Behavior

From Chicago at the annual meeting of the American Psychological Association

Danger decrees get confidence boost

Mental health clinicians must frequently decide whether people diagnosed with psychological disorders are likely to hurt themselves or others in the near future. Serious consequences, such as forcible admission to a psychiatric hospital, ride on these estimations. Yet much research suggests that clinicians usually err in their forecasts of violence.

The confidence that clinicians place in their own judgments, however, turns out to be quite insightful, at least for hospitalized psychiatric patients, a new study finds. If a clinician feels nearly or completely certain about a violence estimate, it typically proves accurate, report Dale E. McNiel of Langley Porter Psychiatric Institute in San Francisco and his coworkers. Modest or low certainty often accompanies erroneous predictions of violence, the researchers hold.

A total of 78 psychiatrists working at a psychiatric hospital participated in the study. They rated 317 patients at the time of admission for any of several mental disorders as either likely or unlikely to physically attack others during the first week of hospitalization. Psychiatrists also indicated the degree of confidence that they placed in these decisions.

Violence estimates relied heavily on patient interviews, information from referring sources, reports by family members, and past medical records. Nursing staff kept track of patients' violent acts during their first week in the hospital.

Among individuals for whom psychiatrists offered confident violence estimates, 3 out of 4 high-risk patients initiated at least one physical attack, and virtually all of the patients considered low risk refrained from aggressive behavior. Moderate- and low-confidence estimates yielded accurate predictions in about 50 percent of cases, a rate that could be achieved by guessing.

In clinical settings, the amount of information available to evaluate dangerousness varies greatly from one patient to another. A confident prediction appears to carry considerable weight, the scientists contend, especially if it relies on knowledge about whether a patient abuses drugs or possesses other violence-promoting characteristics (SN: 1/7/95, p. 8). *—B.B.*

Women mop up after heart attacks

For older married women who survive a heart attack and face a long road to recovery, the daily grind of cooking, cleaning, and other household chores barely skips a beat, a preliminary investigation suggests.

In the month after a woman's heart attack, her household activity declines somewhat below her normal level and her husband picks up the slack, yielding equal workloads for both spouses, according to a study directed by Jerry Suls of the University of Iowa in Iowa City. But within a few more weeks, the domestic status quo returns, with wives reclaiming a virtual monopoly on household duties.

This rapid return to a full work schedule bodes ill for the women's recovery from serious heart conditions, Suls notes.

"We suspect that older, more traditional women are reluctant to give up domestic activity after a heart attack, and their husbands don't want them to," he says.

Suls and his coworkers recruited 15 married women and 15 married men who had survived a first heart attack. Participants came from rural parts of Iowa and averaged about 60 years old. Interviews with volunteers and their spouses occurred at four points over the 6 months after discharge from the hospital.

Male survivors rested at home during the follow-up, Suls remarks, with their wives handling most household tasks in their usual fashion.

Husbands of female heart attack survivors often exhibit a staunch unwillingness to assume domestic duties, says James C. Coyne of the University of Michigan in Ann Arbor, who studies survivors of heart disease. *—B.B.*

Biomedicine

New drugs help angioplasty patients

Angioplasty, a procedure in which a tiny balloon is inserted into a blocked coronary artery and then inflated to open it, can make more invasive heart surgery unnecessary. Each year, about 500,000 people in the United States undergo this procedure. Yet nearly half of them have another angioplasty or even bypass surgery because their arteries either clog again or narrow due to scar tissue formation (SN: 6/14/97, p. 364).

Now, research indicates that two drugs, one new and one old, can limit these problems.

In 2,099 high-risk patients who underwent angioplasty, the new drug abciximab lowered the rate of death, heart attack, or repeat angioplasty by 19 percent in the first year and by 13 percent in the first 3 years, researchers at the Cleveland Clinic Foundation report in the Aug. 13 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. Abciximab was given intravenously for the 12 hours preceding the procedure.

Abciximab keeps blood platelets from aggregating, says Cleveland Clinic cardiologist A. Michael Lincoff, who notes that clotting is the major risk patients face immediately after angioplasty. The drug costs roughly $1,350 per patient, however.

In a Canadian study of nonemergency patients, researchers tested the effectiveness of the antioxidant drug probucol in combating restenosis, the narrowing of blood vessels caused by scar tissue buildup after angioplasty. Of 317 patients, some received probucol for 1 month before and 6 months after angioplasty. Others took extra vitamins C and E, some took both the vitamins and probucol, and some received inactive pills.

Probucol—once used to lower cholesterol but since abandoned by its maker, Hoechst Marion Roussel—reduced by 50 percent the rate of restenosis among angioplasty patients during the 6 months following the procedure. Those getting probucol and vitamins fared better than those not receiving probucol at all, but they did worse than the probucol-only group, researchers at the Montreal Heart Institute report in the Aug. 7 NEW ENGLAND JOURNAL OF MEDICINE.

Only 11 percent of the patients getting probucol alone needed a repeat angioplasty after a year, compared to more than 25 percent of those getting no probucol.

In an editorial accompanying the study, Peter Libby and Peter Ganz of Brigham and Women's Hospital in Boston suggest that probucol may interrupt oxidant-sensitive signaling systems in the body and mitigate the arterial inflammation caused by inflating the balloon. This could lessen restenosis. Because the probucol treatment begins 1 month before surgery, its use is limited to patients having a planned rather than an emergency angioplasty, they note. *—N.S.*

Antibiotic resistance falls in Finland

A nationwide effort to limit erythromycin prescriptions in Finland in the 1990s has short-circuited bacterial resistance there. *Streptococcus pyogenes* had grown resistant to erythromycin, an antibiotic commonly prescribed for people who are allergic to penicillin but who have a respiratory or skin infection caused by group A streptococcus.

As outpatient prescriptions of erythromycin dried up between 1991 and 1996, the resistance rate among group A streptococcus bacteria isolated from throat swabs, pus, and blood samples fell from 16.5 percent to 8.6 percent, Finnish researchers report in the Aug. 14 NEW ENGLAND JOURNAL OF MEDICINE.

Led by a team at the National Public Health Institute in Turku, the researchers documented the decline in resistance after analyzing 39,247 streptococcus samples. "It's a beautiful study," says Stuart Levy, director of the Center for Adaptation Genetics and Drug Resistance at Tufts University School of Medicine in Boston. It says a lot for surveillance in the war on resistant bacteria, he adds. *—N.S.*