

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.

Brief Maternal Depression Screening at Well-Child Visits

Olson AL, Dietrich AJ, Prazar G, et al.

Pediatrics 2006;118:207–216

Objectives: The study goals were to (1) establish the feasibility and yield of maternal depression screening during all well-child visits, (2) comprehend how pediatricians and mothers react to depression screening information, and (3) evaluate the time necessary for discussion of screening results.

Method: Administration of brief depression screening of mothers at well-child visits for children of all ages in 3 rural pediatric practices was evaluated. Two screening trials introduced screening (1 month) and then established the feasibility of sustaining screening (6 months). Screening was conducted with the 2-question Patient Health Questionnaire. Practices followed the ratios of visits screened and supplied data concerning the screening process.

Results: Practices were able to screen in the majority of well-child visits (74% in trial 1 and 67% in trial 2). Of 1398 mothers screened, 17% had 1 of the depressive symptoms and 6% (N = 88) scored as being at risk for a major depressive disorder. When these results were discussed with mothers, 5.7% suspected that they might be depressed, while 4.7% characterized themselves as stressed but not depressed. Pediatric clinicians took action with 62.4% of mothers who screened positive and 38.2% of mothers with lesser symptoms. Interventions included talking about the effect on the child, a follow-up visit or call, and referral to an adult primary care provider, a mental health clinician, or community supports. In the second trial, less time was needed by pediatricians to discuss screening results. Extended time devoted to discussion time was rare (5–10 minutes in 3% of all well-child visits and > 10 minutes in 2%).

Conclusions: Regular, short, maternal depression screening carried out during well-child visits was feasible and revealed mothers ready to talk about depression and stress issues with their pediatrician. Postscreening discussion disclosed more mothers who felt depressed among those with lesser symptoms. The additional discussion time was generally short and prompted specific pediatrician interventions.

Depressive Symptoms After Acute Myocardial Infarction: Evidence for Highest Rates in Younger Women

Mallik S, Spertus JA, Reid KJ, et al;

PREMIER Registry Investigators

Arch Intern Med 2006;166:876–883

Background: Patients hospitalized with acute myocardial infarction (AMI) often experience depression. Although younger women in the community are uniquely prone to depression, it is not known whether younger women are also more prone to depression during hospitalization with AMI.

Method: A total of 2498 AMI patients (1284 patients aged \leq 60 years; 814 women and 1684 men) were recruited from 19 U.S. centers in the Prospective Registry Evaluating Outcomes After Myocardial Infarction: Events and Recovery (PREMIER) study between January 2003 and June 2004. Depression, evaluated at hospitalization, was defined as a Primary Care Evaluation of Mental Disorders Brief Patient Health Questionnaire (PHQ) score of 10 or higher.

Results: Younger (\leq 60 years) patients had higher mean PHQ scores than older patients (6.4 vs. 5.0; $p < .001$) and women had higher mean PHQ scores than men (6.8 vs. 5.2; $p < .001$). Younger women had the highest PHQ scores (8.2; $p < .001$ for the sex-age interaction) when stratified by both age and sex. The prevalence of depression was 40% in women 60 years or younger, 21% in women older than 60, 22% in men 60 years or younger, and 15% in men older than 60. The odds of depression for women 60 years or younger were significantly higher than for the other sex-age groups and were 3.1 times higher than the reference group of men older than 60 years in a logistic model adjusted for study center, race, medical history, and coronary heart disease risk factors.

Conclusions: The prevalence of depression among younger women who have experienced AMI is high, and post-AMI depression has been associated with adverse outcomes. For this reason, younger women, a high-risk group relative to men, may especially benefit from aggressive screening and treatment of depression occurring after AMI.

A Double-Blind, Placebo-Controlled Study of Venlafaxine and Fluoxetine in Geriatric Outpatients With Major Depression

Schatzberg A, Roose S

Am J Geriatr Psychiatry 2006;14:361–370

Background: Although the prevalence of depression in elderly patients is high, few well-designed, placebo-controlled studies of antidepressants have been administered in this population. The efficacy and safety of venlafaxine and fluoxetine in depressed patients aged more than 65 years was evaluated.

Method: In an 8-week trial, 300 patients were randomly assigned to treatment with venlafaxine immediate release (N = 104), fluoxetine (N = 100), or placebo (N = 96). Venlafaxine doses were titrated from 37.5 to 225 mg/day, and fluoxetine doses were titrated from 20 to 60 mg/day, as necessary, over 29 days. Measures of efficacy included the 21-item Hamilton Rating Scale for Depression (HAM-D-21) total score, HAM-D-21 depressed mood item score, Montgomery Asberg Depression Rating Scale (MADRS) score, Clinical Global Impressions-Severity of Illness scale (CGI-S) and -Improvement scale (CGI-I) score, and rates of response (change from baseline in HAM-D, MADRS, or CGI-I scores) and remission (HAM-D-17 score \leq 7). Efficacy analyses are concentrated on the HAM-D-21 total score. Safety evaluations included monitoring of adverse events, physical examinations, vital signs, laboratory determinations, and electrocardiograms.

Results: A significant reduction in HAM-D-21 total score at week 8 compared with baseline was seen in all 3 treatment groups, although no significant differences were seen among the 3 treatment groups in HAM-D-21, MADRS, or CGI change scores from baseline to week 8. No statistically significant difference in the ratio of remitters at the last on-therapy visit was found. The incidence of individual adverse events in the venlafaxine group (27%) was higher than that in the fluoxetine (19%) or placebo (9%) groups.

Conclusion: Placebo, venlafaxine, and fluoxetine appear to be equally efficacious for the treatment of depression.

Maternal Mental Health, Substance Use, and Domestic Violence in the Year After Delivery and Subsequent Behavior Problems in Children at Age 3 Years

Whitaker RC, Orzol SM, Kahn RS

Arch Gen Psychiatry 2006;63:551–560

Objective: The investigators sought to investigate the additive effect of mothers' mental health disorders, substance use, and domestic violence on the probability of behavior problems in young children.

Method: A birth cohort (1998–2000) was followed up to age 3 years in 18 large U.S. cities. At 3 years, 2756 participants (65%) were followed up from the population-based birth cohort of 4242. Annual incomes below the poverty threshold were found in 36%. Mothers were interviewed about conditions in 3 categories at 1 year postpartum. Categories were (1) mental health (major depressive episode and generalized anxiety disorder), (2) substance use (smoking, binge drinking, and illicit drug use), and (3) domestic violence (emotional and physical). At 3 years, mothers completed the Child Behavior Checklist.

Results: Fifty percent of mothers reported a condition in at least 1 of the 3 categories. The prevalence of child behavior problems rose with the number of categories (0, 1, 2, or 3) in

which the mother endorsed a condition: respectively, 7%, 12%, 17%, and 19% for aggression ($p < .001$); 9%, 14%, 16%, and 27% for anxious/depressed ($p < .001$); and 7%, 12%, 15%, and 19% for inattention/hyperactivity ($p < .001$). This incremental risk continued when sociodemographic and prenatal factors and paternal mental health and substance use had been adjusted for.

Conclusions: As the number of areas—mental health, substance use, or domestic violence—in which the mother endorsed difficulties increased, so did the probability of child behavior problems. Family-oriented strategies that encompass the needs of both parents and their children are necessary to avert behavior problems in young children.

Effect of Selective Serotonin Reuptake Inhibitors on the Risk of Fracture

Richards JB, Papaioannou A, Adachi JD, et al., and the Canadian Multicentre Osteoporosis Study Research Group

Arch Intern Med 2007;167:188–194

Background: Elderly persons are frequently subject to depression and osteoporotic fractures. In this population, depression is often treated with selective serotonin reuptake inhibitors (SSRIs), and the relationship between daily SSRI use and fragility fractures is unclear. We sought to investigate the effect of daily SSRI use on the risk of incident clinical fragility fracture.

Method: In this population-based, randomized, prospective cohort study, 5008 community-dwelling adults 50 years and older were followed up over 5 years for incident fractures. Clinical fragility fractures were classified as minimal trauma fractures that were clinically reported and confirmed by radiography. The risk of fragility fracture associated with daily SSRI use was ascertained while controlling for relevant covariates.

Results: One hundred thirty-seven participants reported daily SSRI use. When many potential covariates were adjusted for, daily SSRI use was associated with substantially increased risk of incident clinical fragility fracture (hazard rate, 2.1; 95% CI = 1.3 to 3.4). In addition, daily SSRI use was associated with increased odds of falling (odds ratio, 2.2; 95% CI = 1.4 to 3.5), lower bone mineral density at the hip, and a trend toward lower bone mineral density at the spine. These outcomes were dose-dependent and were similar for those who reported taking SSRIs at baseline and at 5 years' follow-up.

Conclusions: After adjustment for potential covariates, daily SSRI use in adults 50 years and older continued to be associated with a 2-fold increased risk of clinical fragility fracture. Depression and fragility fractures frequently occur in this population, and the elevated risk ascribed to daily SSRI use may have important consequences for public health.

A Pilot Study of Adjunctive Family Psychoeducation in Adolescent Major Depression: Feasibility and Treatment Effect

Sanford M, Boyle M, McCleary L, et al.

J Am Acad Child Adolesc Psychiatry 2006;45:386–495

Objective: To determine whether family psychoeducation combined with standard care in adolescent major depressive disorder is feasible and effective.

Method: Participants were 41 adolescents, aged 13 through 18 years and meeting major depressive disorder criteria drawn

from outpatient clinics in Hamilton and London, Ontario. Patients were recruited over 24 months (31 in Hamilton, 10 in London) and were randomly assigned to standard therapy or standard therapy plus family psychoeducation. Outcome measures were administered at baseline, 2 weeks, midtreatment, posttreatment, and 3-month follow-up. The intent-to-treat group was included in χ^2 , t tests, and growth curve analyses. Standardized effects based on growth curve estimates were calculated for continuous outcomes.

Results: Because of poor participant retention, the London site was withdrawn. In Hamilton, no participant missed more than 1 evaluation, and adherence to family psychoeducation was good. Participants in the experimental group showed more improvement in social functioning and adolescent-parent relationships than controls (with medium standardized effect size > 0.5), and parents reported more satisfaction with treatment.

Conclusions: The clinical course of major depressive disorder may have been mediated by positive treatment effects on family and social functioning processes. Further evaluation of family psychoeducation in this clinical population are needed.

Cognitive Behavioral Therapy vs. Zopiclone for Treatment of Chronic Primary Insomnia in Older Adults: A Randomized Controlled Trial

Sivertsen B, Omvik S, Pallesen S, et al.

JAMA 2006;295:2851–2858

Context: Older adults commonly experience insomnia, which is linked with a number of adverse medical, social, and psychological sequelae. Earlier investigations have suggested positive results for outcomes of both psychological and pharmacologic treatments, but to date there are no blinded placebo-controlled trials comparing the effects of these treatments.

Objective: This study sought to determine clinical efficacy (short- and long-term) of cognitive behavioral therapy (CBT) and medication in older adults with chronic primary insomnia.

Method: This randomized, double-blinded, placebo-controlled trial included 46 adults (mean age, 60.8 years; 22 women) with chronic primary insomnia. The study was conducted between January 2004 and December 2005 in a single Norwegian university-based outpatient clinic for adults and elderly patients. Participants received CBT (sleep hygiene, sleep restriction, stimulus control, cognitive therapy, and relaxation; N = 18), sleep medication (7.5-mg zopiclone each night; N = 16), or placebo pill (N = 12). All treatment lasted 6 weeks, and the 2 active treatment groups were followed up at 6 months. Total wake time, total sleep time, sleep efficiency, and slow-wave sleep (only assessed using polysomnography) on all 3 assessment points were established using ambulant clinical polysomnographic data and sleep diaries.

Results: Subjects receiving CBT had improved short- and long-term outcomes compared with those receiving zopiclone on 3 out of 4 outcome measures. Zopiclone was indistinguishable from placebo for most outcomes. The CBT group experienced improved sleep efficiency from 81.4% at pretreatment to 90.1% at 6-month follow-up compared with a decrease from 82.3% to 81.9% in participants receiving zopiclone. Patients assigned to CBT spent much more time in slow-wave sleep (stages 3 and 4) compared with those assigned to other interventions and spent less time awake during the night. Total sleep time did not differ in all 3 groups; at 6 months, the CBT group had better sleep efficiency measured by polysomnography than the zopiclone group.

Conclusion: In both short- and long-term management of insomnia in older adults, interventions based on CBT appear to be superior to zopiclone treatment.

Clinical Trials Registration: ClinicalTrials.gov identifier: NCT00295386.

Paroxetine Treatment in Children and Adolescents With Major Depressive Disorder: A Randomized, Multicenter, Double-Blind, Placebo-Controlled Trial

Emslie GJ, Wagner KD, Kutcher S, et al.

J Am Acad Child Adolesc Psychiatry 2006;45:709–719

Objective: The efficacy and tolerability of paroxetine in pediatric major depressive disorder were evaluated in this trial.

Method: Paroxetine (10–50 mg/day) or placebo was administered to children and adolescents 7 to 17 years old with major depressive disorder for 8 weeks from 2000 to 2001. Change from baseline in the Children's Depression Rating Scale-Revised total score at week 8 (last observation carried forward) was the chief measure of efficacy. Spontaneous reporting of adverse events provided the primary evaluation of safety.

Results: An intent-to-treat cohort of 206 patients was randomly assigned to paroxetine (N = 104) or placebo (N = 102). Adjusted mean change from baseline to week 8 on the Children's Depression Rating Scale-Revised total score for patients receiving paroxetine and placebo was –22.58 (SE = 1.47) and –23.38 points (SE = 1.60), respectively (0.80, 95% CI –3.09 to 4.69, p = .684). Adverse events occurring in $\geq 5\%$ of the paroxetine group and at a rate at least twice that of the placebo group were increased cough (5.9% versus 2.9%), dyspepsia (5.9% versus 2.9%), vomiting (5.9% versus 2.0%), and dizziness (5.0% versus 1.0%). Serious adverse events were reported in 6 of 104 (5.8%) subjects receiving paroxetine compared with 1 patient (1.0%) receiving placebo. Suicidal behavior and/or ideation while taking study medication (excluding taper) occurred at a rate of 1.92% (2/104) for patients receiving paroxetine versus 0.98% (1/102) for patients receiving placebo.

Conclusions: Paroxetine failed to prove more efficacious than placebo in the treatment of pediatric major depressive disorder.

Disordered Eating Among a Multi-Racial/Ethnic Sample of Female High-School Athletes

Pernick Y, Nichols JF, Rauh MJ, et al.

J Adolesc Health 2006;38:689–695

Purpose: This study sought to investigate the prevalence of disordered eating attitudes and behaviors in a multi-racial/ethnic population of female high school athletes.

Method: Suburban female high school athletes (N = 453; Caucasian, N = 277; Latina, N = 103; African American, N = 73; aged 15.7 \pm 1.2 years) completed the Eating Disorders Examination Questionnaire (EDE-Q) during their competitive season.

Results: The prevalence of disordered eating in the total sample was 19.6%: 19.2% for African Americans, 18.4% for Caucasians, and 23.3% for Latinas. The prevalence estimates of binge eating (12.6%) and vomiting (7.8%) were significantly greater in Latinas than in African Americans (5.5% and 1.4%, respectively) and Caucasians (5.4% and 2.2%, respectively; p < .05). The prevalence of diuretic and laxative use was low

for the entire sample (<3%); there were no differences by ethnicity ($p > .05$). After adjusting for body mass index and sport, analysis of covariance with Bonferroni post hoc pairwise comparisons showed higher scores on all EDE-Q subscales for Caucasian and Latina than African American athletes, except eating restraint, which was higher only in Caucasians compared with African Americans ($p = .001$ to $p = .046$).

Conclusions: Caucasian and Latina female high school athletes may be at higher risk for eating disorders relative to their African American peers. In addition, Latina athletes may be especially prone to binge-eating disorder. Behavioral interventions that are culturally sensitive and aimed specifically at high school athletes are required to lower the risk of eating disorders and related long-term health sequelae in this population.

Depression in Assisted Living Is Common and Related to Physical Burden

Watson LC, Lehmann S, Mayer L, et al.

Am J Geriatr Psychiatry 2006;14:876–883

Objective: To acquire an estimate, based on direct observation, of the prevalence of depression, its associated factors, and rates of treatment among residents of assisted living (AL) facilities in central Maryland.

Method: One hundred ninety-six AL residents were recruited from 22 (10 large and 12 small) randomly selected AL facilities in the city of Baltimore and 7 Maryland counties. An experienced team of geriatric psychiatry clinicians administered chart reviews, staff and family histories, comprehensive in-person resident evaluations, and the Cornell Scale for Depression in Dementia (CSDD). Those scoring greater than 7 on the CSDD, a cut point often associated with poor outcomes, were classified as clinically depressed.

Results: Sixty-eight percent of participants, the majority of whom were female and widowed (average age = 86 years), met consensus criteria for dementia. Depression was found in 74% of the subjects (47/196). Bivariate analyses revealed that depression was significantly related to medical comorbidity, need for activities of daily living (ADLs) assistance, more days spent in bed, and less participation in organized activities. Of these, only the need for ADL assistance was significantly associated with depression after relevant covariates were controlled for. Of currently depressed subjects taking antidepressants (43%), those residing in a large AL facility were more likely to receive them. Sixty percent of depressed residents had no regular source of psychiatric care.

Conclusions: This was the first clinical study carried out by geriatric psychiatry professionals in AL facilities. Depression was common, undertreated, and related to physical illness. AL, a rapidly expanding division of long-term care, is a valuable setting in which to detect and treat serious depression.

Teaching Undergraduate Psychiatry in Primary Care: The Impact on Student Learning and Attitudes

Walters K, Raven P, Rosenthal J, et al.

Med Educ 2007;41:100–108

Objective: To investigate how undergraduate psychiatry placements in primary care settings affect students' learning and attitudes toward mental illness.

Method: A questionnaire survey was completed by 79.2% (145/183) of students in the primary care-based psychiatry un-

dergraduate teaching program at Royal Free and University College Medical School, London. Fourteen students, 12 general practitioner (GP) tutors, and 20 patients participating in the course additionally consented to participate in qualitative in-depth interviews.

Results: In the questionnaire survey, 84.0% of students (121/144) placed a high value on the primary care-based teaching. A total of 62.6% of students (87/139) regarded their attitudes toward mental illness as having changed due to their participation in the course. Four key benefits of the teaching program were established in the in-depth interviews: increasing breadth of experience, understanding the patients' experience, learning about mental illness from a GP's perspective, and changing students' attitudes toward mental illness. The attitudinal shift in the students included 2 main dimensions: "normalization" of mental illness and increased empathy.

Conclusions: Students learning psychiatry in primary care settings experience a broader range of patients than in hospital settings, and they are encouraged to pursue a "person-centered" approach, which in turn can affect their attitudes toward mental illness in a positive way, reducing stereotyping and increasing empathy.

The Timing of Maternal Depressive Symptoms and Mothers' Parenting Practices With Young Children: Implications for Pediatric Practice

McLearn KT, Minkovitz CS, Strobino DM, et al.

Pediatrics 2006;118:e174–e182

Background: Maternal depressive symptoms are prevalent and have associated consequences on parental behaviors, child health, and development. Additional research to assess the effects of the timing of maternal depressive symptoms at different stages in the development of the young child on the emergence of developmentally appropriate parenting practices is needed. For clinicians, data addressing the question of when or how often to screen for maternal depressive symptoms or how to target anticipatory guidance to address parental needs are scarce.

Objective: This study asked whether concurrent maternal depressive symptoms have a greater effect than earlier depressive symptoms on the emergence of maternal parenting practices at 30 to 33 months in 3 important areas: child safety, development, and discipline.

Method: For this study, secondary analyses from the Healthy Steps National Evaluation were performed. Data were provided by a self-administered enrollment questionnaire and computer-assisted telephone interviews with the mother when the Healthy Steps children were 2 to 4 and 30 to 33 months old. Information about 4 safety practices (i.e., always uses car seat, has electric outlet covers, has safety latches on cabinets, and has lowered temperature on the water heater), 6 child development practices (i.e., talks daily to child while working, plays daily with child, reads daily to child, limits child television and video watching to <2 hours a day, follows ≥ 3 daily routines, and is more nurturing), and 3 discipline practices (i.e., uses more reasoning, uses more harsh punishment, and ever slapped child on the face or spanked the child with an object) was elicited by the 30- to 33-month interview. The parenting practices were selected based on evidence of their importance for child health and development, near-complete data, and sample variability. The discipline practices were constructed from the Parental Response to Misbehavior Scale. A 14-item modified version of the Center for Epidemiologic Studies–Depression Scale evaluated

maternal depressive symptoms. The effect of depressive symptoms on parenting practices, adjusted for baseline demographic characteristics, Healthy Steps participation, and site, were estimated by multiple logistic regression models. No significant interactions were found when testing analytic models with dummy variables for depressive symptoms at 2 to 4 months only, 30 to 33 months only, and at both times; reported models exclude interaction terms. Main effects of maternal depressive symptoms at 2 to 4 and 30 to 33 months when both are included in the model are reported.

Results: Of 5565 families, 3412 mothers (61%) completed 2- to 4- and 30- to 33-month interviews and provided Center for Epidemiologic Studies–Depression Scale data at both times. The odds of using car seats, lowering the water heater temperature, and playing with the child at 30 to 33 months were reduced in mothers with depressive symptoms at 2 to 4 months. The odds of using electric outlet covers, using safety latches, talking with the child, limiting television or video watching, following daily routines, and being more nurturing were reduced in mothers with concurrent depressive symptoms. The odds of using harsh punishment and of slapping the child on the face or spanking with an object were increased in mothers with concurrent depressive symptoms.

Conclusions: Concurrent maternal depressive symptoms may have stronger associations than earlier depressive symptoms with mothers not initiating recommended age-appropriate safety and child development practices as well as using harsh discipline practices for toddlers. Nevertheless, these findings also suggest that early depressive symptoms in mothers may continue to affect use of parenting practices that are likely to be established early in the life of the child. That clinicians' screening for maternal depressive symptoms during the toddler period, as well as the early postpartum period, is vital is emphasized by the findings of this study, because maternal depressive symptoms can appear later independent of earlier screening results. Regular depressive symptom screening of the mothers of young patients may improve clinician capacity to give opportune and individualized anticipatory instruction about essential parenting practices, as well as to provide apt referrals.

Moderate to Severe Depressive Symptoms Among Adolescent Mothers Followed 4 Years Postpartum

Schmidt RM, Wiemann CM, Rickert VI, et al.

J Adolesc Health 2006;38:712–718

Purpose: This study sought to investigate racial/ethnic differences in depressive symptoms among adolescent mothers during the first 4 years after delivery.

Method: In this prospective study, 623 adolescent mothers aged 18 years or younger were followed for 4 years postpartum. The Beck Depression Inventory (BDI) was used to measure depressive symptoms. Analyses included data collected at 3, 12, 24, and 48 months after delivery.

Results: Overall, 57% of participants reported moderate-to-severe depressive symptoms during the 4-year period. The greatest percentage of participants who cited new moderate-to-severe depressive symptoms was seen during the first 12 months postpartum. At 3 months, the prevalence of moderate-to-severe depressive symptoms was highest (36.7%) and steadily declined through 48 months (21.1%) for all racial/ethnic groups. The only exception was a slightly higher percentage of African Americans reporting moderate-to-severe depres-

sive symptoms at 48 (20.0%) than at 24 months (16.9%). Higher odds of depressive symptoms for Caucasians (adjusted odds ratio [AOR] = 2.0; 95% CI = 1.2 to 3.4) at 3 months and for Mexican Americans at both 12 (AOR = 2.6; 95% CI = 1.4 to 4.8) and 24 (AOR = 2.2; 95% CI = 1.1 to 4.4) months were revealed by logistic regression analysis, used to calculate the relative odds of experiencing moderate-to-severe depressive symptoms. Moderate-to-severe depressive symptoms at 3 months were significantly related to moderate-to-severe depressive symptoms at 48 months for all racial/ethnic groups ($p < .001$).

Conclusions: Moderate-to-severe depressive symptoms are experienced by > 50% of adolescent mothers during the first year after delivery. Although African American adolescent mothers seem to have the lowest rates of moderate-to-severe depressive symptoms as a group, they have higher rates of recurrence than Mexican Americans and Caucasians.

Improving Recognition of Adolescent Depression in Primary Care

Zuckerbrot RA, Jensen PS

Arch Pediatr Adolesc Med 2006;160:694–704

Objective: This study sought to investigate (1) what evidence (i.e., psychometric data collected in pediatric primary care, patient outcome data) exists for the different techniques employed to distinguish adolescent depression in primary care? and (2) what methods of identification are currently in use?

Data Sources: A search of MEDLINE for English-language articles using particular search terms and inspection of pertinent titles, abstracts, and articles was conducted.

Study Selection: We surveyed 1743 MEDLINE abstracts. Seventy-four articles were pulled for examination, with 30 articles meeting full criteria.

Data Extraction: Five studies had sufficient psychometric data on various strategies for identifying adolescent depression in primary care. Only 1 compared the diagnostic accuracy of physicians trained to ask depression questions compared with physicians educated in the application of a diagnostic aid. Six studies surveyed current practice. Evidence regarding sensitivity, specificity, positive predictive value, and negative predictive value was sought for question 1. Frequency of screening was sought for question 2.

Data Synthesis: Few health care professionals use systematic depression identification methods, although there is some increasing evidence for their validity, feasibility, and possible efficacy.

Conclusion: Although primary care professionals would improve their rates of successful diagnosis of depression through training, using adolescent symptom rating scales would improve these rates even further, according to available evidence.

Efficacy and Safety of Dexamethylphenidate Extended-Release Capsules in Children With Attention-Deficit/Hyperactivity Disorder

Greenhill LL, Muniz R, Ball RR, et al.

J Am Acad Child Adolesc Psychiatry 2006;45:817–823

Objective: This study evaluated the efficacy and safety of dexamethylphenidate extended release (d-MPH-ER) relative to placebo in pediatric patients with attention-deficit/hyperactivity disorder (ADHD).

Method: This multicenter, randomized, double-blind, placebo-controlled, parallel-group, 2-phase study assessed 97 patients (aged 6–17 years) with ADHD (DSM-IV criteria). In this study, performed between 2001 and 2003, patients were randomly assigned to d-MPH-ER or placebo for 7 weeks after the completion of a 2-week assessment period. After 5 weeks, during which flexible d-MPH-ER dosing (30 mg/day) was permitted, patients continued taking their optimal dose for the last 2 study weeks. Change from baseline to final rating on the Conners ADHD/DSM-IV Scale–Teacher version (CADS-T) total subscale score was the primary efficacy assessment. Changes from baseline to final visit in CADS-T Inattentive and Hyperactive-Impulsive subscale scores, CADS-P DSM-IV total subscale score and Inattentive and Hyperactive-Impulsive subscale scores, Clinical Global Impressions-Improvement scale (CGI-I) and CGI-Severity scale (CGI-S) scores, and Child Health Questionnaire Parent Form 50 scores were secondary efficacy measures.

Results: Patients taking d-MPH-ER showed significantly improved CADS-T total scores compared with those taking placebo ($p < .001$), and 67.3% of patients taking d-MPH-ER were rated much or very much improved on CGI-I at final visit compared with 13.3% of patients taking placebo ($p < .001$). Adverse events suspected as drug related were spontaneously reported by more patients taking d-MPH-ER (49.1%) than placebo (25.5%).

Conclusions: Once-daily d-MPH-ER was more effective than placebo in the treatment of ADHD in children and adolescents.

An Open Trial of Light Therapy in Adult Attention-Deficit/Hyperactivity Disorder

Rybak YE, McNeely HE, Mackenzie BE, et al.

J Clin Psychiatry 2006;67:1527–1535

Objective: Adults with attention-deficit/hyperactivity disorder (ADHD), a delayed sleep/activity rhythm, and/or seasonal mood symptoms may contribute significantly to core pathology and disability. This study examined whether a chronobiologically based treatment, i.e., morning bright light therapy (LT), might have utility as an adjunctive treatment for adult ADHD in the fall/winter period.

Method: Twenty-nine adults with DSM-IV ADHD were administered a standard 3-week open trial of LT during the fall or winter months. Primary outcome measures included percentage reduction on the Brown Adult ADD Scale and the Conners' Adult ADHD Scale. Secondary measures were decrease in depression scores according to the Structured Interview Guide for the Hamilton Depression Rating Scale, Seasonal Affective Disorder version; improvements on various neuropsychological tests; and shift toward an earlier circadian preference as measured by the Horne-Ostberg Morningness-Eveningness questionnaire. Regression analyses determined which variables at baseline best predicted improvement on a given outcome measure and which variables changed in parallel with one another. The study was conducted from November 2003 through February 2004.

Results: Morning bright light therapy was associated with a significant decrease in both subjective and objective measures of core ADHD pathology, improved mood symptoms, and a significant phase advance in circadian preference. Multiple regression showed that the shift toward an earlier circadian preference with LT was the strongest predictor of improvement on both subjective and objective ADHD measures. Neither base-

line global seasonality scores nor baseline depression scores strongly predicted LT effects on most measures of ADHD.

Conclusion: These findings suggest that, during the fall/winter period, LT may be a useful adjunct in many adults with ADHD. Strikingly, the strongest correlate of improvement in core ADHD pathology was a phase advance in circadian preference rather than alleviation of comorbid seasonal affective disorder, suggesting important clinical benefits of LT beyond the treatment of seasonal affective disorder.

Emotional, Behavioral, Social, and Academic Outcomes in Adolescents Born With Very Low Birth Weight

Dahl LB, Kaarensen PI, Tunby J, et al.

Pediatrics 2006;118:e449–e459

Background: Survivors of very low birth weight carry an increased risk of acquiring emotional and behavioral problems and low social and academic proficiencies. Information on such cases in very low birth weight adolescents remains scarce.

Objective: This study examined gender-specific emotional and behavioral difficulties and social and academic proficiencies in a sample of very low birth weight adolescents in north Norway.

Method: Families with very low birth weight adolescents aged 13 to 18 years, born between 1978 and 1989 ($N = 162$) were contacted by mail, and they were asked to complete the Child Behavior Check List and the Youth Self-Report. Data provided by these families were compared with 2 normative adolescent cohorts (Child Behavior Check List, $N = 540$; Youth Self-Report, $N = 2522$). Scores given by very low birth weight adolescents and their parents on identical items in Child Behavior Check List and Youth Self-Report (cross-informant syndrome constructs) were compared in pairs. Demographic and early medical characteristics were entered into a hierarchical multiple regression analysis to investigate predictive effects.

Results: Of 156 eligible families, 99 (63.5%) replied. The Child Behavior Check List was completed by all, and the Youth Self-Report was completed by 82 (52.6%). Compared with normative adolescents, very low birth weight boys attested fewer externalizing and internalizing behaviors, thought and attention problems, and higher activity score, whereas very low birth weight girls reported fewer externalizing behaviors and social, thought, and attention problems and higher activity score. Compared with normative parents, however, very low birth weight parents reported more social and attention problems and less social and academic proficiency in boys and more internalizing behavior and social and attention problems and less academic proficiency in girls. Except for externalizing behavior and social problems in girls, high proportions of both genders scored within the borderline/clinical range on all of the scales. In contrast to boys, very low birth weight adolescent girls reported more problems than parents when compared in pairs, and parents, in particular, did not recognize externalizing problems.

Conclusions: Parents report more emotional and behavioral problems and less proficiency in significant proportions of very low birth weight adolescents than normative adolescents. In contrast, very low birth weight adolescents report fewer problems and similar or higher proficiency than normative adolescents. Very low birth weight adolescent girls report more emotional and behavioral problems compared with their parents than very low birth weight adolescent boys do. Parents often fail to recognize externalizing problems in very low birth weight adolescent girls. Prospective longitudinal studies are necessary

to better understand these seemingly contradictory findings and to develop adequate intervention programs.

Child Comorbidity, Maternal Mood Disorder, and Perceptions of Family Functioning Among Bipolar Youth

Esposito-Smythers C, Birmaher B, Valeri S, et al.

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Objective: To study the relationship between youth comorbid psychiatric disorders, maternal mood disorder, and perceptions of family cohesion and conflict among youth diagnosed with pediatric bipolar disorder.

Method: A diagnostic interview and instruments evaluating family psychiatric history and functioning were completed by 389 bipolar youths and their parents. The Family Adaptability and Cohesion Scales-II and the Conflict Behavior Questionnaire were used to evaluate family functioning.

Results: Lower family cohesion was associated with the presence of a maternal mood disorder. In addition, the presence of a youth externalizing disorder with or without a co-occurring anxiety disorder was associated with lower family cohesion as well as higher family conflict. Furthermore, the presence of a youth externalizing disorder meant that the negative relationship between maternal mood disorder and family functioning was stronger.

Conclusions: Among youths with pediatric bipolar disorder, it appears that youth comorbidity and maternal mood disorders are associated with worse family functioning. For the best results, family-based treatments with bipolar youths may need to integrate treatment of youth comorbidity and address maternal mood disorder.

Individual and Combined Effects of Postpartum Depression in Mothers and Fathers on Parenting Behavior

Paulson JF, Dauber S, Leiferman JA

Pediatrics 2006;118:659–668

Background: Pediatric anticipatory guidance has been associated with parenting actions that foster positive infant development. It is recognized that maternal postpartum depression negatively affects parenting and may keep mothers from complying with anticipatory guidance. How postpartum depression in fathers affects parenting has not been well studied.

Objective: This study sought to investigate how maternal and paternal depression affected parental response to anticipatory guidance recommendations.

Method: The 9-month-old wave of data from a national study of children and their families, the Early Childhood Longitudinal Study, provided data on 5089 2-parent families. A short form of the Center for Epidemiologic Studies Depression Scale was used to measure depressive symptoms. Data on parent health behaviors and parent-infant interactions were elicited by interviews with both parents. Estimates of the association between depression in each parent and the parenting behaviors under consideration were provided by logistic and linear regression models adjusted for demographic and socioeconomic status indicators.

Results: In this national sample, 14% of mothers and 10% of fathers showed degrees of depressive symptoms on the Center for Epidemiologic Studies Depression Scale that have been associated with clinical diagnoses, substantiating other outcomes

indicating a high prevalence of postpartum maternal depression but emphasizing that postpartum depression is also a significant issue for fathers. Depressed mothers were approximately 1.5 times more likely to participate in feeding and sleep practices with their infant that were less healthy. Depressive symptoms were negatively associated with positive enrichment activity with the child (reading, singing songs, and telling stories) in both mothers and fathers.

Conclusions: In the United States, postpartum depression presents a significant problem in both mothers and fathers. It is associated with undesirable parent health behaviors and fewer positive interactions between parent and infant.

Cognitive Dysfunction Is Associated With Poor Diabetes Control in Older Adults

Munshi M, Grande L, Hayes M, et al.

Diabetes Care 2006;29:1794–1799

Objective: This study assessed the relationship between cognitive dysfunction and other barriers and glycemic control in older adults with diabetes.

Method: Impediments to successful management of diabetes were evaluated in patients over 70 years old presenting to a geriatric diabetes clinic. The Mini-Mental State Examination (MMSE) and a clock-drawing test (CDT) scored by (1) a method validated by Mendez et al. and (2) a modified CDT (clock in a box [CIB]) were used to screen patients for cognitive dysfunction. The Geriatric Depression Scale was used to assess depression. Activities of daily living (ADLs) and instrumental ADLs (IADLs), in addition to other functional disabilities, were evaluated by Interview questionnaires.

Results: The study assessed 60 patients (mean \pm SD age = 79 ± 5 years, mean \pm SD diabetes duration = 4 ± 13 years), 34% of whom had low CIB scores (≤ 5), and 38% of whom had low CDT scores (≤ 13). Performance on both CIB and CDT were inversely correlated with HbA(1c), an outcome indicating that cognitive dysfunction is associated with poor glycemic control ($r = -0.37$, $p < .004$ and $r = -0.38$, $p < .004$, respectively). Depressive symptoms with greater difficulty completing the tasks of the IADL survey (5.7 ± 1.7 vs. 4.6 ± 2.0 ; $p < .03$) were found in 33% of patients. A high incidence of functional disabilities, including hearing impairment (48%), vision impairment (53%), history of recent falls (33%), fear of falls (44%), and difficulty performing IADLs (39%), was found in these older adults with diabetes.

Conclusions: A high risk for undiagnosed cognitive dysfunction, depression, and functional disabilities is borne by older adults with diabetes, and cognitive dysfunction in this population is associated with poor diabetes control.

Neuropsychological Outcomes of Army Personnel Following Deployment to the Iraq War

Vasterling JJ, Proctor SP, Amoroso P, et al.

JAMA 2006;296:519–529

Background: The effects of war-zone deployment on neuropsychological health remain poorly understood. Neuropsychological performance deficits are sensitive measures of neural dysfunction and are often associated with psychosocial and occupational problems. Earlier investigations have not conducted objective neuropsychological evaluations of participants both before and after a major war-zone deployment.

Objective: This study was designed to assess objective neuropsychological outcomes of Iraq War deployment in a large military cohort.

Method: The Neurocognition Deployment Health Study is a prospective, cohort-controlled study conducted at military installations. This report focuses on 961 male and female active-duty Army soldiers taken from the complete cohort. Deploying Army soldiers (N = 654) were assessed before deployment to Iraq (April–December 2003) and shortly after return (within a mean of 73 days [median = 75 days]; January–May 2005) from Iraq deployment. A comparison group of soldiers (N = 307), similar in military characteristics but not deploying overseas during the study, was assessed in sessions timed to be as close as possible to the assessment of those being deployed. Military unit sampling techniques expedited representation of combat, combat support, and combat service support functions among both deployers and nondeployers. Individually conducted, performance-based neuropsychological tasks were the main outcome measures. Generalized estimating equations (β ; the unstandardized parameter estimate) were used to determine the absolute differences in adjusted mean outcome scores between deployed and nondeployed groups.

Results: Iraq deployment, compared with nondeployment, was associated with neuropsychological compromise on tasks of sustained attention ($\beta = 0.11$; $p < .001$), verbal learning ($\beta = -1.51$; $p = .003$), and visual-spatial memory ($\beta = -3.82$; $p < .001$), as disclosed by multiple linear regression analyses adjusted for battalion membership. In addition, Iraq deployment was associated with increased negative state affect on measures of confusion ($\beta = 1.40$; $p < .001$) and tension ($\beta = 1.24$; $p < .001$), although deployment was associated with improved simple reaction time ($\beta = 4.30$; $p = .003$). After taking into account deployment-related head injury and stress and depression symptoms, deployment effects remained statistically significant.

Conclusions: Deployment to Iraq is associated with increased risk of neuropsychological compromise. Findings emphasize the need for continuing assessment of the effect of deployment on neural functioning. Neuropsychological compromise in health prevention and postdeployment clinical and occupational management are among the public health implications that must be considered.

The Caregiving Environments Provided to Children by Depressed Mothers With or Without an Antisocial History

Kim-Cohen J, Caspi A, Rutter M, et al.

Am J Psychiatry 2006;163:1009–1018

Objective: Many depressed women have a history of antisocial behavior. However, whether this behavior has repercussions for children of depressed mothers has not been determined by research into maternal depression. This study compared the developmental outcomes in children of depressed mothers with or without an antisocial history and caregiving environments provided to them.

Method: In the Environmental Risk Longitudinal Twin Study, a nationally representative study of 1106 families, mothers were given the Diagnostic Interview Schedule for Major Depressive Disorder and questioned about their lifetime history of antisocial personality disorder symptoms. Information regarding the children's behavior problems at 5 and 7 years of

age was obtained from mothers and teachers. The authors evaluated the quality of the caregiving environment using maternal reports and interviewer observations.

Results: Significantly higher levels of antisocial behavior and rates of DSM-IV conduct disorder were found in the children of depressed and antisocial mothers than in children of mothers with depression only, even after the number of symptoms and chronicity of maternal major depressive disorder had been controlled for. The children of depressed and antisocial mothers were at an increased risk of experiencing multiple caregiving abuses, among them physical maltreatment, high levels of maternal hostility, and exposure to domestic violence.

Conclusions: Disregarding the frequent co-occurrence of an antisocial history in depressed mothers may conceal the significantly elevated risks in children's development. Clinicians who encounter depression in female patients should know that children of depressed and antisocial mothers comprise a population at extremely high risk for early-onset psychopathology.

Exploring Risk Factors for the Emergence of Children's Mental Health Problems

Essex MJ, Kraemer HC, Armstrong JM, et al.

Arch Gen Psychiatry 2006;63:1246–1256

Objective: Exploratory studies creating testable models of how risk factors for childhood mental health problems work together over time are vital for developing prevention and treatment approaches.

Objective: This study sought to create models addressing the following 2 questions: (1) How early can we identify children at risk for mental health problems in third grade? (2) How do the risk factors work together over time?

Method: A Wisconsin community sample was evaluated 8 times, beginning during pregnancy. Multi-informant reports (mothers, teachers, and children) of children's mental health symptoms in third grade were completed by 379 families. Symptom severity and directionality (externalizing vs. internalizing) were the main outcome measures.

Results: We generated the hypothesis that distinct pathways to symptom severity were defined by family socioeconomic status (SES). In low/middle-SES families, children were at risk if their mothers were distressed during the infancy period, which was then associated with more generalized maternal and child distress and dysregulation during the preschool period. The situation was more complicated in high-SES families, starting with parental histories of depression and family psychopathology, which caused greater family stress in the infancy period and maternal and child distress and dysregulation during the preschool period. Social and academic impairment during the school transition was an important mediator for all children. Two pathways to later symptom directionality, one beginning with child sex and the other with child temperament, were identified.

Conclusions: Most risk factors predicted the severity, not the directionality, of symptoms. The risk factors for internalizing and externalizing problems could be very similar, and the same preventive interventions might avail for both classes of problems. Furthermore, at-risk children from high-SES families might be distinguishable as early as infancy, whereas those from lower SES families may be recognizable only as preschoolers.