

# Psychiatric Briefs

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## Health and Disability Costs of Depressive Illness in a Major U.S. Corporation

Druss BG, Rosenheck RA, Sledge WH

**Objective:** Employers purchase nearly nine tenths of all private health insurance in the United States and thus wield great influence in shaping the specifics of health coverage. The authors compared the costs of ICD-9–defined depression with those associated with 4 other chronic medical conditions determined by ICD-9 criteria (heart disease, diabetes, hypertension, and back problems) for employees of a major U.S. corporation. **Method:** Mental health costs, general medical costs, number of sick days, and total health and disability costs for depression and the 4 other medical conditions were obtained from records of 15,153 employees of a large U.S. corporation. The authors compared data associated with depression with those related to the other conditions, controlling for demographic and work-related variables. **Results:** The health care costs associated with depression were comparable to those associated with the other 4 conditions and significantly greater than costs incurred by employees without any of the assessed conditions ( $p < .001$ ). The mean total health-related cost for depression (\$5415) was significantly greater than that associated with hypertension ( $p = .002$ ) and similar to costs related to the other 3 medical conditions. The comorbidity of depression with any of the other 4 conditions was 1.7 times more costly than the individual condition alone. Depressed employees took significantly more sick days than those with any other condition (mean = 9.86 days;  $p \leq .04$ ); within the subgroup of depressed employees, those younger than 40 years old took 3.5 more sick days per year than those at least 40 years of age. **Conclusions:** The financial burden of depression on employers is as great as that associated with other chronic medical conditions. The comorbidity of depressive illness with other medical conditions is associated with costs that nearly double those of any of the conditions alone. The higher costs associated with a greater number of sick days taken by younger depressed employees are a possible harbinger of even greater depression-related costs incurred by this group of workers as they age.

(*Am J Psychiatry* 2000;157:1274–1278)

## Psychological Responses of Women After First-Trimester Abortion

Major B, Cozzarelli C, Cooper ML, et al.

**Background:** Although legal, elective abortion is a common procedure, questions about possible mental health risks associated with abortion persist. This study examined the abortion-related emotions and overall mental health of women before and after a first-trimester abortion of an unintended pregnancy. **Method:** Women at 3 abortion providers ( $N = 1043$ ) were randomly asked to participate in the study; 882 (85%) entered the study. Participants underwent assessments 1 hour before abortion and 1 hour, 1 month ( $N = 615$ ), and 2 years ( $N = 442$ ) after abortion. Assessments included preabortion and postabortion

depression and self-esteem, positive and negative emotions after abortion, satisfaction with the decision to have an abortion, perception of harm, and posttraumatic stress disorder (PTSD). **Results:** Two years after abortion, relief was experienced by subjects more often than either positive or negative emotions, and decision satisfaction was more common than dissatisfaction (72% vs. 16%). In addition, 69% of women reported 2 years postabortion that they would make the same decision to have the abortion, and 72% noted more benefit than harm due to the abortion. Depression was reported in 20% of women and PTSD in 1% at 2-year follow-up. Although depression was lower and self-esteem was higher after than before abortion, negative emotions increased and decision satisfaction decreased over 2 years. Women with a history of depression before pregnancy had higher incidence of depression, lower self-esteem, and more negative abortion-related emotions and evaluations after 2 years. Younger age and greater number of live births before abortion were associated with negative evaluation of abortion. **Conclusions:** Although some women experienced psychological problems and regret after having an abortion, most did not. History of depression before pregnancy consistently predicted poorer postabortion mental health.

(*Arch Gen Psychiatry* 2000;57:777–784)

## Tobacco Consumption in Swedish Twins Reared Apart and Reared Together

Kendler KS, Thornton LM, Pedersen NL

**Background:** Although research has shown a genetic influence on regular tobacco use (RTU) in twins reared together, genetic and environmental sources of twin similarities can be confounded in such twin studies. This study aimed to differentiate environmental from genetic influences on RTU by studying tobacco consumption in both reared-together and reared-apart twins. **Method:** RTU was assessed by self-report in 778 same-sex, reared-together and reared-apart twin pairs born 1890–1958. The twins were selected from the Swedish Adoption/Twin Study of Aging subregistry of the Swedish Twin Registry. **Results:** Both genetic and rearing-environmental factors appeared to influence RTU in men: genetic effects accounted for 61% and rearing-environmental effects accounted for 21% of the variance in liability to RTU in the best-fit biometrical model. The influences of heredity and environment on RTU were difficult to discern in female twin pairs overall, but were clearer within individual age groups: RTU was rare and generally influenced by environmental factors in women born before 1925 and was more frequent and increasingly influenced by genetic factors in women born in 1925 or later (in fact, RTU rates in women born after 1940 were comparable to those in men). **Conclusions:** Genetic effects play an important role in shaping vulnerability to RTU in both men and women. The increasing influence of heritability on RTU in women most likely is due to the decrease in social restrictions on smoking in women.

(*Arch Gen Psychiatry* 2000;57:886–892)

### Sex-Specific Genetic Influences on the Comorbidity of Alcoholism and Major Depression in a Population-Based Sample of U.S. Twins

Prescott CA, Aggen SH, Kendler KS

**Background:** Both clinical and epidemiologic studies have found frequent co-occurrence of alcoholism and depression, although distinguishing between genetic and environmental causes of comorbidity has proved difficult. Because patients in treatment settings may have greater comorbidity, different causes of disease, and disease of greater severity than epidemiologically identified individuals, the authors used a population-based twin sample to study the genetic influences of comorbidity of major depression and alcoholism. **Method:** The authors used structured interviews to identify lifetime major depression, alcohol abuse, and alcohol dependence in 3755 pairs of twins from the Mid-Atlantic Twin Registry. Structural equation models were used to analyze genetic and environmental contributions to twin-pair resemblance in liability to depression and alcoholism. **Results:** The risk for both alcohol dependence and the combined diagnosis of alcohol abuse and/or dependence was increased in individuals with major depression. Cotwins in both male and female identical twin pairs were at greater risk for alcohol abuse and/or dependence than cotwins in male or female fraternal twin pairs. Comorbidity of disorders was credited to the overlapping of sex-specific genetic and environmental risk factors for major depression with those for alcohol dependence and alcohol abuse and/or dependence. **Conclusions:** In this twin population, depression and alcohol dependence had overlapping, but not identical causes. The comorbidity of depression and alcoholism appears to be influenced by sex-specific risk factors. In particular, the risk factors for depression in women appear to differ from the risk factors for alcohol dependence in men.

(*Arch Gen Psychiatry* 2000;57:803–811)

### Treatment of Depression With Methylphenidate in Patients Difficult to Wean From Mechanical Ventilation in the Intensive Care Unit

Rothenhäusler H-B, Ehrentraut S, von Degenfeld G, et al.

**Background:** Mechanical ventilation is often required to support patients in the intensive care unit (ICU) with life-threatening cardiovascular, respiratory, or neuromuscular disorders. Occasionally, difficulties related to weaning patients from this support occur owing to depression. The traditional and newer-generation antidepressant drugs have a relatively long latency of response that interferes with rehabilitation attempts in the ICU. Psychostimulants such as methylphenidate show a rapid onset of antidepressant activity and a benign side effect profile. **Method:** As consulting psychiatrists in the consultation-liaison service of a university hospital, we treated 7 patients with complex ICU courses presenting prolonged mechanical ventilation and psychomotor retardation associated with markedly depressed mood (DSM-IV criteria) by giving them methylphenidate. Methylphenidate was started on the first day at a

dose of 2.5 mg p.o. in the morning and was increased by 2.5 mg each day with twice-a-day dosing in the morning and at noon until the patient responded or showed side effects. A maximum dose of 15 mg/day was not exceeded. Outcome evaluation was performed using the Clinical Global Impressions scale. **Results:** Five (71%) of 7 patients showed marked or moderate improvement in mood and activity within 3 to 4 days, and discontinuation of ventilator support was achieved within 8 to 14 days. Side effects with these 5 patients were not encountered. Of the remaining 2 patients (29%), 1 developed psychomotor agitation and anxiety within 4 days. Another patient showed only minimal improvement with regard to activity. **Conclusion:** Methylphenidate might be a rapidly effective and safe treatment for depression in difficult-to-wean patients hospitalized for life-threatening medical illness in the ICU. Implications for future research for this population of patients warrant formal randomized, prospective, clinical case-control evaluation.

(*J Clin Psychiatry* 2000;61:750–755)

### The Relationship Between Quality of Interpersonal Relationships and Major Depressive Disorder: Findings From the National Comorbidity Survey

Zlotnick C, Kohn R, Keitner G, et al.

**Background:** Although individuals with major depressive illness often have difficulties in their interpersonal relationships, past research had not ascertained whether distress in such relationships was specifically due to depression or to psychiatric illness in general. The present study compared the quality of interpersonal relationships among depressed individuals, subjects who had no history of psychiatric illness, and individuals with nonaffective disorders. **Method:** The association between mental illness and impairment of interpersonal relationships was measured in individuals with DSM-III-R major depressive disorder, individuals with nonaffective DSM-III-R disorders, and individuals with no history of psychiatric illness. Data were drawn from the National Comorbidity Survey (NCS) and were analyzed using logistic regressions. **Results:** A smaller number of positive interactions and a greater number of negative interactions with spouses or cohabitating partners were reported in persons with current major depression compared with those with nonaffective disorders and those with no psychiatric illness history. No significant difference in the quality of interpersonal relationships was found between individuals with major depression and those with dysthymia. Neither treatment-seeking status nor presence of comorbid illness was related to differences in quality of personal relationships among individuals with major depression. Gender did not, in general, influence the association of major depression with poor interpersonal relationships. **Limitations:** A causal relationship between major depression and interpersonal dysfunction could not be ascertained owing to the cross-sectional design of this study. **Conclusions:** The results of this study indicate that the level of impairment in interpersonal relationships in depressed individuals exceeds that associated with mental illness in general.

(*J Affect Disord* 2000;59:205–215)

### The Implications of Genetic Studies of Major Mood Disorders for Clinical Practice

Duffy A, Grof P, Robertson C, et al.

**Background:** This article is a selective review and synthesis of relevant research findings from genetic studies of major mood disorders and the application of these to clinical practice. **Method:** The article discusses the application of genetic research findings in major mood disorders, including epidemiologic and family study risk estimates, risk modifiers, and the concepts of etiologic and phenotypic heterogeneity, to 3 clinical domains: risk counseling, diagnosis, and treatment prediction. **Results:** Epidemiologic and family studies have provided general risk estimates useful in counseling mood-disordered patients and their relatives. A complete and accurate family pedigree provides more individualized risk estimates for specific cases and is useful in identifying the phenotypic spectrum of the disorder being transmitted in the family. Both proband course parameters and familial loading for psychiatric illnesses may be relevant for the prediction of treatment response. However, the hypothesis of inherited pharmacologic selectivity remains to be proven. **Conclusion:** Genetic studies of mood disorders have not yet provided conclusive evidence of specific susceptibility genes or their pattern of inheritance. However, they have generated information that is useful to clinical practice.

(*J Clin Psychiatry* 2000;61:630–637)

### Restlessness of Respiration as a Manifestation of Akathisia: Five Case Reports of Respiratory Akathisia

Hirose S

**Background:** Akathisia is a feeling of subjective or inner restlessness, which causes excessive, semipurposive movements, commonly in the legs. However, restlessness in respiration, which presents as dyspnea but is best characterized as the sensation of being unable to breathe in a relaxed manner, has never been reported. **Case Reports:** Five cases are reported in which dyspnea as a sign of akathisia followed the administration of antipsychotic medications. The clinical features of dyspnea were examined, and all patients manifested both subjective and objective restlessness. The dyspnea was characterized subjectively by the patients' inner feeling of restlessness in respiration, which was perceived as an inability to breathe in a leisurely, relaxed manner, and objectively as restless movements of respiration such as gasping or sighing. The dyspnea was momentarily suppressed when a patient took a quick, full breath to relieve the perceived restlessness and was exacerbated when the patient kept the respiration still. Response to medications commonly used in the treatment of akathisia was also examined in an open, uncontrolled therapeutic trial for each patient. The administration of such medications completely alleviated the respiratory restlessness. **Conclusion:** Restlessness in respiration, which clinically presents as dyspnea, may be a manifestation of akathisia. This type of akathisia could be referred to as *respiratory akathisia*.

(*J Clin Psychiatry* 2000;61:737–741)

### Psychiatric Care of Patients With Depression and Comorbid Substance Use Disorders

Montoya ID, Svikis D, Marcus SC, et al.

**Background:** The goal of this study was to describe the sociodemographic and clinical characteristics and routine psychiatric care of depressed patients with or without substance use disorders (SUDs) and to assess the association between the presence of comorbid SUD and the psychiatric management of patients with depression. **Method:** Each of a sample of 531 psychiatrists participating in the Practice Research Network (PRN) of the American Psychiatric Institute for Research and Education was asked to provide information about 3 randomly chosen patients. Data were collected using a self-administered questionnaire, which generated detailed diagnostic and clinical data on 1228 psychiatric patients. Weighted data were analyzed using the SUDAAN software package. Multivariate logistic regression was used to compare depressed patients with and without SUD. **Results:** A total of 595 patients (48.4%) were diagnosed with depression (DSM-IV criteria). The prevalence of SUD (excluding nicotine dependence) in this group was 18.1%. The group with SUD had a significantly larger proportion of males, young adults, and patients seen in public general hospitals and non-managed care public plans. No significant group differences were found for primary payer, locus of care, length of treatment, type of current or past treatment, and prescription of medications. Only 2.2% of SUD patients were prescribed with an anti-SUD medication (i.e., disulfiram and naltrexone). **Conclusion:** Concomitant SUDs have little effect on the routine psychiatric care of depressed patients. Efforts should be made to improve the identification and management of depressed patients with SUD.

(*J Clin Psychiatry* 2000;61:698–705)

### A Randomized, Double-Blind, Placebo-Controlled Trial of Moclobemide in Patients With Chronic Fatigue Syndrome

Hickie IB, Wilson AJ, Wright JM, et al.

**Background:** Chronic fatigue syndrome is characterized by prolonged and disabling fatigue and a range of neuropsychiatric symptoms including depressed and/or irritable mood. To date, no medical or psychotropic therapies have provided clear symptomatic benefit. **Method:** Ninety patients with chronic fatigue syndrome, diagnosed with our system that approximates CDC criteria, participated in a randomized, placebo-controlled, double-blind trial of 450 to 600 mg/day of moclobemide, a novel reversible inhibitor of monoamine oxidase-A. **Results:** Fifty-one percent (24/47) of patients receiving moclobemide improved compared with 33% (14/43) of patients receiving placebo (odds ratio = 2.16, 95% confidence interval [CI] = 0.9 to 5.1). Drug response was best characterized symptomatically by an increase in the subjective sense of vigor and energy rather than a reduction in depressed mood. The effect of moclobemide on subjective energy was detectable within the first 2 weeks of treatment and increased across the course of the study. The greatest reduction in clinician-rated disability was in patients with concurrent im-

munologic dysfunction (mean difference in standardized units of improvement = 0.8, 95% CI = 0.03 to 1.6). **Conclusion:** Moclobemide produces some improvement in key symptoms experienced by patients with chronic fatigue syndrome. This effect is not dependent on the presence of concurrent psychological distress and is likely to be shared with other monoamine oxidase inhibitors.

(*J Clin Psychiatry* 2000;61:643–648)

### Attention, Memory, and Motor Skills as Childhood Predictors of Schizophrenia-Related Psychoses: The New York High-Risk Project

Erlenmeyer-Kimling L, Rock D, Roberts SA, et al.

**Objective:** The authors studied the relationship between childhood neurobehavioral deficits and adult schizophrenia-related psychoses by evaluating offspring of schizophrenic, affectively ill, and healthy parents. **Method:** Deficits in 3 areas of neurobehavioral function (attention, verbal memory, and gross motor skills) were measured when the offspring were 7 to 12 years old. The offspring were later evaluated in mid-adulthood by Schedule for Affective Disorders and Schizophrenia–Lifetime Version interviews and categorized according to the axis I diagnoses of schizophrenia-related psychoses, major affective disorders, or other major axis I disorders. Logistic regression equations were used to identify relationships between childhood neurobehavioral deficits and axis I disorders. **Results:** A connection between neurobehavioral deficits and later development of schizophrenia-related psychoses was observed in the offspring of schizophrenic parents: 83% had childhood deficits in verbal memory; 75%, in gross motor skills; 58%, in attention; and 50%, in all 3 domains. Deficits found in offspring who did not develop schizophrenia-related psychoses ranged from 18% in those with attention deficits in childhood to 28% in those with memory deficits. Offspring from the other 2 parent groups had low neurobehavioral deficit rates, and the 3 neurobehavioral deficit categories showed no association with axis I disorders other than schizophrenia in offspring from any parental group. **Conclusions:** Childhood deficits in attention, memory, and gross motor skills denote a subsequent risk for development of schizophrenia-related psychoses in adulthood. These neurobehavioral deficits appear to be specific to schizophrenia versus other disorders and very likely indicate a genetic susceptibility to schizophrenia.

(*Am J Psychiatry* 2000;157:1416–1422)

### Alternative Therapies, Part 1: Depression, Diabetes, Obesity

Morelli V, Zoorob RJ

The rise in the use of nutritional supplements in the United States has outpaced research that objectively confirms the efficacy and safety of these compounds; thus, physicians should be aware of the claims made for and possible risks associated

with natural compounds that are recommended with growing frequency for the treatment of a variety of medical conditions. The authors discuss the role that nutritional supplements can play in treating depression, diabetes, and obesity. Natural treatments for depression include St. John's wort (*Hypericum perforatum*), which has been shown to be effective in treating mild-to-moderate (but not severe or treatment-refractory) depression, and exogenous S-adenosylmethionine, which has demonstrated short-term (but not long-term) effectiveness in treating depression. Both supplements have favorable side effect profiles in the short term, but further research is needed to confirm their safety and efficacy in long-term treatment. Chromium picolinate, garlic, and  $\alpha$ -lipoic acid have shown varying levels of success in treating diabetes, but a greater number of human studies are needed before these compounds can be recommended. Likewise, although ma huang, guarana, the ephedrine/caffeine combination, garcinia, and guggul gum carry claims of effectiveness in treating obesity, such claims have not received conclusive backing by research studies.

(*Am Fam Physician* 2000;62:1051–1060)

### Venlafaxine Monotherapy in Women With Bipolar II and Unipolar Major Depression

Amsterdam JD, Garcia-España F

**Background:** Gender differences in the presentation of bipolar I disorder suggest that women with bipolar II disorder may also be more susceptible to drug-induced switches to mania and to the development of depressive episodes. However, recent studies have found antidepressant monotherapy to be safe and effective in treating patients with bipolar II major depressive episodes. The authors compared the safety and efficacy of venlafaxine monotherapy for bipolar II and unipolar major depressive episodes in a post hoc analysis. **Method:** Fifteen women with DSM-IV bipolar II major depressive episodes (mean  $\pm$  SD age = 37  $\pm$  12 years) and 17 women with DSM-IV unipolar major depressive episodes (mean age = 41  $\pm$  12 years) were randomly assigned to 6 weeks of either once- or twice-daily double-blind monotherapy with venlafaxine, up to 225 mg/day. The 21-item Hamilton Rating Scale for Depression, the Montgomery-Asberg Depression Rating Scale, and the Clinical Global Impressions scale were used to measure efficacy of treatment. The authors assessed the presence of drug-induced switches to mania at weekly visits. **Results:** Neither rapid cycling nor drug-induced hypomania was observed in the bipolar patients, for whom venlafaxine treatment had efficacy comparable to that experienced by the patients with unipolar depression. **Limitations:** The small sample size, short treatment duration, and exclusion of bipolar I subjects are limitations that may have influenced the observed drug efficacy and produced the lack of drug-induced manic switching in this study. **Conclusions:** In women with bipolar II major depressive episodes, short-term venlafaxine monotherapy may prove efficacious without inducing a switch to mania.

(*J Affect Disord* 2000;59:225–229)