# PRAYER & SPIRITUAL HEALING

## EVEN OUR GOVERNMENT WANTS TO KNOW IF IT WORKS!

CAN PRAYERS HEAL? WHILE CRITICS SAY STUDIES GO PAST SCIENCE'S REACH, PROPONENTS SAY THEY ALREADY KNOW THE ANSWERS!

In 2001, two researchers and a Columbia University fertility expert published a startling finding in a respected medical journal: women undergoing fertility treatment who had been prayed for by Christian groups were twice as likely to have "Intercessory prayer presupposes some supernatural intervention that is by definition beyond the reach of science," said Dr. Richard J. McNally, a psychologist at Harvard. "It is just a nonstarter, in my opinion, a total waste of time

a successful pregnancy as those who had not.

Three years later, after one of the researchers pleaded guilty to conspiracy in an unrelated business fraud, Columbia is investigating the study and the journal reportedly pulled the paper from its Web site.

No evidence of manipulation has yet surfaced, and the study's authors stand behind their data.

But the doubts about the study have added to the debate over a deeply contro-

versial area of research: whether prayer can heal illness.

Critics express outrage that the federal government, which has contributed \$2.3 million in financing over the last four years for prayer research, would spend taxpayer money to study something they say has nothing to do with science. and money."

Prayer researchers, many themselves believers in prayer's healing powers, say scientists do not need to know how a treatment or intervention works before testing it.

Dr. Richard Nahin, a senior adviser at the National Center for Complementary and Alternative Medicine, part of the National Institutes of Health, said in an email message that the studies were meant to answer practical questions, not religious ones.

"We only recently understood how aspirin worked, and the mechanisms of action of various antidepressants and general anesthetics remain under investigation," Dr. Nahin wrote.

He said a recent government study found that 45 percent of adults prayed specifically for health reasons, and suggested that many of them were poor people with limited access to



#### care.

"It is a public health imperative to understand if this prayer offers them any benefit," Dr. Nahin wrote.

Some researchers also point out that praying for the relief of other people's suffering is a deeply human response to disease.

### "The 'Placebo Effect"

Since 2000, at least 10 studies of intercessory prayer have been carried out by researchers at institutions including the Mind/Body Medical Institute, a nonprofit clinic near Boston run by a Harvard-trained cardiologist, as well as Duke University and the University of Washington. Government financing of intercessory prayer research began in the mid-1990's and has continued under the Bush administration.

In one continuing study, financed by the National Institutes of Health and called "Placebo Effect in Distant Healing of Wounds," doctors at California Pacific Medical Center, a major hospital in San Francisco, inflict a tiny stab wound on the abdomens of women receiving breast reconstruction surgery, with their consent, and then determine whether the "focused intention" of a variety of healers speeds the wound's healing.

Two large trials of the effects of prayer on coronary health are currently under review at prominent medical journals.

Even those who defend prayer research concede that such studies are difficult. For one thing, no one knows what constitutes a "dose": some studies have tested a few prayers a day by individual healers, while others have had entire congregations pray together. Some have involved evangelical Christians; others have engaged rabbis, Buddhist and New Age healers, or some combination. Another problem concerns the mechanism by which prayer might be supposed to work. Some researchers contend that prayer's effects - if they exist - have little to do with religion or the existence of God. Instead of divine intervention, they propose things like "subtle energies," "mindto-mind communication" or "extra dimensions of space-time" - concepts that many scientists dismiss as nonsense. Others suggest that prayer may have a soothing effect that works like a placebo for believers who know they are being prayed for.

Either way, even many churchgoers are skeptical that prayer can be subjected to scientific scrutiny. For one thing, prayers vary in their purpose and content: some give praise, others petition for strength, many ask only that God's will be done. For another, not everyone sees God as one who does favors on request.

"There's no way to put God to the test, and that's exactly what you're doing when you design a study to see if God answers your prayers," said the Rev. Raymond J. Lawrence Jr., director of pastoral care at New York-Presbyterian Hospital/Columbia University Medical Center. "This whole exercise cheapens religion, and promotes an infantile theology that God is out there ready to miraculously defy the laws of nature in answer to a prayer."

#### Prayer and Heart Disease

Proponents of prayer research often cite two large heart disease trials to justify further study of prayer's healing potential.

In one study, Dr. Randolph Byrd, a San Francisco cardiologist, had groups of born-again Christians pray for 192 of 393 patients being treated at the coronary care unit of San Francisco General Hospital. In 1988, Dr. Byrd reported in The Southern Medical Journal, a peer-reviewed publication of the Southern Medical Association, that the patients who were prayed for did better on several measures of health, including the need for drugs and breathing assistance.

At the end of the paper, Dr. Byrd wrote, "I thank God for responding to the many prayers made on behalf of the patients."

In the other study, of 990 heart disease patients, Dr. William S. Harris of St. Luke's Hospital in Kansas City, Mo., and his colleagues reported in The Archives of Internal Medicine in 1999 that the patients who were prayed for by religious strangers did significantly better than the others on a measure of coronary health that included more than 30 factors. Dr. Harris, who was one of the authors of a paper arguing that Darwin's theory of evolution is speculative, concluded that his study supported Dr. Byrd's.

In the experiments, the researchers did not know until the study was completed which patients were being prayed for. But experts say the two studies suffer from a similar weakness: the authors measured so many variables that some were likely to come up positive by chance. In effect, statisticians say, this method is like asking the same question over and over until you get the answer you want.

"It's a weak measure," said Dr. Richard Sloan, a professor of behavioral medicine at Columbia who has been critical of prayer research. "You're collecting 30 or 40 variables but can't even specify up front which ones" will be affected.

Dr. Harris corrected for this problem, experts say, but he then found significant differences between prayer and no-prayer groups only by using a formula that he and his colleagues had devised, and that no one else had ever validated. A swarm of letters to the journal challenged Dr. Harris's methods. One correspondent, a Dutch doctor, jokingly claimed that he could account for the results because he was clairvoyant. "I have subsequently used my telepathic powers to influence the course of the experimental group," he wrote. Still, some religious leaders and practitioners of alternative medicine argue that because prayer is so common a response to illness, researchers have a responsibility to investigate it.

"We need to look at this with what I call openminded skepticism," said Dr. Marilyn Schlitz, the lead investigator of the federally financed wound healing study and the director of research at the Institute of Noetic Sciences, an alternative medicine research center near San Francisco.

#### Questions About Data

It was a former associate of Dr. Schlitz's, Dr. Elisabeth Targ, who first helped draw federal money into research on so-called distant healing. The daughter of Russell Targ, a physicist who studied extrasensory perception for government intelligence agencies in the 1970's, Dr. Targ made headlines with a 1998 study suggesting that prayers from assorted religious healers and shamans could protect AIDS patients from some complications related to the disease.

The findings, and Dr. Targ's reputation, helped win her two grants from the complementary and alternative medicine center at the National Institutes of Health - one for a larger study of distant healing among AIDS patients, another to test the effect of prayers by outside healers on the longevity of people with deadly brain tumors.

Both trials are continuing at the California Pacific Medical Center in San Francisco, which has a complementary medicine wing, but Dr. Targ is no longer running them. She herself died of brain cancer in 2002.

Shortly after Dr. Targ's death, her methods came under attack. An article in Wired magazine charged that she and her co-authors had massaged their data on AIDS to make the effects of prayer look better than they were. Officials at California Pacific conducted an investigation of the study and concluded that the data had not been manipulated. Dr. John Astin, who is running the second AIDS study, said the biggest weakness of Dr. Targ's first trial was that it was too small to be conclusive.

But in a letter defending the study, the hospital's director of research also acknowledged that he could not tell for sure from the original medical records which patients had been prayed for and which had not been.

"Each subject's name, age and date of birth were blinded with what appears to be a black crayon," he wrote.

The quality of original data is also at the center of the controversy over the 2001 Columbia fertility study, which was reported by many newspapers including The New York Times. Dr. Kwang Cha, a Korean fertility specialist visiting the university, was the study's lead author. Daniel Wirth, a lawyer from California who had conducted research on alternative healing, was his principal research associate. In the spring of 1999, the two met at a Starbucks on the Upper West Side to exchange data, according to Dr. Cha, who provided details of the meeting through a colleague.

Dr. Cha had the pregnancy results with him, and Mr. Wirth had a roster of the women he said had been prayed for. The two had never shared the information before, and Dr. Cha was surprised enough by the results that he took them to a former mentor, Dr. Rogerio Lobo of Columbia, to make sure the study was done correctly.

In a recent interview, Dr. Lobo said that the study had come to him as a "fait accompli" and that he had interrogated Dr. Cha to make sure his study methods were sound. He decided they were and helped write the study.

"We had these results, we didn't believe them, we couldn't explain them, but we decided to put them out there," Dr. Lobo said.

In May, Mr. Wirth pleaded guilty to conspiracy in connection with a \$2 million business fraud in Pennsylvania. He is awaiting sentencing.

Dr. Lobo said he had met Mr. Wirth but knew little about him or about his contributions to the study. He acknowledged that the data could have been manipulated, but said he did not know how.

"I didn't actually conduct the study, so I can't know for sure," Dr. Lobo said.

Mr. Wirth's lawyer, William Arbuckle, said his client was not available for comment.

"This Is No Routine Paper"

One study that many people believe could either bolster prayer research or dampen interest in the topic has been completed, but has not yet been published. Dr. Herbert Benson, the cardiologist who founded the Mind/Body Medical Institute, began the trial in the late 1990's with \$2.4 million from the John Templeton Foundation, which supports research into spirituality. The Mind/Body Institute, according to its Web site, is a "scientific and educational organization dedicated to the study of mind/body interactions."

The study included some 1,800 volunteers, heart bypass patients at six hospitals. They were monitored according to strict medical guidelines and randomly assigned to be prayed for or not. One doctor who has seen a final version of the study said it was the most rigorous trial on the subject to date.

Other experts say they wonder whether the study will be published at all, and what is hold-ing it up.

"He's got nothing, or we would have seen it by now," Dr. Sloan of Columbia said, referring to Dr. Benson. In an interview at his office, Dr. Benson acknowledged that at least two medical journals had turned down the study after asking for revisions. He said that the study was currently under review at another journal and that talking about the results could jeopardize publication.

"This is no routine paper," he said. "What you're looking at obviously is not a typical intervention, not at all. We are at the interface of science and religion here, and there are boundary issues that you would not have for almost any other paper."

Dr. Benson, who has studied the links between spirituality and medicine for many years, declined to answer when asked if he himself believed in the effects of intercessory prayer, saying only that he believed in God.

"We know that praying for oneself can influence health, so that's what led us to this topic," he said.



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