUD (D'souza et al., 2006).

AUD have a negative impact on the course and outcome of schizophrenia, in particular, alcohol use may worsen the positive and cognitive symptoms of schizophrenia (Bowie et al., 2005). AUD are associated with depression and suicide behaviors in patients with schizophrenia. Patients with dual disorders have higher rates of medication nonadherence or number of hospitalizations. Despite lower alcohol exposure than in pure alcohol dependence, the comorbidity of schizophrenia with AUD compounds or accounts for brain volume abnormalities of schizophrenia in cortical prefrontal (Mathalon et al. 2003), cerebellar (Sullivan et al. 2000), pontine and thalamic (Sullivan et al. 2003) sites.

A number of theories have been proposed to explain the frequency of the comorbidity. Dopamine-mediated mesocorticolimbic brain reward circuitry dysfunction in schizophrenia may explain the increased sensitivity to alcohol (Chambers et al. 2001, Green 2005). Atypical antipsychotics, particularly clozapine treatment, could be associated with reduced substance abuse.

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## S33. Symposium: MORTALITY AND MENTAL DISORDERS: SUICIDE AND BEYOND (Organised by the AEP section on Epidemiology and Social Psychiatry)

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### S33.01

Does duration of depression predict suicidality?

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**Background:** To describe the associations between depression and suicidality in the general population.

**Methods:** Data were derived from the Netherlands Mental Health Survey and Incidence Study (NEMESIS), a prospective epidemiological study of a representative sample of 7076 adults aged 18-64,

interviewed in three waves (baseline, one year and three years after baseline) with the CIDI.

**Results:** 3% of the population reported suicidal thoughts and 1% a suicidal act in the past year. Women were more at risk than men (RR=1.83). Suicidal thoughts were associated with mood disorders (RR= 12.09), especially dysthymia (RR = 26.42). The same associations were found for suicidal acts (mood disorders RR= 11.9; dysthymia = 45.6). Incident suicidal thoughts (in three years time) were reported by 2.7% of the population and new suicidal acts by 0.8%. Bipolar disorder was strongly related to new suicidal acts.

Suicidality is persistent for almost 30% of those affected over a period of one year.

**Conclusions:** From the mood disorders, dysthymia is mostly correlated with suicidality. This raises the question whether suicidality is more related to duration of the depressive disorder than severity.

### S33.02

Transition probability from attempted to completed suicide: A thirty year follow-up study

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**Background and Aims:** Since suicide is a rare event, the much more frequent suicide attempts are often used as a "proxy measure" - in such diverse fields as the ongoing debate about the potential increase of "suicidality" by SSRIs and the public health challenge of suicide prevention. Most authors dealing with these topics implicitly assume that there is a continuity between suicidal ideation > first suicide attempt > repeated suicide attempt and > completed suicide. They obviously take no notice of an important literature casting doubt on this unitarian process model of "suicidality". The pooled findings of studies show that the risk of suicide is raised after an attempted suicide, but generally not very much - in fact most people who "attempt a suicide", never commit suicide.

**Methods:** A thirty year prospective population based actuarial follow up study of 261 persons who had attempted suicide in 1971.

**Results:** (1) the risk of suicide was 9 times higher than in a comparable sample of the general population, but with 8% rather small in absolute figures; (2) most of the suicides occurred in the 5 to 10 years immediately following the attempt; (3) general mortality was slightly increased in men but not in women.

**Conclusion:** Given the rather low transition probability from attempted to completed suicide, the above mentioned debates should become more differentiated. It will also be discussed, whether subtypes of suicide attempts have different prognostic implications with regard to completed suicide.

### S33.03

Mortality and mental disorders

C. Lauber, V. Ajdacic-Gross, W. Rössler. *Psychiatric University Hospital, Zurich, Switzerland*

**Background and Aims:** People with mental illness are at a high suicide risk. About 5% of these suicides occur during psychiatric inpatient treatment. Few data are available on demographic and risk factors for this population. Therefore, we analysed all psychiatric inpatient suicides from 1992 - 2004 in a catchment area of about 1.2m population in Switzerland.

**Methods:** Charts review.

**Results:** We identified 142 patients who committed suicide while in the hospital wherefrom 125 charts could be reviewed. 52% were male. 52% were diagnosed with an affective and 26% with a psychotic disorder, respectively. 59% were admitted due to suicidal ideations. 58% had a history of suicide attempt(s). 74% reported serious life events previous to the index hospitalisation. 74% committed suicide outside the hospital. Most suicides occurred in month 3-6 after admission. In the last assessment before the suicide, 88% had affective symptoms, 66% anxiety, 63% hopelessness, 42% psychotic symptoms and 36% agitation/restlessness. Of those with affective symptoms, 79% received antidepressive medication. 77% with psychotic medication had antipsychotics and 42% of those with anxiety received anxiolytics. 64% denied in their last interview before committing suicide suicidal ideations, 42% had a “non-suicide agreement” with their clinicians. According to a clinical assessment, 80% of those who committed suicide were at low or at no suicide risk.

**Conclusions:** Most inpatients suicide occurred unexpectedly. A more rigorous treatment of anxiety, but also affective and antipsychotic symptoms could lead to decrease suicide in inpatient settings. “Non-suicide agreements” could not prevent suicides.

### S33.04

General mortality from anxiety and depression (the HUNT study)

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**Background and Aims:** Depression is reported to be associated with increased mortality, but underlying mechanisms are uncertain. Associations between anxiety and mortality are also uncertain. In a large population study, we investigated associations between anxiety, depression and mortality over a 3-6 year period. We utilized a unique link between a large regional community survey and a comprehensive national mortality database.

**Methods:** Baseline information on mental and physical health was collected in a population-based health study (n=61,349) (the HUNT-2 study) of adults aged 20 years and over. Anxiety and depressive symptoms were ascertained using the Hospital Anxiety and Depression Scale (HADS). Records were linked with the Norwegian national mortality database.

**Results:** Case-level depression was a risk-factor for mortality, but case-level anxiety was not (having adjusted for confounding factors). The association between anxiety symptoms and mortality was U-shaped, and anxiety comorbid with depression was associated with lower mortality compared to depression alone. Associations between depression and mortality were partly but not entirely explained by somatic symptoms and conditions, and also physical impairment, but not by smoking, obesity, cholesterol level or blood pressure.

**Conclusions:** Depression predicted general mortality after adjustment for multiple potential confounding factors. Associations between anxiety symptoms and mortality were U-shaped. Lower

mortality was found in comorbid anxiety and depression than in depression alone.

### S33.05

Anxiety, depression and cause - specific mortality. The HUNT historical cohort study

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**Objective:** Depression is reported to increase general mortality. For cause-specific mortality, there is evidence for the effect of depression on cardiac mortality and suicide. Less is known as to other mortality diagnoses. The literature on anxiety in relation to mortality is scarce and conflicting. This study investigates empirically the association between anxiety/depression and cause-specific mortality with particular attention to underlying mechanisms and causes of death.

**Methods:** Employing a historical cohort design we utilized a unique link between a large epidemiological cohort study and a comprehensive national mortality database. Baseline information on physical and mental health (HADS) was gathered from the population based health study (N=61349). Causes of death were registered with ICD-10 diagnoses during 4.4 year follow-up.

**Results:** Case-level depression increased mortality for all major disease-related causes of death, whereas case-level anxiety and comorbid anxiety/depression did not. The effect of depression was equal in cardiac mortality compared to all other causes combined, and confounding factors were also markedly similar. Accidents and suicide was predicted by comorbid anxiety depression.

**Conclusions:** Depression is a risk factor for all major disease-related causes of death, and is not limited to cardiac mortality or suicide. Case-level anxiety imposes no increased disease-related mortality, but comorbid anxiety depression predicts external causes of death. As the association between depression and cardiac mortality was comparable to the other causes of death combined, and confounding and mediating factors are markedly similar, future investigation as to mechanisms underlying the effect of depression on mortality should not be limited to CVD mortality.

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## S34. Symposium: LONG TERM TREATMENT OF SCHIZOPHRENIA

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### S34.01

The role of adherence to medication in the effectiveness of long-term treatment of schizophrenia

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