

Psychiatric Briefs

Hospital Nurse Staffing and Patient Mortality, Nurse Burnout, and Job Dissatisfaction

Aiken LH, Clarke SP, Sloane DM, et al.

Background: With a growing shortage of hospital nurses and recent legislation in California requiring minimum ratios of hospital patients to nurses comes a need to understand the ways that nurse staffing levels affect patient outcomes and nurse retention in hospital practice. This study was conducted to determine the relationship of patient-to-nurse ratio to patient mortality, failure-to-rescue (deaths following complications) among surgical patients, and aspects of nurse retention.

Method: Cross-sectional analyses were conducted of linked data from 10,184 staff nurses who were surveyed; 232,342 general, orthopedic, and vascular surgery patients discharged from the hospital between April 1, 1998, and November 30, 1999; and 168 nonfederal adult general hospitals in Pennsylvania. The chief outcome measures were risk-adjusted patient mortality and failure-to-rescue within 30 days of admission as well as job dissatisfaction and job-related burnout as reported by nurses.

Results: After adjustments were made for patient and hospital characteristics (the latter included size, teaching status, and technology), each additional patient per nurse was associated with a 7% increase in the likelihood of dying within 30 days of admission (odds ratio [OR] = 1.07, 95% CI = 1.03 to 1.12) and a 7% increase in the odds of failure-to-rescue (OR = 1.07, 95% CI = 1.02 to 1.11). After adjustments were made for nurse and hospital characteristics, each additional patient per nurse was associated with a 23% increase in the odds of burnout (OR = 1.23, 95% CI = 1.13 to 1.34) and a 15% increase in the odds of job dissatisfaction (OR = 1.15, 95% CI = 1.07 to 1.25).

Conclusions: Surgical patients in hospitals with high patient-to-nurse ratios have higher risk-adjusted 30-day mortality and failure-to-rescue rates; nurses in such hospitals are more likely to experience job dissatisfaction and burnout.

(*JAMA* 2002;288:1987–1993)

Traumatic Grief Treatment: Case Histories of 4 Patients

Harkness KL, Shear MK, Frank E, et al.

Background: Traumatic grief treatment is a newly developed intervention for a debilitating bereavement-related condition. Traumatic grief treatment uses imaginal and in vivo exposure techniques to target emotional distress and behavioral avoidance hypothesized to be core features of the syndrome, along with interpersonal psychotherapy techniques to engage patients and maintain rapport. The present report describes 4 case histories of patients treated in this way. **Method:** Each patient met

our criterion for traumatic grief, defined as a score of at least 25 on the Inventory of Complicated Grief. Additionally, all 4 patients met DSM-IV criteria for a current episode of major depression and 1 patient for bipolar II disorder. The treatment course followed a direct replication design and ranged from 14 to 18 weekly 60- to 90-minute sessions. **Results:** These 4 cases illustrate reduction in distress during exposure to painful emotional memories and avoided situations that was associated with decreased scores on measures of traumatic grief, depression, and anxiety and increased participation in and enjoyment of daily-life activities. **Conclusion:** Case histories of traumatic grief treatment suggest it is a promising treatment for individuals suffering from traumatic grief. It appears that imaginal reliving and in vivo exposure are effective in reducing grief intensity and lead to reduction in symptoms.

(*J Clin Psychiatry* 2002;63:1113–1120)

Mental Health Services for Latino Adolescents With Psychiatric Disorders

Hough RL, Hazen AL, Soriano FI, et al.

Objectives: This study had 2 major objectives: (1) to learn the prevalence of mental disorders among Latino adolescents receiving services in at least 1 of 5 public sectors of care in San Diego County (Calif.) and (2) to ascertain the use of mental health services among these individuals. **Methods:** A random sample of 1164 Latino adolescents receiving public-sector care was taken. For these individuals, the Diagnostic Interview Schedule for Children was used to assess mental disorders and the Service Assessment for Children and Adolescents was used to assess utilization of mental health services. **Results:** Among Latino adolescents, rates of disruptive disorders were significantly lower than among white adolescents. Latino adolescents with psychiatric disorders were significantly underserved compared with white adolescents with such disorders, even though more than 50% of the Latino sample received specialty mental health services. Compared with their white counterparts, Latino adolescents with psychiatric disorders entered mental health services at a later age and had made significantly fewer visits to mental health services in the past year. In addition, multivariate analyses found that, independent of diagnosis, gender, age, and the service sector from which they were selected, Latino adolescents were significantly less likely than white youths to use specialty mental health services. **Conclusions:** It is incumbent upon public service systems to make sure that Latino adolescents receive appropriate assessments for disruptive disorders and that they are given appropriate specialty mental health care. (*Psychiatr Serv* 2002;53:1556–1562)

Cost-Effectiveness and Cost Offset of a Collaborative Care Intervention for Primary Care Patients With Panic Disorder

Katon WJ, Roy-Byrne P, Russo J, et al.

Background: Improved symptomatic and functional outcomes for panic disorder patients resulted from a collaborative care (CC) intervention that provided increased patient education and integrated a psychiatrist into primary care. The incremental cost-effectiveness and potential offset in costs from the payer's perspective of a CC treatment program for primary care patients with panic disorder are evaluated in this report. **Method:** Primary care patients (N = 115) were assigned to either usual primary care or a CC intervention that included systematic patient education and approximately 2 visits with an onsite consulting psychiatrist. At months 3, 6, 9, and 12, telephone assessments were conducted. Data from the primary care clinics and self-report data were analyzed to assess use of health care services and costs. **Results:** During the 12-month intervention, patients in the CC group experienced a mean of 74.2 (95% CI = 15.8 to 122.0) more anxiety-free days than patients receiving usual care. The CC intervention was associated with an incremental health care cost of \$205 (95% CI = -\$135 to \$501); expenditures for antidepressant medication and outpatient mental health visits explained the additional mental health costs of the intervention. CC was associated with a total outpatient cost of \$325 (95% CI = -\$1460 to \$448) less than for usual care. Per anxiety-free day, the incremental cost-effectiveness ratio for total ambulatory cost was -\$4 (95% CI = -\$23 to \$14). Per a bootstrap analysis, the suggested probability that the CC intervention was dominant (e.g., lower costs and greater effectiveness) was 0.70. **Conclusion:** Compared with usual care, the CC intervention for patients with panic disorder led to significantly more anxiety-free days, no significant difference in total outpatient costs, and a distribution of the cost-effectiveness ratio based on total outpatient costs suggesting a 70% probability that the intervention was dominant.

(*Arch Gen Psychiatry* 2002;59:1098-1104)

Comorbidity of Obsessive-Compulsive Disorder and Depression: Prevalence, Symptom Severity, and Treatment Effect

Overbeek T, Schruers K, Vermetten E, et al.

Background: The goal of this study was to investigate the co-occurrence of depressive disorders in obsessive-compulsive disorder (OCD) and the effect of these disorders on combined pharmacologic and behavioral treatment for OCD. **Method:** A retrospective chart analysis was performed on baseline ratings of 120 OCD patients and posttreatment ratings of 72 of these patients. For depressive symptoms, the Montgomery-Asberg Depression Rating Scale and the Self-Rating Depression Scale were applied; for obsessive-compulsive symptoms, the Yale-Brown Obsessive Compulsive Scale and the Maudsley Obsessive Compulsive Inventory were used; and for general anxiety symptoms, the Self-Rating Anxiety Scale, the Clinical Anxiety Scale, and the State-Trait Anxiety Inventory were given.

Results: One third of the OCD patients in our sample were found to be depressed. Symptom severity on OCD symptoms at baseline did not differ between depressed and nondepressed OCD patients; on general anxiety symptoms, the comorbid group was more severely affected. Both depressed and nondepressed OCD patients responded well to treatment, as reflected in assessments for depressive, obsessive-compulsive, and general anxiety symptoms. However, comorbid depression had a negative effect on treatment: depressed OCD patients showed less improvement than nondepressed OCD patients on most scales. **Conclusion:** Depression frequently accompanies OCD and appears to affect treatment outcome negatively. While both groups of patients improved with combination treatment, the OCD-alone group had more improvement than the group that had comorbid depression.

(*J Clin Psychiatry* 2002;63:1106-1112)

Depressive Symptoms and Cognitive Decline in Elderly People: Longitudinal Study

Paterniti S, Verdier-Taillefer M-H, Dufouil C, et al.

Background and Aims: Although an association between cognitive decline and depressive symptoms exists in the elderly, the nature of their temporal relationship is uncertain. This longitudinal study sought to determine whether cognitive decline is predicted by depressive symptoms in cognitively normal elderly individuals. **Method:** The study sample included 1003 persons aged 59 to 71 years who had a score of 26 or higher on the Mini-Mental State Examination (MMSE). The MMSE was used throughout the study to evaluate cognitive functioning, and the Center for Epidemiologic Study depression scale (CES-D) was used to evaluate depressive symptomatology. A decrease of ≥ 3 points on the MMSE at 4-year follow-up was indicative of cognitive decline. **Results:** A higher risk of cognitive decline at 4-year follow-up was predicted by high baseline levels of depressive symptoms. Depressed participants were more likely than nondepressed participants to have MMSE scores < 26 after 2 years and that remained < 26 at 4-year follow-up. Although persistent depressive episodes were associated with cognitive decline, episodic episodes were not. **Conclusion:** In this sample of elderly individuals, high levels of persistent depressive symptoms were associated with cognitive decline.

(*Br J Psychiatry* 2002;181:406-410)

Posttraumatic Symptoms and Disability in Paramedics

Regehr C, Goldberg G, Glancy GD, et al.

Objective: Because potential for secondary gain may lead to overreporting of trauma symptoms in individuals seeking compensation or taking stress leave from work, questions have been raised about the relationship between posttraumatic stress and disability. Using an anonymous sample of emergency-service workers not currently seeking compensation, this study examined the relationship between symptoms of traumatic stress and the use of work leave. **Method:** Questionnaires that took into

account exposure to traumatic events, use of mental health leave, social support, current distress levels, and personality patterns were filled out by 86 paramedics. Groups of paramedics who had used mental health stress (MHS) leave and those who had not were compared. The best predictors of using leave were determined using logistic regression. **Results:** An association was found between current levels of social support and previous use of MHS leave. Also, significantly more individuals with past history of taking MHS leave reported posttraumatic stress symptoms in the high or severe range. MHS leave was more likely to have been taken by individuals with personality patterns characterized by suspiciousness, hostility, and isolation and having a tendency toward demanding, controlling, and manipulative behavior in relationships. **Conclusion:** In this study, personality type was the strongest predictor of use of MHS leave, even though social support and trauma symptoms were also associated with use of MHS leave.

(*Can J Psychiatry* 2002;47:953-958)

A Longitudinal View of Triggers and Thresholds of Suicidal Behavior in Depression

Pezawas L, Stamenkovic M, Jagsch R, et al.

Background: Recurrent brief depressive disorder (RBD) and major depressive disorder (MDD) share the same diagnostic picture of full-blown depression and are both associated with increased suicide attempt rates. However, longitudinal diagnostic shifts from RBD to MDD or vice versa, called "combined depression" (CD), have demonstrated a substantially higher risk of suicide attempts in epidemiologic and clinical studies. Following the stress-diathesis model of suicidal behavior, we compared possible triggers and thresholds for suicidal behavior among patients with RBD, MDD, and CD. RBD and MDD diagnoses were based on DSM-IV criteria. Furthermore, the goal of this study was to determine if impulsivity as an underlying factor could explain high suicide attempt rates in CD. **Method:** A structured clinical interview evaluating comorbid Axis I and II disorders and RBD and a battery of instruments assessing suicidal behavior were administered to 101 patients with RBD (N = 27), MDD (N = 33), or CD (N = 41). **Results:** Patients with CD showed significantly higher ($p < .05$) scores on measures of suicidal behavior in comparison with RBD and MDD patients. Together with comorbid substance abuse and marital status, CD was among the highest-ranking risk factors for suicide attempts. Impulsivity was identified as a major underlying factor, predicting 80.7% of suicide attempts. **Conclusion:** CD seems to be an important clinical risk factor for the prediction of suicide attempts, similar to risk factors such as substance use disorders and borderline personality disorder. All of these factors share the same diathesis for increased impulsivity and suicidal ideation, which could explain comorbidity and suicidal behavior. The coexistence of a greater propensity for suicidal ideation and impulsivity in RBD might also explain why such patients are more prone to attempt suicide, even if they do not, in the case of RBD, meet the duration criteria for MDD.

(*J Clin Psychiatry* 2002;63:866-873)

Collaborative Care Management of Late-Life Depression in the Primary Care Setting: A Randomized Controlled Trial

Unützer J, Katon W, Callahan CM, et al.

Background: Because most depressed older adults do not receive effective treatment of depression in the primary care setting, this study was conducted to determine the effectiveness of a collaborative care management program for late-life depression, the Improving Mood-Promoting Access to Collaborative Treatment (IMPACT) program. **Method:** In this randomized controlled trial, 1801 patients aged 60 years or older with major depression (17%), dysthymic disorder (30%), or both (53%) receiving care at 1 of 18 primary care clinics from 8 health care organizations in 5 states were recruited from July 1999 to August 2001. Patients were randomly assigned to either the IMPACT intervention (N = 906) or usual care (N = 895). In the intervention group, patients had up to 12 months of access to a depression care manager who was supervised by a psychiatrist and a primary care expert. The depression care manager also offered education, care management, and support of antidepressant management by the patient's primary care physician or Problem Solving Treatment in Primary Care, a brief psychotherapy for depression. Depression, rate of depression treatments, satisfaction with care, functional impairment, and quality of life were assessed at baseline and at 3, 6, and 12 months. **Results:** After 12 months, a 50% or greater reduction from baseline in depressive symptoms was experienced by 45% of intervention patients compared with 19% of usual care patients (odds ratio [OR] = 3.45, 95% CI = 2.71 to 4.38; $p < .001$). In addition, compared with usual care patients, intervention patients experienced higher rates of depression treatment (OR = 2.98, 95% CI = 2.34 to 3.79; $p < .001$), greater satisfaction with depression care (OR = 3.38, 95% CI = 2.66 to 4.30; $p < .001$), lower severity of depression (range, 0-4; between-group difference, -0.4; 95% CI = -0.46 to -0.33; $p < .001$), less functional impairment (range, 0-10; between-group difference, -0.91; 95% CI = -1.19 to -0.64; $p < .001$), and better quality of life (range, 0-10; between-group difference, 0.56; 95% CI = 0.32 to 0.79; $p < .001$). **Conclusion:** In a wide range of primary care practices, the IMPACT model for collaborative care appears to be feasible and significantly more effective than usual care for depression.

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Dopamine Antagonists and the Development of Breast Cancer

Wang PS, Walker AM, Tsuang MT, et al.

Background: The possibility that prolactin-elevating dopamine antagonists used in the treatment of psychotic disorders may lead to and increase the risk of breast cancers has been raised by animal studies. In humans, however, epidemiologic studies have been limited and inconsistent. **Method:** Data from 52,819 women exposed and 55,289 women not exposed to dopamine antagonists between January 1, 1989, and June 30, 1995, were examined in a retrospective cohort study. Participants were

enrolled in the Medicaid or the Pharmaceutical Assistance to the Aged and Disabled programs of New Jersey, were at least 20 years of age, and were initially free of breast cancer. The New Jersey Cancer Registry and definitive breast cancer surgeries were used to identify incident cases of breast cancer. Multivariable proportional hazards models were used to calculate adjusted hazard ratios of breast cancer. **Results:** A 16% increase in breast cancer risk (adjusted hazard ratio = 1.16, 95% CI = 1.07 to 1.26) was associated with use of antipsychotic dopamine antagonists; a dose-response relationship was found between larger cumulative dosages and greater risk. This increased risk was also found in women who used prolactin-elevating antiemetic dopamine antagonists, even though their breast cancer risk profiles differed from women who used antipsychotic dopamine antagonists. Risk of colon cancer was a control condition that was not related to elevated prolactin levels; use of dopamine antagonists was not associated with risk of colon cancer. Neither increased surveillance nor protopathic bias accounted for the increased risk of breast cancer among users of dopamine antagonists. **Conclusions:** Use of dopamine antagonists may pose a small yet significant risk of breast cancer. Follow-up investigations, though not changes in treatment strategies, should stem from the findings of this study, in light of the small hazards and possibility of residual confounding.

(*Arch Gen Psychiatry* 2002;59:1147–1154)

Testosterone Therapy in Late-Life Major Depression in Males

Perry PJ, Yates WR, Williams RD, et al.

Background: Major depression associated with aging in males may improve with anabolic/androgenic steroid therapy. The efficacy and safety of testosterone therapy in the treatment of depression in elderly hypogonadal males is inconclusive. The following study identifies a subgroup of elderly depressed males who may benefit from testosterone therapy. **Method:** Participants included 16 elderly eugonadal males with major depressive disorder (DSM-IV criteria) and a Hamilton Rating Scale for Depression (HAM-D) score > 18. Following a single-blind 2-week placebo lead-in, patients were randomly assigned to treatment with either a physiologic dose of testosterone cypionate (TC), 100 mg/week, or supraphysiologic dose of 200 mg/week IM for 6 weeks. Psychometric testing was carried out at entry into the study, at the TC injection baseline, and every 2 weeks thereafter. Tests included an objective measurement, the HAM-D, and the Buss-Durkee Hostility Inventory. **Results:** One patient meeting inclusion criteria responded during the placebo lead-in; thus, 15 patients were randomly assigned to treatment (100 mg/week, N = 8; 200 mg/week, N = 7). There was a 42% decrease in the mean HAM-D scores from 20.1 to 11.9 ($p < .0001$). However, the majority of the change was due to improvement in the 10 late-onset (≥ 45 years old) depression patients, whose mean HAM-D score decreased from 19.8 to 9.3 (53%), versus the 5 early-onset depression patients, whose mean HAM-D score decreased from 20.8 to 17.0 (18%) ($p = .0110$). The TC dose did not affect the response. Similar HAM-D decreases of 43% and 41% occurred for the respective

100- and 200-mg/week doses. The HAM-D responder analysis found that none of 5 early-onset patients had HAM-D response, whereas 6 (60%) of 10 late-onset patients responded ($p = .025$). Similarly, none of the early-onset patients experienced a remission whereas 5 (50%) of the late-onset patients were categorized as remitters ($p = .053$). Correlations between the peak and mean total testosterone concentrations and HAM-D change scores suggested that only minimal TC doses were required to produce an antidepressant effect. **Conclusion:** These data suggest that testosterone therapy would best be limited to men with late-onset depression. The findings suggest that short-term therapy with TC is safe. Long-term treatment safety is unknown. Psychiatrists using testosterone therapy should ascertain that patients have been recently valuated for prostate cancer. If testosterone therapy is initiated, serial serum prostate-specific antigen sampling should be used for monitoring patients' prostate status.

(*J Clin Psychiatry* 2002;63:1096–1101)

Suicide Among New York City Police Officers, 1977–1996

Marzuk PM, Nock MK, Leon AC, et al.

Objective: The suicide rates of New York City police officers were assessed during a recent period. **Method:** Death certificates for all active New York City police officers who died from 1977 through 1996 (N = 668) were reviewed, and suicide rates by age, gender, and race were determined for both New York City police officers and the overall New York City population. **Results:** For police, the suicide rate was 14.9 per 100,000 person-years; the demographically adjusted suicide rate for New York City residents was 18.3 per 100,000 person-years. Suicide rates were similar for New York City men within and outside the police force; female police officers, however, had a higher suicide rate than female residents, although the rate even among female officers was low. **Conclusions:** Overall, the rate of suicide among New York City police officers is similar to or even lower than the rate in residents of the city.

(*Am J Psychiatry* 2002;159:2069–2071)

Results From 2 Proof-of-Concept, Placebo-Controlled Studies of Atomoxetine in Children With Attention-Deficit/Hyperactivity Disorder

Spencer T, Heiligenstein JH, Biederman J, et al.

Background: Atomoxetine is a nonstimulant drug being studied for the treatment of attention-deficit/hyperactivity disorder (ADHD). Atomoxetine is a highly specific inhibitor of the presynaptic norepinephrine transporter with minimal affinity for other noradrenergic receptors or other neurotransmitter transporters or receptors. Results of 2 proof-of-concept studies are reported that tested the hypothesis that a selective inhibitor of presynaptic norepinephrine uptake would be effective for the treatment of ADHD in school-aged children. **Method:** Two identical 12-week, stratified, randomized, double-blind,

placebo-controlled trials were conducted in children who met DSM-IV criteria for ADHD. The primary efficacy outcome measure was the mean change from baseline to endpoint in the Attention-Deficit/Hyperactivity Disorder Rating Scale (ADHD RS) total score. Secondary efficacy measures included the Clinical Global Impressions-ADHD-Severity (CGI-ADHD-S) and the Conners' Parent Rating Scale-Revised: Short Form (CPRS-R:S). **Results:** A total of 291 patients were randomized in the 2 trials combined (Study 1, N = 147; Study 2, N = 144). Stimulant-naïve patients were randomized to atomoxetine, placebo, or methylphenidate. Patients with prior stimulant exposure were randomized to atomoxetine or placebo. Atomoxetine

significantly reduced ADHD RS total scores compared with placebo in each study ($p < .001$). Changes in the CGI-ADHD-S (Study 1: $p = .003$; Study 2: $p = .001$) and CPRS-ADHD Index (Study 1: $p = .023$; Study 2: $p < .001$) also showed atomoxetine to be statistically significantly superior to placebo in reducing ADHD symptoms. Atomoxetine was found to be well tolerated in this population of pediatric patients. **Conclusion:** Two studies of atomoxetine early in its development confirmed that atomoxetine, a specific and selective inhibitor of noradrenergic uptake, was effective for the treatment of children with ADHD. In addition, atomoxetine was found to be well tolerated. (*J Clin Psychiatry* 2002;63:1140-1147)