the contribution of different frequencies to the EEG signal) for the various sleep and waking stages. Power spectra were calculated per 2 sec epoch and were averaged for each of the 6 sleep-wake stages and for each rat on an hourly basis. These spectra were normalized with respect to the baseline power spectra obtained before drug administration. T-test comparisons were then made between placebo and drug treatment groups per 0.5 Hz spectral line. The ensuing t-profiles of power spectral changes were similar for all antidepressants studied and consisted of a broadband power decrease above 8 Hz, which was much more prominent for slow wave sleep and quiet sleep than for waking EEG. Mirtazapine in contrast to fluoxetine, moclobemide, desipramine further produced a 3–7 Hz power increase for all sleep and waking stages, which might be related to the observed enhancement of deep slow wave sleep after mirtrazapine. For REM sleep EEG complex patterns of spectral changes, consisting of a 1–7 increase combined with a power decrease between 7 and 10 Hz and from 20 to 60 Hz, were observed for all the antidepressants studied. This pattern of REM sleep changes could not be observed for other psychotropic drugs, suggesting that all antidepressants, including the novel antidepressant mirtazapine, produce a characteristic effect on rat REM sleep EEG.

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DEPRESSION AND PERCEPTIONS OF HEALTH STATUS: EFFECT OF DEPRESSIVE SYMPTOMS ON SF-36 RATINGS IN CHRONIC PHYSICAL ILLNESS

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Background and Objectives: The SF-36 questionnaire devised for the Medical Outcomes Study is widely used as an outcome measure in research on medical or surgical interventions, and as a measure of quality of life. Responses to the SF-36, as with other similar self-report measures, would be expected to be significantly influenced by the presence of depressive symptoms. Depression leads to systematic bias in appraisal, including that of illness and its consequences. Among people with a chronic physical illness, depressive symptoms lead patients to report more functional impairment and greater pain, regardless of objective measures of disease status. Given the high prevalence of depressive symptoms in patients with chronic illnesses, this effect of depression is likely to be clinically significant. The present study therefore aimed to test the hypothesis that SF-36 scores correlate significantly with depression ratings.

Methods: Patients with rheumatoid arthritis attending a rheumatology outpatient clinic at a district general hospital were asked to compete a battery of questionnaires, including the SF-36, the Hospital Anxiety and Depression Scales (HADS) and the Rheumatoid Arthritis Disease Activity Index (RADAI), a brief self-report measure which correlates with physician ratings of disease activity such as joint tenderness and swelling, and grip strength.

Results: Questionnaires were completed by 89 patients. Scores on the RADAI correlated significantly with each of the SF-36 subscales. However, there were also significant correlations ($p < 0.01$) between the HADS depression score and all the SF-36 subscales, with the exception of the emotional role subscale. These correlations were greatest for SF-36 general health ($r = -0.62$), mental health ($r = 0.62$) and social functioning ($r = 0.61$) subscales.

Conclusions: These results provide strong support for the study hypothesis. While the SF-36 may be a useful measure of overall quality of life or health service utilization (since depression and physical status may each influence these), the results cast doubt on the validity of the SF-36 as a global outcome measure for interventions in chronic illness, where depressive symptoms are common but often independent of the intervention under study.

CHANGES OF PATTERN IN UTILISATION OF HOSPITAL SERVICES AFTER ADMISSION TO THERAPEUTIC RESIDENTIAL FACILITIES

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An analysis of utilisation data was conducted for 218 residents from nine different residential facilities, i.e. halfway houses, group homes and sheltered apartments. Data for each patient were obtained from the Division of Scientific Documentation of the Central Institute of Mental Health for five different categories: hospital admission, emergency and outpatient services, day clinic and liaison service within a general hospital.

Utilisation was calculated per year for the periods before and after admission to the current therapeutic facility. In all 1840 contacts were counted since the beginnings of the Central Institute in 1972, amounting to a mean of 8.4 contacts per patient with a range from 0 to 55 contacts. Utilisation of the Central Institute increased from 0.85/year before admission to 1.04/year after admission to the respective institution. Further analysis revealed this finding to be due to an increase in utilisation of emergency services (0.35/year vs. 0.6/year), while utilisation of services in all other categories remained stable or decreased. Especially the number and proportion of hospital admissions was reduced significantly as was the length of stay in hospital and day clinic.

We conclude that admission to therapeutic residential facilities does not reduce overall utilisation rates of hospital services. However, according to our results, it is associated with a substantial reduction in hospital admissions and length of stay in hospital. This indicates not only a higher level of quality of life for the respective population, but also a possible cost saving effect generated by therapeutic institutions like halfway houses and group homes.

DEPRESSION WITH AND WITHOUT CONCURRENT PANIC ATTACKS: DIFFERENCES IN THYROID ECONOMY

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The abnormalities of Thyroid stimulating hormone (TSH) response to Thyrotropin releasing hormone (TRH) has been reported both in depressed and panic patients. In the present study TRH test was performed in 28 depressed women. Patients were divided by the presence ($n = 10$) or absence ($n = 18$) of concurrent panic attacks and compared their TRH test results. All patients were screened for the microsomal thyroid antibodies.

There were no significant differences in basal thyroid hormones (thyroxin and triiodothyronine) levels. Basal TSH tended to be lower in depressives with panic attacks in comparison to depressives without panic (1.51 ± 1.08 vs. 3.38 ± 0.85, $p < 0.1$) and TSH response to TRH stimulation (dmaxTSH) was significantly lower (5.73 ± 3.01 vs. 12.91 ± 2.41, $p < 0.05$). Basal TSH correlated significantly to dmaxTSH in depressed patients without panic attacks only ($r = 0.80$, $p < 0.001$). One patient (10%) in panic group and three (16.7%) in depression group had titre of microsomal thyroid antibodies higher than 1:2560, suggesting autoimmune thyroiditis.

The present study suggests that depressed patients with concur-

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rent panic attacks differ in thyroid economy from depressed patients without panic.

SAFETY AND TOLERABILITY OF COMBINED SPECIFIC SEROTONIN REUPTAKE INHIBITORS, AND REVERSIBLE MONOAMINEOXIDASE INHIBITOR A (MOCLOBEMIDE)

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Moclobemide is a new and a Reversible Inhibitor of Monoamine A (RIMA). It is of benzamide type and contains a morphine-ring as a characteristic part of its structure. Its selectivity and reversibility has contributed to the reduction of risk in combination with serotonergic substances. This enables users of Moclobemide to be given other antidepressants safely and effectively and for patients on other antidepressants to be changed to Moclobemide without significant risk.

All patients received Moclobemide in doses range of 150–900 and average dose of 300 mg 79 patients were on doses between 150–300 mg, 23 on dose range 450–600 mg, and one patient on a dose of 900 mg. 60 patients received a concomitant Fluoxetine in a minimal dose of 20 mg q.d, 23 patients were on concomitant Citalopram in a minimal dose of 20 mg a day, 12 patients were on concomitant Paroxetine in a minimal dose of 20 mg, and 7 patients were on concomitant Fluvoxamine in a minimal dose of 50 mg.

No patient has encountered a significant serotonergic syndrome. Two patients reported symptoms that can be interpreted as such. Side effects observed were similar to the known side effects of SSRIs. No patient had to stop the drugs because of intolerance of side effects, although some have because of lack of significant benefit. The details of side effect profiles of each combination will be discussed, plus a correlative analysis of these side effects to response rate, and other clinical parameters will be pointed out.

D-FENFLURAMINE RESPONSES IN DEPRESSION BEFORE AND AFTER ANTIDEPRESSANT TREATMENT

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Methods: D-Fenthuramine, a specific serotonin releasing agent, was used as a neuroendocrine challenge in 19 subjects with DSM-IIIR major depression. 15/19 were psychotropic drug naive; all were drug free for 3 months. Results were compared before and after antidepressant treatment, and with 19 healthy controls matched for age, sex, weight and phase of menstrual cycle. Prolactin and cortisol responses, calculated as peak responses and area under the curve, were used as an index of functional central 5-HT activity.

Results: Compared to controls, 5-HT mediated prolactin and cortisol responses were both significantly attenuated in the depressed group. Within the depressed group, patients with a history of a suicide attempt had lower cortisol responses than those without. Prolactin responses, but not cortisol responses, rose significantly after antidepressant treatment, irrespective of treatment response. Seven patients received a specific noradrenergic reuptake inhibitor, either desipramine or Org-4428. Analysed separately, these patients also showed a rise in prolactin responses with treatment. Cortisol responses were inversely related to baseline cortisol levels, as were prolactin responses in males only. Montgomery-Asberg Depression Rating Scale scores, Bech Melancholia Scale scores, and 5/8 subscales of the Brief Symptom Inventory (depression, anxiety, phobic, obsessive-compulsive and interpersonal sensitivity) were all inversely correlated to cortisol responses.

Conclusions: These findings provide further support for the 5-HT hypothesis of depression, and re-iterate the role of reduced 5-HT activity in suicide. The importance of hypercortisolaemia in this reduced monoamine activity is suggested by the inverse correlations between 5-HT responses and basal cortisol levels. Finally, antidepressants enhance serotonergic functioning, but this occurs independently of treatment response, and is a property shared by drugs which specifically affect noradrenaline reuptake.

BURDEN OF CARE, PSYCHOLOGICAL DISTRESS AND SATISFACTION WITH SERVICES IN THE RELATIVES OF ACUTELY MENTALLY DISORDERED ADULTS

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Aims and Methods: The study aimed to examine the views of relatives nominated as the 'most significant other person' by acutely mentally disordered patients who were newly referred to either a community based (n = 24) or a district general hospital based (n = 17) psychiatric service. Relatives were asked about their satisfaction with these services, the psychological impact on them of caring for a mentally disordered relative and the levels of subjective and objective burden of care at the time of referral and six months later.

Results and Conclusions: The characteristics of the total sample were similar to those reported in other studies of relatives in terms of participation rate, satisfaction levels, psychological distress and burden of care scores. The findings suggested that the initial severity of an acute psychiatric disorder rather than the type of psychiatric service provided was more strongly associated with objective and subjective levels of burden. At follow-up, psychological distress as measured on the General Health Questionnaire (GHQ) was associated with the objective burden of caring for a relative with psychosis or major affective disorder, but not other conditions. Dissatisfied relatives tended to be those who remained distressed at six months according to GHQ scores or those recording continually high levels of subjective burden on the Burden of Care Schedule. Interventions to reduce subjective and objective burden should be targeted at the group demonstrating persistent stress.

IMPULSIVITY IN A SAMPLE OF DEPRESSED PATIENTS WITH OR WITHOUT SUICIDE ATTEMPTS

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Suicide is a major risk of depression, although it remains difficult to predict. Impulsivity may be a relevant dimension in the prediction of suicide attempts in depressed patients. The main hypothesis being that depressed patients who attempted suicide before admission are more impulsive than depressed patients who did not.

55 newly admitted in-patients fulfilling DSM-III-R criteria for major depressive disorder, with a MADRS score > 20 have been assessed for depressive symptomatology and impulsivity. Among these patients, 17 attempted suicide during the week prior to their admission whereas 38 did not. These two groups have been compared.

For depressive symptomatology, assessment criteria were the Montgomery and Asberg Depression Rating Scale (MADRS, 1979), the Depressive Retardation Scale (DRS, Widlöcher, 1983) and the Symptom Check List — 90 items, revised (SCL-90-R, Derogatis, 1977). The impulsivity assessment criteria were the Baratt Impulsivity Scale (Baratt et al, 1965), a 30 items questionnaire and the Impulsivity Rating Scale (Lecrubier et al, 1995), a 7 items scale.

Results will be discussed regarding suicide attempts, depres-

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