

news accounts that followed the report's release.

There is little doubt that federal task force members believe the data are worth attention. Robert Harris, a member of CEQ and an author of the report, says they "strengthen the hypothesis that environmental factors are playing a greater role." He too claims to be wary of drawing firm conclusions. "But the data are certainly worth bearing down on and scrutinizing. The implications are so profound for regulatory responses that you can't discount it. Chemical industry growth has been extraordinary and transformed the environment." There is no direct evidence linking the cancer increase to chemicals, he acknowledges, but says he is "highly suspicious of the increase, which may only be the tip of the iceberg."

Such conclusions fly in the face of previous insistence that cancer rates have not appreciably changed over a long period of time. The American Cancer Society (ACS), for example, wrote in its "1979 Cancer Facts & Figures" that "the overall incidence of cancer decreased slightly in the past 25 years." Philip Handler, president of the National Academy of Sciences, declared in a widely quoted address at Northwestern University last year that there is no cancer epidemic. "The age-corrected incidence rate . . . has remained approximately constant for a half-century." Handler went on to say that "the possible effects of all known man-made chemicals, when totaled, could contribute only a minuscule fraction of the total of all carcinogenesis in our population." Even Vincent DeVita, the new director of NCI, reported in his opening press conference that "If you subtract 85 percent of lung cancer from the total . . . the incidence has been going up rather slowly, about 0.3 percent a year."

Pollack and Horm, in contrast, reported cancer incidence increasing by 1.3 to 2 percent a year. Now that the Pollack, Horm, and Schneiderman data are attracting broader attention, both Handler and the ACS are singing a different tune. Schneiderman has circulated a letter from Handler that amounts to an apology of sorts. "Accepting the data shown in your letter of 17 March," Handler writes, "it does appear that in the period since 1971 incidence rates have been creeping up. Whereas the meaning thereof may be subject to debate, the imprecision of my [earlier] statement is not, and I shall not make it in the future in those terms." The ACS, after reviewing the new data, revised its "1980 Facts & Figures" statement to read that while over-

## Cancer Patients: Joints or THC?

Despite dissent in the medical community, the Food and Drug Administration (FDA) is expected soon to approve wider use of a marijuana ingredient that helps some cancer patients combat the nausea and vomiting caused by their chemotherapy.

The ingredient is synthetic THC or  $\Delta^9$ -tetrahydrocannabinol. Some researchers believe that the drug's effectiveness has been established; others disagree, saying that too little is known about THC's efficacy or its toxicity.

This difference of opinion among researchers is reflected in the FDA's oncologic advisory panel that voted 5 to 4 in June to release the drug for wider use to an estimated 50,000 cancer patients.

Adding to the dispute are some patients who accuse the federal government of skirting the real issue: legalizing marijuana in cigarette form for medical use. The patients say THC in capsule form is not as effective as the cigarette, even though the capsules will contain three times as much THC as the cigarettes. Indeed, studies of THC were first prompted by cancer patients who smoked marijuana and found welcome relief from their nausea.

Despite the controversy, the FDA plans to approve greater distribution of THC at the urging of the National Cancer Institute. The institute already has invited 500 hospital pharmacies to dispense the THC capsules. If approved, THC will still be classified as an experimental drug, but virtually any cancer patient will be able to obtain it, some researchers say.

Charles Moertel, director of cancer research at Mayo Clinic, is opposed to the release of THC and says, "I wonder if perhaps the weight of this political pressure does not exceed the scientific evidence justifying its release."

Moertel and other clinicians working with THC claim that the drug can cause hallucinations and even psychosis. "Frankly, I'm scared to use THC on my patients," Moertel says. Other side effects outweigh the benefits in patients Moertel has tested. He says older patients often rejected THC because it disoriented them, even though it stopped their nausea.

Robert Randell, a patient who smokes marijuana to treat his glaucoma, defends the use of the cigarettes for cancer patients. At an FDA committee hearing in June, he said that the panel was ignoring evidence that shows marijuana cigarettes are superior to THC capsules. Inhaling marijuana allows patients to adjust their THC dosage better than using THC in capsules, he said. The agency would be unwise to adopt a policy that forces patients to use an "inferior, poorly formulated, intensely psychoactive drug." He charged that FDA and the cancer institute already have agreed to release the drug and that the committee was only going to rubber stamp the tacit policy.

According to Charles Haskell, director of the Wadsworth Cancer Center at the University of California at Los Angeles, the issue of THC is a philosophical question. "How much do we protect the people from what they want? I think we protect them too much sometimes." Some patients are ambivalent about taking their chemotherapy because it makes them nauseous. As clinicians, "we'll take anything that can help us," he said.

Peter Schein, chairman of the FDA oncologic advisory committee and chief of medical oncology at Georgetown University School of Medicine, says THC is probably no more toxic than cytotoxic drugs that the panel usually approves for this category of medication. Schein says that the cancer institute did not place any pressure on him to favor THC.

With FDA approval almost assured, researchers in California and Illinois are worried that government supplies of THC may run short and jeopardize pending studies involving more than 800 patients. And with more patients using THC, fewer people are left to serve as controls in the experiments.

But Donald Poster of the National Cancer Institute's drug regulation branch predicts that THC studies will not fold up. "Researchers have to make a decision to go ahead or to wait to conduct studies, but there is an important need right now." He adds that the institute is not ruling out more experiments testing marijuana cigarettes.—MARJORIE SUN