

## EDITOR'S NOTE

This column reflects our commitment to provide you, the primary care physician, with information that will prove helpful in making informed decisions about the care of your patients who suffer from psychiatric disorders. We will highlight abstracts of high interest to you from our sister publication, *The Journal of Clinical Psychiatry*, and summarize pertinent articles from the general scientific literature. We hope that this section is clinically relevant to your practice and that it will encourage you to expand your horizons.

## Indicators of a Major Depressive Episode in Primary Care Patients With a Chief Complaint of Headache

Maeno T, Inoue K, Yamada K, et al.

Headache 2007;47:1303–1310

**Objective:** The aim of this study was to identify the indicators of major depressive episode (MDE) in primary care patients with a chief complaint of headache. Headache patients in primary care very frequently also have MDE. However, primary care physicians often fail to identify comorbid MDE.

**Method:** The study included 177 consecutive new adult patients who visited 19 primary care clinics from January 2002 to December 2002 with a chief complaint of headache. A self-report questionnaire that included questions regarding the duration and severity of their headaches, changes in headache severity, and other symptoms was completed by all participants. In addition, the questionnaire identified distressed high utilizers (patients who consulted different doctors for the same episode of an illness, without being referred). A module of the Mini-International Neuropsychiatric Interview (MINI) was used to identify MDE. Both univariate analysis and multiple logistic regression analysis were performed to identify potential indicators of depression.

**Results:** Forty-five (25.4%) of 177 patients fulfilled the diagnostic criteria for MDE. Severe headache, longer duration of headaches, multiple somatic symptoms, and being a distressed high utilizer were associated with MDE according to univariate analysis. Patients with headaches lasting 6 months or longer and those with multiple somatic symptoms were more likely to be suffering from MDE according to multiple logistic regression analysis (adjusted odds ratios: 3.1, 95% CI = 1.7 to 10.6 and 3.9, 95% CI = 1.2 to 8.1, respectively).

**Conclusions:** There is a high prevalence of MDE in headache patients visiting primary care settings. Clinicians will find multiple somatic symptoms and longer duration ( $\geq 6$  months) of headaches particularly useful indicators of MDE.

## Maternal Mental Health and Child Behavior Problems at 2 Years: Findings From the Pacific Islands Families Study

Gao W, Paterson J, Abbott M, et al.

Aust N Z J Psychiatry 2007;41:885–895

**Objective:** This study examined relationships between the onset and continuation of maternal psychological disorder and child behavior problems in a cohort of Pacific 2-year-old children in New Zealand.

**Method:** Mothers of a cohort of 1398 Pacific infants born in South Auckland, New Zealand, were interviewed when their children were 6 weeks, 12 months, and 24 months of age. At the same times, data regarding maternal mental health were obtained as part of a more comprehensive interview. When the children were 2 years old, mothers' descriptions of child behavior were solicited.

**Results:** Internalizing problems were significantly more prevalent in children of mothers who had self-reported symptoms of psychological disorder (11.9% in no symptoms, 27.8% in early symptoms of postnatal depression, 21.1% in late symptoms of psychological disorder, and 42.9% in persistent or recurrent symptoms). Compared with children of mothers in the no-symptoms group, the adjusted odds ratio (OR) of a child having internalizing problems was 1.38 (95% CI = 0.79 to 2.43) in those of mothers reporting early symptoms of postnatal depression, 1.45 (95% CI = 0.85 to 2.49) in late symptoms of psychological disorder, and 2.93 (95% CI = 1.54 to 5.57) in persistent or recurrent symptoms. Psychological disorders in mothers did not have significant effects on externalizing disorders.

**Conclusions:** Continuing or recurrent symptoms of psychological disorder in mothers may be a factor in the behavior problems of children as young as 2 years old. The timing of disorder, whether the exposure occurs in infants or in toddlers, seems not to be as important, however. Maternal and child health professionals may be aided in designing appropriate and effective screening and intervention programs to help Pacific mothers and children by an improved understanding of the relationships between psychological disorders in mothers and early child behavior problems.

### Age Differences in Posttraumatic Stress Disorder, Psychiatric Disorders, and Healthcare Service Use Among Veterans in Veterans Affairs Primary Care Clinics

Frueh BC, Grubaugh AL, Acierno R, et al.

Am J Geriatr Psychiatry 2007;15:660–672

**Objective:** The researchers sought to enlarge our understanding of the prevalence of posttraumatic stress disorder (PTSD), its psychiatric characteristics, and service use among elderly veterans in Veterans Affairs (VA) primary care clinics.

**Method:** This study was a cross-sectional, epidemiologic design (N = 745) employing self-report measures, structured interviews, and chart reviews to obtain relevant information for analyses.

**Results:** The oldest group of veterans ( $\geq 65$  years; N = 318) had lower prevalence of most psychiatric diagnoses than the youngest (18–44 years; N = 69) and middle-aged (45–64 years; N = 358) groups. Veterans in the oldest group (6.3%) had one third the prevalence of PTSD of those in the middle-aged group (18.6%) despite having higher rates of combat exposure. This pattern remained constant across other psychiatric diagnoses. The oldest veterans, for example, had one third the prevalence of major depression (7.5%) of those in the 2 younger groups (21.7% and 22.9%). These differences remained constant when relevant demographic covariates (race and sex) were controlled for. Examination of VA healthcare service use across the 3 groups yielded results consistent with the findings that the oldest veteran group is functioning significantly better across mental health domains.

**Conclusion:** Elderly veterans using VA primary care services evidence lower rates of PTSD and other psychiatric disorders than younger veterans, and they use significantly fewer VA mental health services. In addition, they appear not to have worse physical health functioning or to use VA healthcare services or disability benefits at a meaningfully higher rate than their younger counterparts.

### Birth Outcomes Following Prenatal Exposure to Antidepressants

Pearson KH, Nonacs RM, Viguera AC, et al.

J Clin Psychiatry 2007;68:1284–1289

**Background:** Antidepressant use during pregnancy and the peripartum period is common despite the absence of clear evidence-based guidelines to direct clinical use of these compounds.

**Method:** We compared obstetrical and neonatal outcomes as recorded in medical records among 84 pregnant women with major depressive or anxiety disorders (DSM-IV criteria) who took antidepressants during pregnancy (cases) versus a 2:1 age- and parity-matched control group of 168 unexposed women. Women in the case group had sought psychiatric consultation regarding the use of medication from the Perinatal and Reproductive Psychiatry Program at the Massachusetts General Hospital between 1996 and 2000.

**Results:** There were no significant differences among cases versus controls and their offspring, with respect to various neonatal and obstetrical outcomes, including gestational age and weight, although 1-minute Apgar scores were slightly lower in exposed infants. Admissions to the special care nursery were more frequent, but briefer and based on relatively minor indications, among case newborns. There were no significant differ-

ences in neonatal outcomes between exposures to serotonin reuptake inhibitor (SRI) and tricyclic (TCA) antidepressants.

**Conclusion:** This retrospective cohort study found no evidence of major increases in risk of adverse obstetrical or neonatal outcomes following prenatal exposure to antidepressants, nor between SRIs and TCAs. Larger, prospective studies with specific neurobehavioral measures are required to resolve current uncertainties about safe and effective use of antidepressants by pregnant women.

### Outcomes of a Quality Improvement Project Integrating Mental Health Into Primary Care

Watts BV, Shiner B, Pomerantz A, et al.

Qual Saf Health Care 2007;16:378–381

**Objective:** Depression is commonly seen, but infrequently adequately treated, in primary care clinics. Although improving access to depression care in primary care clinics has improved outcomes in clinical trials, these interventions have not been examined, for the most part, in clinical settings. This study sought to investigate the effectiveness of a quality-improvement project allowing better access to mental health care in a large primary care clinic.

**Method:** A before-after study assessed the efficacy of incorporating a primary mental health care (PMHC) clinic into a large primary care clinic at the White River Junction, Vermont Veterans Affairs Medical Center (VAMC). In the before period (2003), mental health care services were accessed through a traditional referral and schedule model. Patients who had screened positive for depression using a depression screen for 6 months after entry into either model were retrospectively followed, and VA clinics without a PMHC served as a control. The proportion of patients who received any depression treatment and guideline-adhering depression treatment in each model was compared, as well as the volume of patients seen in mental health clinics and the wait time to be seen by mental health personnel.

**Results:** The number of patients screening positive for depression at VAMC and the community-based outreach clinic was 383 and 287, respectively. The before and after cohorts did not differ with respect to demographic characteristics. The PMHC model was associated with a greater proportion of patients who had screened positive for depression obtaining some depression treatment (52.3% vs. 37.8%,  $p < .001$ ), an increase in guideline-adherent depression treatment for depression (11% vs. 1%,  $p < .001$ ).

**Conclusions:** Implementation of the PMHC model was associated with faster and enhanced depression treatment in the cohort of patients who screened positive for depression. Broader implementation of this model should be studied.

### Aripiprazole in Juvenile Bipolar Disorder Comorbid With Attention-Deficit/Hyperactivity Disorder: An Open Clinical Trial

Tramontina S, Zeni CP, Pheula GF, et al.

CNS Spectr 2007;12:758–762

**Introduction:** A highly impairing chronic mental health condition, juvenile bipolar disorder (JBD), affects the overall functioning of children and adolescents. Comorbidity with attention-deficit/hyperactivity disorder (ADHD) is extremely prevalent and may determine worse response to treatment. Although several guidelines suggest the use of recent atypical

antipsychotics in JBD, few investigations have addressed their use.

**Method:** Ten children and adolescents with JBD comorbid with ADHD were included in this 6-week open trial with aripiprazole, which assessed impact on mania and ADHD symptoms, respectively, by means of the Young Mania Rating Scale and the Swanson, Nolan, and Pelham Scale, as well as on global functioning (Clinical Global Impressions-Severity) and adverse events.

**Results:** Significant improvement was found in global functioning scores ( $F = 3.17$ ,  $p = .01$ , effect size [ES] = 0.55), manic symptoms ( $F = 5.63$ ,  $p < .01$ , ES = 0.93), and ADHD symptoms ( $t = 3.42$ ,  $p < .01$ , ES = 1.05). An overall positive tolerability was reported, but significant weight gain ( $F = 3.07$ ,  $p = .05$ ) was seen.

**Conclusion:** Although aripiprazole was effective in improving mania and ADHD symptoms, neither JBD nor ADHD symptom remission occurred in most of the cases. Randomized, placebo-controlled trials for JBD and ADHD are needed.

### Sustainable Impact of a Primary Care Depression Intervention

Lee PW, Dietrich AJ, Oxman TE, et al.

J Am Board Fam Med 2007;20:427-433

**Background:** Re-Engineering Systems for Primary Care Treatment of Depression (RESPECT-D) was designed to improve patient outcomes by spreading the 3-component model of depression management. This study sought to assess whether an integrated model of depression management was still used by primary care clinicians after a randomized controlled trial (RCT) had ended.

**Method:** A descriptive appraisal was administered twice: first, during a 12-month period after the end of the RESPECT-D RCT, when referrals to care management were chosen for each of the 5 participating health care organizations, and second, 3 years after the conclusion of the RCT, when clinicians were asked about use of the 3-component model.

**Results:** The model was maintained with minimal modifications by 3 organizations. One organization made a major modification to the model, and 1 made no further use of it. In the 12 months after the RCT, 1039 care management referrals were made. The follow-up survey was completed by 71% ( $N = 92$ ) of RCT clinicians, 87% of whom reported using the Patient Health Questionnaire-9, 58.9% of whom reported availability of care management, and 45.1% of whom reported availability of informal psychiatry consultation.

**Conclusion:** It is possible to continue practical clinical interventions in primary care settings beyond the end of an RCT. More resources may be required to maintain and disseminate the program.

### Recurrence of Major Depression in Adolescence and Early Adulthood and Later Mental Health, Educational, and Economic Outcomes

Fergusson DM, Boden JM, Horwood LJ

Br J Psychiatry 2007;191:335-342

**Background:** How the recurrence of major depression in adolescence affects outcomes in later life is unclear. This study investigated the relationships between the frequency of major depression at ages 16 to 21 years and later outcomes, both before and after controlling for potentially confounding factors.

**Method:** A 25-year longitudinal study of a birth cohort of New Zealand children ( $N = 982$ ) provided the data. DSM-IV symptom criteria for major depression and anxiety disorders, suicidal ideation and attempted suicide, achieving university degree or other tertiary education qualification, welfare dependence and unemployment, and income at ages 21 to 25 years were outcome measures.

**Results:** Associations between the frequency of depression at ages 16 to 21 years and all outcome measures were significant ( $p < .05$ ). The association between frequency of depression and all mental health outcomes, and welfare dependence and unemployment, remained significant ( $p < .05$ ) after adjustment for confounding factors.

**Conclusions:** The rate of depression in adolescence and young adulthood is associated with negative mental health and economic outcomes in early adulthood.

### Does Depression Precede or Follow Executive Dysfunction? Outcomes in Older Primary Care Patients

Cui X, Lyness JM, Tu X, et al.

Am J Psychiatry 2007;164:1221-1228

**Objective:** The potentially reciprocal relationships between depression and executive dysfunction in older patients over time were evaluated in this study.

**Method:** Seven hundred nine patients aged 65 years and older who presented for primary care on selected days and gave informed consent were enrolled in this prospective, 2-year, cohort study. Of these, 431 and 284 patients completed follow-up interviews at 1 year and 2 years, respectively. Depression diagnosis and measures assessing selected components of executive functions, the initiation-perseveration subscale of the Mattis Dementia Rating Scale, Trail Making tests A and B, and D Trails (Trails B time minus Trails A time), were among the main outcome measures.

**Results:** No cognitive measure was significantly independently associated with depression diagnosis concurrently or in 1-year lagged outcomes. A diagnosis of depression was independently associated with concurrent poorer Trails B time and with both Trails B and D Trails times in 1-year lagged models. No baseline executive function measure predicted the score on the Hamilton Rating Scale for Depression (HAM-D), but HAM-D score independently predicted poorer Trails B and D Trails times in path analyses testing 2-year competing dynamic models. Although cerebrovascular risk factors predicted only Trails B time, overall medical burden also independently predicted both depressive and cognitive outcomes.

**Conclusions:** Older persons with depression are at risk of subsequent decline in at least some aspects of executive functioning. It remains possible that either neurobiological or psychosocial factors have important roles in the mechanisms underlying the course of geriatric depression.

### Pediatric Primary Care Providers and Adolescent Depression: A Qualitative Study of Barriers to Treatment and the Effect of the Black Box Warning

Richardson LP, Lewis CW, Casey-Goldstein M, et al.

J Adolesc Health 2007;40:433-439

**Purpose:** Controversies concerning the treatment of adolescent depression in primary care settings have been highlighted by the recent black-box warning on antidepressants. However,

very little is known about how providers decide to treat depressed youth and what resources they employ.

**Method:** Focus groups were conducted with 35 providers and staff in 9 community-based pediatric practices in rural and urban settings of western Washington State. Perceived barriers to the treatment of depression in youth, how providers addressed these barriers, and the impact of the recent U.S. Food Drug Administration (FDA) black-box warning were among the discussion topics. Focus groups were audiotaped and professionally transcribed. Qualitative content analysis was performed using Atlas ti software, and 3 independent reviewers resolved differences in coding via discussion.

**Results:** On the basis of analysis of interviews, a conceptual model was developed detailing factors affecting decisions made by primary care providers (PCPs) regarding depression treatment. Lack of availability of mental health resources in the community, feeling responsible for helping based on longstanding relationships with patients and families, and patient and family beliefs and preferences regarding treatment were the 3 key themes that influenced doctors' decisions concerning the treatment of depression. Most of the approaches to address barriers were not systemized and were physician dependent. Despite most providers' expressed concern about recent antidepressant warnings, many continued to treat and none had devised new approaches to closer monitor youth beginning treatment with antidepressants.

**Conclusion:** PCP perceptions of their role in treatment, availability of other treatment resources, and family and patient preferences and resources strongly influence the decision of when and how PCPs treat adolescent depression. Changes in the approach to practice needed to meet FDA black-box recommendations regarding close monitoring of response to medications have been implemented by few providers.

### Physician Attitudes Toward Treatment of Depression in Older Medical Inpatients

Koenig HG

Aging Ment Health 2007;11:197-204

**Objectives:** The investigators sought a better understanding of low treatment (< 50%) and psychiatry referral rates (< 10%) of depressed older medical patients by examining characteristics, attitudes, and practices regarding treatment of medical physicians.

**Method:** Questionnaires dealing with general attitudes and behaviors regarding the treatment of depression in older patients were distributed to physicians caring for a consecutive series of 1000 depressed older patients during medical hospitalization and/or after discharge.

**Results:** Of 422 physicians who responded, less than half (48%) generally initiated more than 2 patients a month on antidepressant treatment. Referrals of more than 2 patients a month for counseling were made by even fewer (14%); 37% usually referred none. Only 11% referred more than 2 patients a month to psychiatrists; nearly 40% generally referred none. Respon-

dents rarely regarded antidepressants, counseling, and psychiatric referral as effective. Patients were more likely to be treated by physicians out of their training and those in primary care specialties (especially family practice). Perceived resistance to treatment (62.3%), lack of time (61.1%), uncertainty of depression diagnosis (56.2%), belief that patients couldn't afford treatment (50.5%), and concern about medication/disease interactions (58.8%) were frequently cited reasons for not treating these patients. One third (33.5%) responded that they were unsure about treatment effectiveness and one third (34.4%) that they were poorly prepared to treat depression in older patients. Compared with white clinicians, nonwhite physicians were more likely to refer to psychiatrists.

**Conclusions:** Many older depressed patients in medical settings go without treatment or referrals. The decision to treat may be influenced by physician experience and specialty, and the decision to seek consultation may be influenced by physician race. Therapeutic nihilism may also have an effect.

### Pain Limits the Effectiveness of Collaborative Care for Depression

Thielke SM, Fan MY, Sullivan M, et al.

Am J Geriatr Psychiatry 2007;15:699-707

**Objective:** The purpose of this study was to identify how baseline pain affects depression outcomes in a collaborative care treatment trial of depression for older adults.

**Method:** Using a cohort of 1801 depressed older adults in the Improving Mood: Providing Access to Collaborative Treatment trial, a secondary data analysis compared groups with no/low and high baseline pain with 2 pain interference variables. A 50% reduction in depression score at 12 months was the primary outcome. Separate analyses were performed for usual care and intervention groups. Analyses were then assessed for interactions.

**Results:** Baseline pain status was not associated significantly with depression outcomes in the treatment-as-usual group. There was a significant association between higher pain interference and worse depression response in the intervention group: 48.9% of those with no/low pain interference achieved a depression response, compared with 37.4% of those with high pain ( $\chi^2 = 12.27$ ,  $df = 1$ ,  $p = .001$ ). Arthritis pain interference showed a similar association ( $\chi^2 = 4.04$ ,  $df = 1$ ,  $p = .044$ ). This association was not lessened when sociodemographic and baseline characteristics were controlled for. There was a significant interaction effect on depression response between pain interference and the intervention, suggesting a differential impairment of depression response by higher pain in collaborative care relative to usual care.

**Conclusion:** A collaborative care intervention was significantly more successful in older adults with less pain. These findings suggest that pain may be an important obstacle to improvement of depression and that addressing pain might result in better depression outcomes.