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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