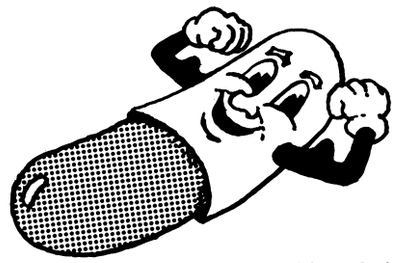
Power of the Placebo



A few years ago, a drug called reserpine became available for treating homicidal patients. St. Elizabeth's Hospital in Washington set up a trial to test the effectiveness of the drug. One group of homicidal patients was to receive the drug. Another group of homicidal patients was to receive a placebo sugar pill, which purportedly has no pharmacological effectiveness. Neither patients nor doctors involved in the study knew which of the two groups of patients would be getting which pill.

The psychiatric resident who gave medication to one of the two groups was Werner Mendel (now a professor of psychiatry at the University of Southern California School of Medicine). Shortly after the drug trial started, Mendel became convinced that his patients were receiving reserpine because they calmed dramatically. The more convinced he became, the more they improved. After the study was over, however, he learned that his patients had received the placebo. And that's when the power of the placebo first hit him. If a physician believes in a medication, he decided, he will transfer that belief to his patient, and his patient's condition will improve.

Many physicians, however, do not appreciate the power of the placebo and what it can do for patients. This charge is leveled in the June 23 JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION by Herbert Benson and Mark D. Epstein, physicians at Harvard Medical School.

Back in the 19th century, Benson and Epstein report, the placebo effect was the best therapy physicians could offer to patients in spite of patients' submission to "purging, puking, poisoning, puncturing" and what have you. The placebo, however, started to fall in the estimation of physicians in the 20th century and especially during the 1950's, when controlled drug investigations used placebos as whipping boys. In other words, if a drug was found to have effects comparable to a placebo, it was pooh-poohed as ineffective. Most investigators eliminated the placebo effect itself, "ignoring its often remarkable benefits."

There is ample evidence, Benson and Epstein continue, that placebos can help patients with a variety of ills—pain, heart attacks, rheumatoid arthritis, hay fever, headache, cough, peptic ulcer, anxiety, depression. It is precisely because of this evidence, they argue, that physicians should look into how placebos work and exploit them to full advantage.

Does the placebo work solely on the psychological level, because a patient believes a physician can heal him? Benson and Epstein suggest that it is possible, because the more concerned a patient is and the greater his discomfort, the more likely it is that he will completely entrust himself to a physician, and receive relief from a placebo. However, Benson and Epstein do not rule out the possibility that the setting in which a physician treats a patient might influence the success of a placebo, or that the placebo itself, whether sugar pill or salt solution, might have some beneficial physiological effect. "The physiology of the placebo effect," they point out, "remains a relatively unexplored area."

Only when physicians better understand the scientific basis for placebo effectiveness, Benson and Epstein conclude, will they be able to incorporate advantageously the placebo into evolving forms of health care. They are concerned that taking patient histories by computer will not allow physicians to develop the rapport with patients that is necessary to heal them.

However valuable Benson's and Epstein's commentary, it does not touch upon one aspect of placebos that worries some health consumers: the ethics of giving patients placebos rather than drugs with pharmacologically documented effects. One physician, for example, has given placebos to some 2,000 patients with chronic pain. Only if the placebos don't help them does he try other treatments. Is such treatment ethical? Many physicians, such as Hubert L. Rosomoff, a neurosurgeon with the University of Miami School of Medicine, believe it is. "We do this sort of thing all the time in the pain field," Rosomoff says.

Then there is the question of whether placebo treatment constitutes routine or experimental medicine and whether patients should provide informed consent before they submit to this treatment. If patients knew they were going to get placebos, of course, the placebos would lose their effectiveness. Undoubtedly, there are ethical pros and cons to using placebos in medicine. The ethics of medical placebos would be a suitable topic for exploration by the Congressionally mandated Commission for the Protection of Human Subjects, which reported its first recommendations, on the ethics of fetal research, in May (SN: 5/3/75, p. 285). □

NSB: Peer review, education reforms

Reacting to recent criticism of the National Science Foundation in Congress and elsewhere over peer review secrecy and curriculum implementation procedures (SN: 6/28/75, p. 412), the foundation's governing body, the National Science Board (NSB), has set new policy guidelines on disclosing the peer review process and continuing support for educational innovation. The board met late last month in La Jolla, Calif.

As practiced at NSF, peer review consists of written statements from outside experts on the scientific worth of a proposed project. Traditionally, the names of the reviewers and their exact comments were supposed to be kept secret, though the review "summaries" shown to applicants sometimes amounted to almost verbatim transcriptions of the reviewers' comments, and the identity of reviewers themselves was often not hard to guess, particularly in very specialized fields.

Now the fear that fuller disclosure of the peer review process might make some experts less willing to express opinions of their colleagues' work has apparently fallen before an even greater fear—that unless the scientific community can shed some of its trappings of elitism it may lose some of its unique freedom of self-governance (SN: 4/19/75, p. 253). The NSB has thus passed four new guidelines it says should improve communication between scientists and help them better understand the reasons behind NSF decisions:

- NSF is to publish annual lists of reviewers used in each division.
- Reviewers are to be "broadly representative" of qualified experts.
- Verbatim copies of reviews—not including the identity of the reviewer—will be provided to applicants, beginning next January 1.
- Reasons for acceptance or rejection of a proposal will be furnished to the principal investigator or project director, on demand.

The second provision is of particular interest to Sen. William Proxmire (D-Wis.), whose charges that the present peer review system amounted to an "academic oligarchy" helped trigger the present debate (SN: 3/15/75, p. 165). A Proxmire aide says the Senator was "pleased" with the new spirit of openness in the NSB guidelines, but was going to request further clarification from NSF Director H. Guyford Stever over whether "broad representation" would mean that more scientists from small colleges and universities will be used as reviewers.