Behavior

Cancer support-group data challenged

In recent years, carefully designed studies documenting the benefits of support groups for cancer patients have revitalized research in this area. Perhaps the most influential of these studies, directed by psychiatrist David Spiegel of the Stanford University School of Medicine, found that breast cancer patients randomly placed in weekly support groups for one year lived markedly longer than controls — patients randomly assigned only to regular medical care (SN: 11/4/89, p.302).

But debate has now surfaced concerning the actual effects of Spiegel's intervention and the ethics of denying psychological treatment for cancer to control groups in the name of science. Several researchers discuss these issues in the spring Advances, a journal that publishes articles describing research on the interplay of mind and body.

Psychologist Lawrence L. LeShan, who has studied the relationship of emotions to cancer progression since 1950 and now practices in New York City, launched the debate in the same journal last year. "We're dealing with an important, unresolved question," LeShan asserts. "Did Spiegel's design extend the life span of the experimental group or shorten that of the control group? Or both?" Many cancer patients harbor a strong sense of rejection by others, LeShan maintains. When researchers tell them about a potentially helpful procedure but then withhold the intervention from some patients in order to obtain a suitable control group, feelings of rejection — along with death rates — may soar among controls, he argues.

A preliminary analysis of federal data on U.S. cancer survival rates from 1978 to 1986 — conducted by psychologist Bernard H. Fox of the Boston University School of Medicine — offers some support for LeShan's theory. Fox finds that women receiving group therapy in Spiegel's study died at a slightly higher rate than women with breast cancer in the national sample, while controls died at a substantially higher rate. Spiegel's sample came from the San Francisco area and may differ in some respects from the national sample, Fox points out. Fox plans to pull San Francisco survival rates out of the national data and compare them with Spiegel's findings.

Until then, Fox considers LeShan's argument "provocative" but open to question. For instance, he says, Spiegel's small sample of controls may have deviated from the national survival rate purely by chance.

Spiegel rejects LeShan's hypothesis. He notes that his team initiated the support groups in the 1970s, before such approaches became popular. Cancer patients in the experimental group reported plenty of reticence about attending group meetings, but only a few controls cited disappointment at missing the chance for group therapy, Spiegel argues. Any therapeutic effect observed in the study underestimates the survival advantage for cancer patients "in the real world" who seek out and pay for supportive therapy, he adds.

Tracking HIV in psychiatric patients

Psychiatric hospitals may need to pursue more vigorous testing for the AIDS virus among newly admitted patients, according to a report in the April American Journal of Psychiatry. Analysis of residue from blood samples taken on admission from 350 patients at an urban psychiatric facility revealed HIV infection in 25. Of 10 HIV-positive patients whose HIV status was not known at the time of admission, eight received discharges with their positive status still unrecorded, note psychiatrist Michael Sacks of the Payne Whitney Clinic in New York City and his colleagues.

Also, of 77 patients who on admission cited risk behaviors for HIV infection, such as intravenous drug use, 39 received discharges with no record of being tested for the virus, either before or during hospitalization, the researchers report.

Climate

Nay-sayers play down greenhouse threat

With the United Nations' big environmental meeting coming up next month, and with most other industrialized nations pushing for a strong treaty to limit global warming, President Bush may feel left out in the cold. Unlike the leaders of other wealthy nations, Bush has steadfastly opposed any strict controls on carbon dioxide emissions, prompting environmental groups to charge that he has ignored the climate change threat. But a conservative think tank issued a report last week that supports a wait-and-see approach.

Previous reports on global warming from the George C. Marshall Institute in Washington, D.C., have come under fire from climate researchers, who charge that the documents — which are not peer reviewed—contain errors and unsupported claims. Because the institute's conclusions have reportedly reached the administration's ears in the past, its current science update will likely generate renewed controversy.

The report emphasizes a well-known point among climate experts: The world has not warmed as quickly as computer climate models predicted it would. The report also notes that satellite data going back 13 years show a warming rate of only 0.06°C per decade — one-fifth of the rate predicted by most climate models, according to the Marshall Institute. Using the satellite data to extrapolate ahead, the report's authors suggest that warming in the next century will be minimal, only about one-fifth of the "best guess" estimate by the Intergovernmental Panel on Climate Change (IPCC), which produced an influential report in 1990 and an update this year. The Marshall Institute report concludes that "temperature increases in the next century, assuming a greenhouse gas increase equivalent to doubling of carbon dioxide in the atmosphere, will almost certainly be less than 1°C and may be less than 0.5°C."

Seeing no evidence as yet that a greenhouse warming presents a problem, the report recommends waiting at least five years before making any major policy decisions regarding carbon dioxide. During that time, new research should improve understanding of the climate and the accuracy of models that forecast climate change, suggest the authors.

John R. Christy of the University of Alabama at Huntsville, an atmospheric scientist who analyzed the satellite data quoted in the report, says he certainly agrees with the conclusion that Earth has not warmed as quickly as models predicted. But he cautions against using the relatively short, 13-year satellite record to extrapolate how the climate might respond in the next century. "The uncertainties are tremendous in this business, and extrapolation is one of the least capable means of prediction, I would think," Christy says.

Climate researcher Tom Wigley of the University of East Anglia in Norwich, England, criticizes many of the Marshall Institute's conclusions and methods. "They're certainly trying to make an impact in an unconventional way, where they are not ensuring scientific credibility first. That's not a good thing to do. It's in stark contrast with what the IPCC is trying to do—that is, to go through a process where a lot of scientists are involved in producing a synthesis and then a lot of other scientists are involved in peer reviewing it," says Wigley, who coauthored one of the chapters in the IPCC update.

The Marshall Institute report was written by Frederick Seitz, past president of the National Academy of Sciences; Robert Jastrow, past director of NASA's Goddard Institute for Space Studies; and William A. Nierenberg, past director of the Scripps Institution of Oceanography. To produce the report, the authors consulted some 50 researchers, estimates Nierenberg.

In an interview, Nierenberg said that greenhouse gas emissions could cause regional climate changes even if average world temperatures rise only slightly. The present report does not mention that possibility, although earlier ones did.

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