

## 2008 in Review

**T**he editors are pleased to offer personal selections of some of the articles they found particularly interesting and important in this year's *Journal*.

### Neighborhood Ethnic Density and Psychosis in Immigrants

The paper by Veling and colleagues in the January issue (1) adds a critical piece of information to the schizophrenia literature, explaining the curious finding that the incidence of schizophrenia increases in individuals who emigrate to a new country. The authors used a clever epidemiological design to explore an association between the incidence of schizophrenia in immigrants and the ethnic density of the immigrant's own race in a neighborhood. It was a necessary convenience that a city like The Hague exists, which has several large immigrant populations (Moroccan, Surinamese, and Turkish) living alongside native Dutch and a continuously updated municipal recording system for the ethnicity of its citizens and their parents by postal-code neighborhoods. The density of these four ethnic groups in each neighborhood was calculated, as was the social deprivation status of the neighborhood. The incidence of psychotic disorders within postal-code neighborhoods was calculated over a 7-year period. While the incidence of psychotic disorders was higher in all immigrant groups compared with native Dutch (incidence rate ratio=2.22), this difference was primarily accounted for by the dramatically higher rate of psychosis in those immigrants who lived in neighborhoods with a low density of their own ethnicity (incidence rate ratio=2.36) compared with those who lived in neighborhoods with a high density of their own ethnicity (incidence rate ratio=1.25). The risk of psychosis was unrelated to neighborhood deprivation status. These results can be interpreted to suggest that the social experience of living in an estranged environment can contribute to the onset of psychosis. Alternatively, one could propose that individuals with a propensity for psychosis seek out alienating environments. In either case, this experiment implicates the risk of an altered living context in psychosis, not "immigration" itself.

CAROL A. TAMMINGA, M.D.

### Measuring Longer-Term Psychiatric Treatment Outcomes

Studies of psychiatric treatment outcomes require the selection of specific measures of outcome and duration of follow-up. Three papers published in the *Journal* this year, studying quite different conditions with quite different treatments, illustrate that it is possible to progress from traditional short-term studies measuring symptom relief to more clinically relevant outcomes with longer duration of follow-up. Bateman and Fonagy (2) report on mentalization-based treatment for borderline personality disorder 8 years after randomization and 5 years after cessation of treatment. Swartz and colleagues (3) studied the effect of a brief interpersonal psychotherapy on depressed women who have children in psychiatric treatment. That the treatment helps depressed women has been well established; Swartz et al. demonstrate that it also helps their offspring. Pilowsky and colleagues (4), working with data from the STAR\*D-Child Study—a much larger effectiveness study of pharmacotherapy for depression, although not randomized—report similar effects on the patients' children.

Each of these studies is important in its own right. Together, they demonstrate that clinically realistic follow-up intervals and clinically relevant outcome measures are compatible with high-quality scientific methodology and can be applied to studies both of psy-

chotherapy and of pharmacotherapy. Finally, it is of interest too that none of these studies were funded by industry or designed to obtain regulatory approval of the treatment.

ROBERT MICHELS, M.D.

### Relapse Prevention in Pediatric Depression

Picking a yearly favorite is a rite of fall to be relished. While the *Journal* publishes outstanding science in diverse areas, studies on therapeutics consistently pique my interest, as they hold hope for having an immediate impact on patient care. My selection this year is the article from Emslie and colleagues (5), who demonstrate the efficacy of fluoxetine in relapse prevention for pediatric major depressive disorder.

Perhaps no area has garnered more attention recently in child psychiatry than antidepressant safety and efficacy. In 1997, Emslie and colleagues (6) were the first to demonstrate convincing efficacy (also for fluoxetine) in pediatric depression. Over the ensuing decade, nagging questions persisted concerning the reliability of this finding. The Food and Drug Administration (FDA) has maintained that such questions at least partly reflect flaws in the most frequently employed efficacy design, the parallel-group randomized controlled trial. A novel approach, suggested by the FDA, may yield more definitive results. As in 1997, Emslie and colleagues have once again answered the call for a novel approach: using the discontinuation randomized controlled trial design, as specifically recommended by the FDA, they convincingly demonstrate medication efficacy in pediatric major depression, this time for relapse prevention.

DANIEL S. PINE, M.D.

### Treatment of Depression in the Elderly

In an article in the February issue entitled “Microstructural White Matter Abnormalities and Remission of Geriatric Depression,” Alexopoulos and colleagues (7) provide a superb example of the future of research at the interface of brain aging and depressive syndromes in late life. The study demonstrated that microstructural white matter abnormalities serve to perpetuate depressive symptoms in older adults by disrupting connectivity with cortico-striato-limbic networks subserving mood regulation. As Kumar and Ajilore aptly stated in the accompanying editorial in the same issue (8), these findings raise “the intriguing possibility of identifying potential nonresponders to pharmacological intervention early in the course of illness.” The opportunity to track subtle changes in distributed neural circuits over the lifespan provides an exciting new horizon in developing tailored treatments. The challenge, however, is highlighted by the finding that lower fractional anisotropy predicted *poorer* treatment response. This leaves the field to struggle with the next question, namely, when markers of refractoriness are identified, what strategies are available to deal with the recalcitrant symptoms? Leaders in the field are clearly advocating multimodal therapies for older adults as offering the greatest hope for improving quality of life. This approach will involve embracing comprehensive interventions to address unmet needs in terms of medical comorbidity, functional deficits, social isolation, and access to care. Our attention to comprehensive care to improve quality of life for older people could not come at a better time for our aging society.

SUSAN K. SCHULTZ, M.D.

### Diagnosis-Specific Brain Abnormalities

Ever since Kraepelin differentiated dementia praecox from manic-depressive psychosis, schizophrenia and bipolar disorder have been considered separate psychiatric dis-

orders with different clinical features and courses. However, recent findings of shared genetic liabilities and intermediate illness phenotypes have supported the suggestion that schizophrenia and bipolar disorder represent overlapping spectrums on a continuum of illness. To address this controversy, McIntosh and colleagues (9) probed patterns of brain activation in a large cohort of patients with schizophrenia or psychotic bipolar disorder and healthy comparison subjects. The investigators used a sentence completion task as the experimental probe because of the differences in the characteristic speech and language abnormalities found in schizophrenia and bipolar disorder. The patients with schizophrenia showed decreased activation of the dorsal prefrontal cortex, whereas those with bipolar disorder exhibited decreased anterior insula activation. Although the potential effects of medications (e.g., antipsychotics versus mood stabilizers) could not be excluded, these findings are consistent with diagnosis-specific brain abnormalities. The focus on patients who had at least one first- or second-degree relative with the same diagnosis, by increasing specific genetic loading, may have helped reveal differences but may limit the generalizability of the findings to familial forms of illness. Despite these limitations, the study provides interesting findings and an example of the types of experimental designs that can generate the empirical data required for a rational revision of diagnostic categories and criteria in psychiatry.

DAVID A. LEWIS, M.D.

## Neuroimaging and the Cognitive Model of Depression

From Freud to Bleuler, the goal of psychiatrists at the beginning of the 20th century was to divine the malfunction of the brain in psychiatric illness from the thoughts of patients. The project was frustrated not because of the failure of psychiatrists' clinical observations but because brain science had not advanced to a point where it could test their pioneering hypotheses. A century later, Aaron T. Beck wrote "The Evolution of the Cognitive Model of Depression and Its Neurobiological Correlates," which appeared in the August issue of the *Journal* (10). It is a remarkable paper because Beck modestly but convincingly shows us how his characterization of the cognitive features of depression presaged the imaging of brain dysfunction in depression. Through his insightful observations, first in the dreams of his patients and then in experimental cognitive therapy, Beck dismissed the old theory that depression was self-directed hostility and replaced it with a model of automatic misprocessing of information, which he termed negative cognitive bias. His article cautiously but clearly links this cognitive construct to contemporary imaging of the overreaction of the amygdala to negative stimuli.

Clinical readers are sometimes puzzled by how many brain imaging articles the *Journal* publishes. Beck's article puts these studies into perspective: the model of automatic cognitive misprocessing that now guides the widespread clinical practice of cognitive therapy for depression is based on a brain dysfunction that can be demonstrated by physiological brain imaging. The goal of 100 years ago is now a reality that provides a scientific basis for our most widely practiced psychotherapy for depression.

ROBERT FREEDMAN, M.D.

## References

1. Veling W, Susser E, van Os J, Mackenbach JP, Selten JP, Hoek HW: Ethnic density of neighborhoods and incidence of psychotic disorders among immigrants. *Am J Psychiatry* 2008; 165:66–73
2. Bateman A, Fonagy P: 8-year follow-up of patients treated for borderline personality disorder: mentalization-based treatment versus treatment as usual. *Am J Psychiatry* 2008; 165:631–638
3. Swartz HA, Frank E, Zuckoff A, Cyranowski JM, Houck PR, Cheng Y, Fleming MA, Grote NK, Brent DA, Shear MK: Brief interpersonal psychotherapy for depressed mothers whose children are receiving psychiatric treatment. *Am J Psychiatry* 2008; 165:1155–1162
4. Pilowsky DJ, Wickramaratne P, Talati A, Tang M, Hughes CW, Garber J, Malloy E, King C, Cerda G, Sood AB, Alpert JE, Trivedi MH, Fava M, Rush AJ, Wisniewski S, Weissman MM: Children of depressed mothers 1 year after

- the initiation of maternal treatment: findings from the STAR\*D-Child Study. *Am J Psychiatry* 2008; 165:1136–1147
5. Emslie GJ, Kennard BD, Mayes TL, Nightingale-Teresi J, Carmody T, Hughes CW, Rush AJ, Tao R, Rintelmann JW: Fluoxetine versus placebo in preventing relapse of major depression in children and adolescents. *Am J Psychiatry* 2008; 165:459–467
  6. Emslie GJ, Rush AJ, Weinberg WA, Kowatch RA, Hughes CW, Carmody T, Rintelmann J: Double-blind, randomized placebo-controlled trial of fluoxetine in depressed children and adolescents. *Arch Gen Psychiatry* 1997; 54:1031–1037
  7. Alexopoulos GS, Murphy CF, Gunning-Dixon FM, Latoussakis V, Kanellopoulos D, Klimstra S, Lim KO, Hoptman MJ: Microstructural white matter abnormalities and remission of geriatric depression. *Am J Psychiatry* 2008; 165:238–244
  8. Kumar A, Ajilore O: Magnetic resonance imaging and late-life depression: potential biomarkers in the era of personalized medicine (editorial). *Am J Psychiatry* 2008; 165:166–168
  9. McIntosh AM, Whalley HC, McKirdy J, Hall J, Sussmann JE, Shankar P, Johnstone EC, Lawrie SM: Prefrontal function and activation in bipolar disorder and schizophrenia. *Am J Psychiatry* 2008; 165:378–384
  10. Beck AT: The evolution of the cognitive model of depression and its neurobiological correlates. *Am J Psychiatry* 2008; 165:969–977

*Address correspondence and reprint requests to Dr. Freedman, American Journal of Psychiatry, 1000 Wilson Blvd., Suite 1825, Arlington, VA 22209; [ajp@psych.org](mailto:ajp@psych.org) (e-mail). Editorial accepted for publication September 2008 (doi: 10.1176/appi.ajp.2008.08091434).*

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