

THIS MONTH IN
ARCHIVES
OF
GENERAL PSYCHIATRY

Although cigarette smoking in the United States has been closely monitored, little is known about the epidemiology of nicotine dependence. Using data from the National Comorbidity Survey, **Breslau et al** (p 810) report that 50% of persons who had ever smoked daily for a month or more met *DSM-III-R* criteria for nicotine dependence, and that dependence increased by more than twofold the risk for smoking persistence.

A commentary by Hughes is included.

A high rate of smoking and a low rate of smoking cessation among individuals with depression implicate cigarette smoking as a form of self-medication. **Klimek et al** (p 821) present evidence that long-term smoking produces biological changes in neurons containing the neurotransmitter norepinephrine in the human brain. Alterations observed in these neurons are similar to changes produced experimentally in laboratory animals treated with long-term antidepressant drugs, and the converse of some abnormalities observed in major depression.

The olfactory system is a unique part of the central nervous system where robust molecular, cellular, and synaptic development occurs throughout life. This represents an opportunity to investigate neuronal development in schizophrenia. **Arnold et al** (p 829) examined olfactory receptor neuron birth, differentiation, and maturation in the continuously regenerating olfactory neuroepithelium and identified alterations in the proportions of neurons at different stages of molecular and morphological development. Most significant was an increase in immature neuronal forms in schizophrenics compared with controls. These data indicate a dysregulation of olfactory receptor neuron lineage in schizophrenia.

Steiger et al (p 837) studied the extent to which childhood physical and sexual abuse corresponded to abnormalities in serotonin and cortisol measurements obtained in bulimic and non-bulimic women. Findings suggested that a history of abuse, especially in the bulimic women, predicted more pronounced abnormalities on both biological indices.

Bipolar and unipolar disorder patients have an increased mortality both from suicide and natural causes of death. In the first population-based study of all patients in Sweden followed up from the first inpatient diagnosis, **Ösby et al** (p 844) found suicide mortality ratios were markedly increased for men and women with bipolar and unipolar disorder. Natural causes of death

were also increased, causing around half the excess deaths in both bipolar and unipolar disorder.

Since Alzheimer disease has a gradual onset and progression, decline over time on objective cognitive testing may be present before the patient or family actually observe symptoms. In a prospective study of a community-based cohort of older adults, **Chen et al** (p 853) examined change over time on several cognitive tests. They compared participants who developed Alzheimer disease symptoms approximately 1.5 years later with those who did not. Among those who subsequently manifested Alzheimer disease, tests of memory and of executive function showed the greatest decline.

A commentary by Small, Fratiglioni, and Bäckman is included.

Poor quality of care may contribute to impaired health status and excess mortality in individuals with serious mental disorders. However, little work has been done to design or test models for improving these patients' medical care. In the first such randomized trial, **Druss et al** (p 861) found that veterans treated in an on-site integrated primary care clinic obtained significantly better medical care and health outcomes than those treated in a general medical clinic.

To improve the treatment of panic disorder patients commonly seen in primary care, **Roy-Byrne et al** (p 869) in a 12-month study tested the clinical effectiveness of psychiatrist-guided pharmacotherapy combined with extra education and telephone calls ("collaborative care"), compared with care as usual by a primary care physician. Patients treated by this model of care were more likely to receive and adhere to adequate medication at 3 and 6 months, and had greater improvements in anxiety, depression and disability.

Schizotypal personality disorder (SPD) shares many of the symptoms of schizophrenia. However, unlike in schizophrenia, SPD patients do not have long term, active psychotic symptoms. **Shihabuddin et al** (p 877) used magnetic resonance imaging (MRI) and positron emission tomography (PET) to study the size and metabolic rate of the striatum, an area that has been associated with psychotic symptoms, in individuals with SPD, schizophrenia, and controls. Patients with SPD had reduced size and elevated metabolic rate in parts of the striatum. These alterations may be related to the sparing of patients with SPD from frank psychosis and suggest that SPD is associated with different brain chemistry.