Is school environment linked to depression?

- **The Issue:** Low socioeconomic status has been identified in many studies as a risk factor for depression in adolescents. Some researchers suggest that school environment is also an important risk factor.
- **The Study:** Researchers used data from a 1995 nationally representative survey of more than 13,000 U.S. adolescents in grades seven through 12 from 132 schools. Individual household income and school-level income were analyzed for their effect on depression.
- **The Results:** Low individual household income and low school-level income were each associated with significantly increased depressive symptoms, but individual income level had the greater effect. Also, among students with similar individual household incomes, those who attended schools where average income was in the lowest quartile had significantly higher depression scores than students who attended schools where average income was in the highest quartile. Although these data are interesting, they do not tell us whether low household and school-level incomes actually cause depression in adolescents or even whether they are actually linked to adolescent depression. There is a need for more research to provide concrete answers.

Goodman E, Huang B, Wade TJ, et al: A multilevel analysis of the relation of socioeconomic status to adolescent depressive symptoms: Does school context matter? J Pediatr 2003; 143(4):451-6.

Alternatives in asthma treatment

- **The Issue:** Some guidelines recommend inhaled corticosteroids as first-line therapy for people with asthma. However, when this approach fails, another option is combination therapy with either a ß-agonist or a leukotriene-receptor antagonist. Researchers compared these two approaches.
- **The Study:** The study included 1,490 patients with histories of asthma who responded to inhaled ß-agonists, and who had used inhaled steroids for at least eight weeks before trial entry. Patients were assigned either to inhaled fluticasone plus oral montelukast, or to inhaled fluticasone plus inhaled salmeterol.
- **The Results:** At 48 weeks, 20.1% of the montelukast group and 19.1% of the salmeterol group had experienced at least one asthma exacerbation. However, both groups showed significant improvements in symptoms and pulmonary function. According to these results, montelukast and salmeterol are equivalent as add-on therapies for patients whose asthma is controlled suboptimally by inhaled steroids.

Bjermer L, Bisgaard H, Bousquet J, et al: Montelukast and fluticasone compared with salmeterol and fluticasone in protecting against asthma exacerbation in adults: One year, double blind, randomised, comparative trial. BMJ 2003; 327(7420):891-5.

Falling BP can be dangerous for stroke patients

- **The Issue:** Management of hypertension during acute stroke is controversial. Physicians find it hard to resist treating substantially elevated blood pressure (BP) immediately following stroke, despite the possible hazards.
- **The Study:** In a Brazilian study, 115 patients with acute ischemic strokes were followed. Mean BP on admission was 160/94 mmHg. In an Austrian study, 372 acute ischemic-stroke patients with average BPs similar to those in the Brazilian study were evaluated.
- **The Results:** In the Brazilian study, systolic BP decreased by an average of 28 mmHg during the first 24 hours, while in the Austrian study, a ≥ 25% decrease in diastolic BP during the first hospital day was associated with increased risk for poor neurologic outcome on day 5 (independent of diastolic BP at admission). In both studies, a relationship was demonstrated between an early decrease in BP and poor neurologic outcome among patients with acute ischemic stroke, but cause and effect remains unclear. Furthermore, in both studies, the use of antihypertensive drugs did not correlate with systolic BP reductions, nor predicted poor outcomes.

Oliveira-Filho J, Silva SC, Tabucco CC, et al: Detrimental effect of blood pressure reduction in the first 24 hours of acute stroke onset. Neurology 2003; 61(8):1047-51.

More benefits with coated TIPS

- **The Issue:** The survival effect of transjugular intrahepatic portosystemic shunts (TIPS) in patients with portal hypertension is unclear. TIPS that are coated with polytetrafluoroethylene (PTFE) have recently become available with the expectation of improved patency, lower reintervention rates, and, perhaps, higher survival rates.
- **The Study:** Researchers in Austria retrospectively compared survival rates in 419 patients who received bare-TIPS with rates in 89 patients who received PTFE-TIPS at several centres during three years. Survival data were available for two years. Most patients in both TIPS groups were Child-Pugh class B or C. Alcohol or chronic viral infection was the most common etiology of the underlying liver disease.
- **The Results:** Significantly higher survival rates were found in the PTFE-TIPS group at three months, one year, and two years (93%, 88%, and 76% versus 83%, 73%, and 62% in the bare-stent group). Multivariate analysis confirmed that stent type, patient age, and Child-Pugh class were important predictors of survival. These results substantiate the theoretical advantages of PTFE-coated stents in a large number of patients. Dx

Angermayr B, Cejna M, Koenig F, et al: Survival in patients undergoing transjugular intrahepatic portosystemic shunt: ePTFE-covered stentgrafts versus bare stents. Hepatology 2003; 38(4):1043-50.