

Further, everyone is agreed that the research ought to be planned and carried out by skilled investigators under the most stringent safeguards. Finally, there is general agreement that a doctor treating his own patient must have ample leeway in prescribing new drugs or techniques, and that he should deal as honestly as possible with his patient, keeping him informed of the nature of his ailment and the methods of treatment (though most doctors hold that full and unadorned disclosure is not invariably in a patient's best interest).

So much for the areas of relative agreement. Controversy arises when tests are made on persons who have little or no prospect of direct benefit from what is done to them and, indeed, may suffer harm.

To return to the most publicized example, no one has questioned the integrity of Dr. Southam of Sloan-Kettering, or the significance of his experiment in Brooklyn. Researchers at Sloan-Kettering have been studying the body's ability to fight off cancer for years. In 1956 they began injecting live tissue-cultured cancer cells into prisoners at Ohio State Penitentiary. By the time this test was completed, some 300 volunteers had been injected and their bodies had thrown off the implanted cells. Carrying forward his tests on persons with cancer, Dr. Southam found that as the subject's condition worsened the body took longer to reject the cancer transplants. In approaching the Jewish Chronic Disease Hospital in 1963, he sought to learn whether the delay in rejecting the transplants was related specifically to the spreading cancer, as he hypothesized, or just to the body's general weakness. For this he needed a test group of severely debilitated patients who did not have cancer. He wished to inject them with cancer cells and compare the length of time it took their weakened bodies to throw off the foreign cells with the time it took cancer victims to do so.

What brought Dr. Southam and Dr. Mandel their reprimand from the Board of Regents was the way they went about obtaining—or failing to obtain—the consent of the patients, a group of old, very sick, somewhat confused people whose consent would have been questionable in the best of circumstances. They were told that the test was aimed at discovering their immunity or resistance to disease; that they would receive an injection, and that a lump

would form at the site within a few days and disappear within a few weeks. This was accurate as far as it went. But the patients were not told that the injections were not for the purpose of alleviating their own condition. Nineteen of the 22 patients suffered from ailments other than cancer—a word that was never whispered to them.

The experimenters later explained their avoidance of that fearsome word as an effort to spare the patients needless distress. Hundreds of previous tests had demonstrated to the satisfaction of experts that there was no danger in the procedure. "We are not doing something which is going to induce cancer," said Dr. Southam in his defense. "We are going to observe the growth and rejection of these transplanted cells. The fact then that they are cancer cells does not mean that there is any risk of cancer to this patient."

Had the patients been informed that they were being asked to receive cancer cells in their bodies, subjects for the experiment would probably have been lost. As it was, no written consent was obtained; no kin of even the most muddled patient were notified—which is the normal practice in ordinary surgery. The fact that the patients evidently did not suffer any ill effects from the transplants does not lay to rest the question of consent.

Dr. Mandel's role in the affair was especially delicate. One of his reasons for participating was the hope that a relationship with Sloan-Kettering might shed a bit of favorable light on his relatively obscure institution—not an unnatural nor an unworthy hope, but one that has no standing in the temple of medical ethics. As medical director of the hospital, his overriding responsibility was to his patients. Three staff doctors resigned in protest over the testing procedures and it was their complaint to the late William A. Hyman, a founder of the hospital and a member of its board of directors, that brought out the story.

If we think of this case in the terms that some writers have presented it, i.e., as 22 old and helpless people vs. science, it is cold-blooded not to come down on the side of the old and helpless. Dr. Beecher asks, "Whoever gave the investigator the godlike right of choosing martyrs?" But no one appears to have been martyred. And suppose that the Southam test, deceptively conducted though it indubitably was, moves us to-

ward a cancer virus? How many lives will such a virus have to save, how much suffering will it have to eliminate before the ethical balance is redressed and we can say that perhaps the doctors were right not to tell the whole truth?

YET, if we grant the Sloan-Kettering researchers the benefit of every doubt, the concept of a man's body being put to the service of a cause that is not his own remains to nag at us. To return to Dr. Beecher's study in the New England Journal of Medicine, several of the experiments he notes seem unnervingly gratuitous. One, involving 18 children about to undergo surgery for congenital heart disease, had to do with the effect of the thymus gland on skin grafts. While they were on the operating table, all 18 had skin grafts sutured to their chest walls. Eleven of the children also had their thymuses removed, while the seven others served as a control group. The eleven were thus subjected to an operation—removal of the thymus—whose long-term effects on the body are not known, in order to study a relatively uncommon phenomenon—skin transplants—which had nothing to do with their needs.

In another, quite different experiment which raises a similar question of judgment, 50 inmates of a children's center, none of whom was suffering from any ailment worse than acne, were given doses of a drug that was suspected—correctly, as it turned out—of causing abnormal functioning of the liver. Again, the test was, at best, unrelated to the immediate welfare of the subjects.

Still another type of troubling experiment was carried out in 1956 at the Francis E. Warren Air Force Base in Wyoming, on 585 Air Force men who were suffering from a bacterial infection of the food canal. One possible complication of their infection was rheumatic fever, which may cause permanent harm to the heart. According to Dr. Beecher, it was known that the rheumatic fever could be prevented with penicillin. Nonetheless, the doctors withheld penicillin from these men because they were interested in learning whether sulfa drugs, too, could do the job. Unfortunately, the sulfa failed. Twenty-five men—14 who had been given the sulfa and 11 in a control group who were deprived even of that ineffective substitute—developed rheumatic fever.

Medical officers involved in the experiment admit that