between the number of contacts with mental health care services and quality of life. Quality of life was mainly determined by social support including professional support.

Discussion: The basic assumption of a correlation between need and service provision was confirmed. But quality of life of vulnerable schizophrenic patients is not necessarily determined by the extent of services used. Considering outcome criteria, such as quality of life, other influencing factors of service provision should also be taken into account.

ROLE DES ORGANISATIONS NON-GOUVERNEMENTALES DANS LA PRISE EN CHARGE DES MALADES MENTAUX

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Dans la majorité des pays européens, les gouvernements sont préoccupés par les coûts de la santé et cherchent un moyen de les réduire. Les conséquences de cette exploration sont souvent néfastes pour les malades mentaux et leurs famillies. La privatisation peut rendre les services moins chers et en assurer une bonne qualité, surtout pour les malades qui sont bien intégrés dans la société et qui possèdent les moyens nécessaires pour utiliser les services privatisés. Or, la grande majorité des malades mentaux graves sont mal intégrés, n'ont pas les moyens de se faire soigner et n'ont pas de représentants qui seraient disposés à plaider leur cause.

Les autres grandes tendances du développement socio-économique en Europe représentent aussi des risques nouveaux pour les malades mentaux. La famille, toujours plus petite, les exigences de qualifications professionnelles requises toujours plus grandes, les changements de la structure démographique (par exemple, le vieillissement des populations), sont des exemples de telles tendances auxquelles la psychiatrie doit trouver une réponse adéquate.

Dans ces situations, les organisations non-gouvernementales doivent accepter un rôle beaucoup plus actif et différent de celui qui leur a été offert par le passé. En plus de leurs efforts de ralliement, elles devraient dorénavant (i) devenir les avocats de la qualité des soins en psychiatrie; (ii) jouer un rôle prépondérant dans la protection des droits des malades mentaux et des professionnels travaillant dans le domaine de la santé mentale; (iii) veillet à ce que les données scientifiques soient prises en compte dans les décisions sur les questions administratives concernant les soins de santé mentale; (iv) faire entendre leur voix dans les débats et décisions concernant la formation et la recherche en psychiatrie.

CONCLUSIONS: SYMPOSIUM "PSYCHIATRIC AND PUBLIC HEALTH"

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Life in the community of mentally ill patients once they have been discharged from inpatient psychiatric departments and their rehabilitation require a continuous follow-up and a specific assistance.

The paper of Dr Fichter concerning a study of the psychiatric disorders in the homeless population reveals a high rate of mental illnesses with a high prevalence of alcoholics; schizophrenia is relatively much less frequent. The majority of the homeless are not properly taken care of, which naturally raises the question of how can a long-term follow up be organised.

Dr Rössler tries to answer the following question: "who needs long-term outpatient care?" He mentions a study conducted by the Mannheim Institute which assessed the care needs of patients followed-up 12 months after their discharge from inpatient units. There is a direct correlation between their needs and their contacts with the out-

patient departments but the quality of life does not necessarily depend on the intensity with which these services are used.

Pr Leff who followed patients up to 10 years after the closure of 2 mental hospitals in London observed an improvement in all the areas investigated. Only 1% of these patients became homeless.

These studies demonstrate the necessity of a serious and adequate outpatient follow-up. As regards to this issue, Pr Sartorius is worried that the cost of these proceedings may lead European Countries to diminish their financing, which requires a similar increase from the non governmental associations which play a major role in the help and support of the mentally ill.

The problems covered by our symposium and the answers, although still quite insufficient, brought by these studies justify the increase and the extension of the investigations and also of the means of support. They must appeal to European leaders and encourage them to take into consideration the rehabilitation of mentally ill patients as a significant part of their health policy.

S2. Addictions and comorbid psychiatric disorders

Chairmen: J Adès, M Berglund

SUICIDE AND ADDICTIONS

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About half of all suicides are committed by subjects with substance use disorders and about 3% of all alcoholics kill themselves. In the present paper the international literature is reviewed. Three factors are associated with an increased risk of suicide in substance use disorders namely strong psychological stressors, for example separation from spouse during the last six weeks before suicide, comorbid psychiatric disorders and attempted suicide. Data supporting effects of intervention after suicide attempt in alcoholics is presented.

Data on suicide rates in Malmö, a Swedish town with a population of 23.000 inhabitants, is presented. Eleven percent of the male population and 3% of the female population have been patients at the Department of Alcohol and Drug Diseases. In 1984–1987 there were 291 male suicide cases and 125 female suicide cases. One hundred and three male suicide cases (35%) and 22 female suicide cases (18%) had previously been patients at the Department. Seventy-three percent among the male patients and 23% among other males had positive blood alcohol levels. Corresponding values for females were 77% and 17%, respectively. Blood alcohol levels over 0.2% were as a rule registered only in alcoholics.

In 1993-1995 there were 197 forensic autopsies performed on previous patients at the Department including 96 suicides. Drug misuse was found in 50% of the suicides and in 22% of other cases.

It is concluded that suicide in substance use disorders is a large problem that has to be addressed by the psychiatric profession.

SUBSTANCE USE DISORDERS: EPIDEMIOLOGICAL OVERVIEW OF PSYCHIATRIC COMORBIDITY

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The clinical fact that the same person can have more than one mental disorder has been "rediscovered" in epidemiological research with use of the new standardized diagnostic instruments. This is now called comorbidity or sometimes "dual diagnosis" in relation to substance use disorders. This rediscovery is important for the treatment and prognosis of alcoholism and other substance use disorders, which have been segregated from other mental disorders for various reasons.

The magnitude of the comorbidity varies with the sampling frames used. In substance use disorders it increases with increasing severity of the disorders as manifested by treatment seeking. Also, the comorbidity is more prevalent with multiple substance abuse than with alcohol abuse only.

Recent estimates of the prevalence of comorbidity disorders with substance use in the general population indicate that up to 40% of substance abusers have another psychiatric disorder. Most prevalent are anxiety, affective, and personality disorders. The prevalence of comorbid disorders is higher among substance abusers seeking treatment reaching 80% in specialized abuse treatment settings. Again anxiety, affective, and personality disorders are most frequent as well as multiple substance abuse.

Another important aspect is substance use disorder among other psychiatric patients. Studies of psychiatric inpatients have, in addition to the mentioned diagnostic groups, identified comorbid substance abuse as significant problem among patients with psychotic disorders, especially those with schizophrenia.

The data about comorbidity indicates the importance of considering other mental disorders in the treatment and prevention of substance use disorders.

ANXIETY DISORDERS AND ADDICTIONS

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Alcohol abuse/dependence has been found the most common psychiatric diagnosis in the Epidemiologic Catchment Area (ECA) study, the largest ever personal interview general population survey in the United States. Therefore, it is not surprising that alcoholism and anxiety disorders overlap, although with little compelling evidence of a higher rate of alcoholism in groups of anxious patients. According to different studies, a great variety exists in the prevalence of the occurrence of both pathological states. Several reasons are responsible for this. First of all, denial is typical of alcoholics and they may find more acceptable (especially if female confronting male doctors) to attribute heavy drinking to a cause (like anxiety) that may elicit sympathy. Another reason is the loose definition of anxiety which has been used in the past (comprehensive of fear, irritability, restlessness and any kind of unpleasant mood state). Still more important is the timing of interview. Most alcoholics undergo a mild withdrawal syndrome including feeling of tension and anxiety, which is over in one week. The first two weeks after entering treatment, alcoholics are also realistically anxious and worried about their personal situation. For this reason, attention should be paid only to symptoms occurring after two weeks of abstinence. An accurate history to document the chronology of development of both alcoholism and anxiety states is also negatively affected by the gradual onset of alcohol problems (5-20 years), and cognitive disturbances. Specialists under-report alcoholism also for their own attitudes and drinking patterns. A limited exposure to a formal substance-abuse curriculum make them reluctant to treat alcohol withdrawal. They may be discouraged also by the time demands to their busy practice to maintain abstinence, and by the family pressure to identify a psychological cause to alcohol problems. As a result psychiatrists over-prescribe benzodiazepines or antidepressants instead of using drugs to inhibit drinking behavior. Abstinent subjects with an anxiety disorder are actually less than 10%.

S3. The neuroendocrinology of depression

Chairmen: S Checkley, W Hoogendijk

HPA REGULATION IN DEPRESSION

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In relation to the hypothalamic pituitary adrenal (HPA) axis the neuroendocrinology of depression is very similar to the neuroendocrine consequences of chronic stress in experimental animals. Both are characterized by an increased central drive of the HPA axis, impairment of its delayed negative feedback control (as tested in man in the dexamethasone suppression test), and hypertrophy of the adrenal glands. Impairment of the fast feedback of the ACTH by rapidly rising plasma corticosteroid concentration is also seen in nanimals exposed to chronic stress. We now report the same change in patients with depression: a progressively faster rate of hydrocortisone inhibited the secretion of ACTH in 10 healthy controls but not in 10 depressed patients of the same age and sex.

All these changes contribute to the increased secretion of cortisol which is seen in major depression. The measurement of cortisol in saliva provides a convenient way to monitor the effects of environmental stress on cortisol in depressed patients. Data will be presented on the effects of meals, arguments and intrusive negative thoughts. The importance of hypercortisolaemia in depression is emphasized by our recent finding that depression can be detected by inhibiting the synthesis of cortisol using metyrapone.

THE ROLE OF ADRENAL STEROIDS IN BRAIN FUNCTION AND DYSFUNCTION WITH PARTICULAR REFERENCE TO CORTISOL AND DHEA

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Dysregulation of peripheral cortisol is a well-known feature of a proportion of patients with major depressive disorder, though its significance is still debated. It is important to distinguish feedback (dexamethasone) insensitivity from hypercortisolaemia. There is now evidence that cortisol may have direct actions both on cerebral function and structure, including the induction of hippocampal damage. Administration of corticoids alter both cognitive ability and affective states, though whether the hypercortisolaemia of depression contributes either to symptoms or to onset is still unclear. A recent study in adolescents showed that about 30% had evening hypercortisolaemia and that this was significantly associated with the presence of co-morbid dysthymia, suggesting a distinct pathophysiological state. Abnormalities of DHEA in depression are also becoming evident. About 30% of depressed adolescents had low morning DHEA, though less than half overlapped with those showing evening hypercortisolaemia. The differences between cortisol and DHEA in both incidence and diurnal pattern suggests distinct psychopathological mechanisms. Experimental evidence suggests that DHEA might have a powerful anti-glucocorticoid action, so that low levels (from whatever cause) might accentuate cortisol-induced brain dysfunction or damage. DHEA also acts directly on GABA receptors, and this mechanism may also contribute to depressive states. These findings open up new prospects for understanding more about the contribution of disordered steroids to depression.