

Wired 10.12: A Prayer Before Dying

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A Prayer Before Dying

THE ASTONISHING STORY OF A DOCTOR WHO SUBJECTED FAITH TO THE RIGORS OF SCIENCE - AND THEN BECAME A TEST SUBJECT HERSELF.

By Po Bronson

THE THIRD-MOST ODDS-DEFYING, EYE-POPPING DISCOVERY IN THE LIFE AND WORK OF ELISABETH TARG, MD

In July 1995, back when AIDS was still a death sentence, psychiatrist Elisabeth Targ and her co-researchers enrolled 20 patients with advanced AIDS in a randomized, double-blind pilot study at the UC San Francisco Medical Center. All patients received standard care, but psychic healers prayed for the 10 in the treatment group. The healers lived an average of 1,500 miles away from the patients. None of the patients knew which group they had been randomly assigned to, and thus whether they were being prayed for. During the six-month study, four of the patients died - a typical mortality rate. When the data was unblinded, the researchers learned that the four who had died were in the control group.

All 10 who were prayed for were still alive.

THE FOLLOW-UP STUDY

A lot of studies had investigated the effect of prayer on healing, but they were methodologically sloppy and their findings couldn't be replicated. In July 1996, Targ began a confirmation study, one with a larger sample and a more exacting protocol. It is widely acknowledged as the most scientifically rigorous attempt ever to discover if prayer can heal.

By this time, triple-drug therapy for those with AIDS had begun, and quite miraculously AIDS patients stopped dying. So rather than just measuring mortality, the replication trial also tallied the occurrence of 23 AIDS-related illnesses that appeared during the six months of the study, from ulcers to encephalitis.

Forty patients were recruited. They filled out questionnaires, had photos taken, and signed consent forms that indicated they had a 50/50 chance of being prayed for by faraway psychic healers. They were free to pray for themselves and have family and friends pray for them as well - the trial design assumed everyone would get a "baseline" amount of prayer from loved ones. Their blood was drawn, and a computer matched them to a statistical twin - a counterpart with a similar CD4+ level, age, and number of previous AIDS-related complications. The computer randomly assigned one of each pair to a control group and the other to a treatment group.

The photos of those in the treatment group were sent to 40 healing practitioners, ranging from rabbis to Native American medicine men to bioenergetic psychics. These healers performed their rituals one hour a day for six consecutive days. Each week for 10 weeks they rotated, so each test-group patient received distant healing from 10 practitioners. The healers kept logs

and were not paid. They never met the subjects in person.
The photos of the control group were kept in a locked drawer.
Six months later, the data was unblinded.

THE SECOND-MOST ODDS-DEFYING, EYE-POPPING DISCOVERY IN THE LIFE AND WORK OF ELISABETH TARG

The research results showed that the subjects who were not prayed for spent 600 percent more days in the hospital. They contracted 300 percent as many AIDS-related illnesses. That's a pretty sensationalistic way of saying those who were prayed for were a lot less sick. Here's the somewhat less-sensational way of framing the results: The control group spent a total of 68 days in the hospital receiving treatment for 35 AIDS-related illnesses. The treatment group spent only 10 days in the hospital for a mere 13 illnesses.

This begs all sorts of questions, which we will get to, but for the moment, consider the following:

The chance of this occurring randomly is less than 1 in 20, meaning it is statistically significant.

There was no placebo effect. For the patients, being less sick didn't correlate with believing they were being prayed for by the psychic healers. Not even close. Nearly 55 percent of both groups imagined or guessed or believed they were being prayed for - and they did no better than the others.

Targ had a pedigree. She graduated from Stanford Medical School, did her residency at UCLA, and, at the time of the study, was an assistant professor of psychiatry at UCSF.

The study, while controversial, eventually passed the scrutiny of peer review and was published by the *Western Journal of Medicine*.

Targ was news. She appeared on *Good Morning America* and *Larry King Live* and was written about in *Time*. She instantly became a star in the New Age community - not as famous as doctors Deepak Chopra, Andrew Weil, and Larry Dossey, but more respected because of her scientific rigor.

Although few doctors have read the study or know its details, it has achieved renown and is routinely cited - not as proof that prayer works, exactly, but as evidence that there's some connection between spirituality and healing.

THE VARIOUS QUESTIONS THIS BEGS

Are these psychic healers who I think they are?

How did a reputable doctor come to risk her reputation studying the paranormal?

What could be more odds-defying than this?

IS THIS EVEN THEORETICALLY POSSIBLE?

Targ refused to speculate. Her position: Use the scientific method to find out if an effect exists before trying to analyze how it works. For years, no one knew how morphine or aspirin worked - just that they were effective. The understanding came later.

She presented her data dozens of times at conferences but never offered a hypothesis. She enjoyed its mystique, its unknowable nature. Even in private, she almost never let herself be drawn into these discussions. Her coauthor on the study, Fred Sicher, a psychologist, is an enthusiastic believer in the prayer effect, and he would get into long arguments with their biostatistician, Dan Moore, who took the role of skeptic. Targ never joined in. Her boyfriend, Mark Comings, was a theoretical physicist. He felt that an eight-dimensional universe could explain how a healer in Santa Fe could influence a patient in San Francisco: In our ordinary three-dimensional world, healer and patient appear far apart, but in one of the as-yet-unmeasurable extra dimensions, they'd be in the same place. Targ would shake him off - speculation wasn't for her. She had patients to care for.

Although other people invoked her work as proof of God, Targ thought of it as proof of only one thing: that this should be studied more.

WHO ARE THESE PSYCHIC HEALERS?

The usual wackos - but experienced wackos. On average, they had 17 years' experience, and each had treated more than a hundred patients from a distance. Many had graduated from a bioenergetic healing school on Long Island run by Barbara Brennan, a former NASA physicist. They had a variety of religious backgrounds, from Jewish to Christian to Buddhist to shamanist; however, their method of prayer was not an appeal to a higher power. Rather than ask God for help, the healers were directed to send positive healing energy, to direct an intention for health and well-being to the subject. The point was to test the ability of a person to affect another remotely, in a one-to-one relationship. Wackos at the other end of the religious spectrum frequently interrupted Targ's speeches at conferences, sometimes by shouting vitriol, sometimes by asking accusatory questions. They would shadow her through restaurants, sit down at her dinner table, lecture her on how the power of faith is not to be subjected to the rigors of science, how God is not to be questioned. They were afraid she might succeed, and reduce their god to a physics phenomenon. They were equally afraid she might fail, and discover nothing's there.

REALITY CHECK QUIZ

Here is a list of expert quotes from articles that have been written about Targ:

"Elisabeth is our hero. She's a wonderful, groundbreaking researcher." - Dr.

Mitchell Krucoff, Duke University

"Medical research has shown that people who believe in God or in prayer generally fare better than those who don't. What remains unproven is whether prayer itself makes a difference." - Dr. Herbert Benson, Harvard Medical School

"Nobody would dispute that for a great many people, religion provides comfort in times of distress, medical or otherwise. But there is no really good, compelling evidence that there is a relationship between religious involvement and health."

- Dr. Richard Sloan, Columbia University

Question 1: Based on these quotes, what would a reader of an ensuing article likely conclude?

a) That most doctors think her research is a bogus waste of time and money.

b) That doctors are evenly divided but open-minded about the prayer effect.

Question 2: Which is closest to the truth, a or b?

WHAT YOU MIGHT WANT TO KNOW ABOUT HER UPBRINGING

"She had more permission to be psychic than anyone in history," proudly offers her father, Russell Targ, who in the 1970s conducted CIA-funded experiments in extrasensory perception at Stanford. Subjects in his lab attempted to describe objects hidden inside boxes and tried to get better at it through repetition, as if it was a learnable skill, like riding a unicycle. During the Cold War, his psychics would sit in a chair and calm their minds until they received visions and diagrams of certain military bases in Russia.

Russell had an ESP machine, an early computer that asked subjects which of four colors they thought would randomly appear onscreen. Targ began training on the machine at age 10. When she played hide-and-seek with a girlfriend, Targ would attempt to find her by means of clairvoyance. She was expected to call out what was in her Christmas presents before opening them; if she guessed incorrectly, her father teased her: "What's wrong with you?"

"I expected her to be intelligent, polite, and psychic," says Russell. He was a force. He was famous. He had helped invent the laser while at Lockheed. Her uncle was the world chess champion, Bobby Fischer. Greatness was assumed.

And Targ was exceedingly bright. By the time she entered Palo Alto High School, she'd already skipped two grades. At 12, she was helping a Stanford researcher stick electrodes into monkey brains to examine hemispheric specialization. That's also when she conducted her first human experiment: demonstrating that left-handed people make more spelling errors than right-handed people. At 13, she tested crayfish feeding reflexes. In high school, she cofounded the debate team. "Truth through dialog" was her motto.

She graduated from high school at 15, in 1977. Fluent in Russian - as well as French and German - she got a job in a psychology research department at Stanford, translating studies from the Soviet Union. Since Russia was an atheist country, parapsychology didn't carry the religious taboo it did here, and she was exposed to a lot of it. In her first semester at Pomona College, she conducted a study that took her father's favorite experiment - attempting to describe objects hidden inside boxes - and subjected it to double-blinded, randomized scientific rigor. This time, neither subject nor experimenter knew what had been placed in the box. Her teacher hated it; she transferred to Stanford.

To her best friend, Janice Boughton, Targ simply seemed open-minded, influenced by those Russian studies she'd translated. "Parapsychology was her hobby, as if she played the trombone."

During college, she would fool around with notions of being able to manipulate events in the near future. She called it Associative Remote Viewing. Hoping to be awarded grants for her research, she would associate that grant with an ordinary object, such as a vase or a teddy bear; then she and her friends would visualize this vase or teddy bear frequently, believing that the visualization would make the desired outcome more likely. She used a variation on this method when she got accepted to Stanford, and later, when she and Comings were trying to find an affordable house in San Francisco.

She also put a lot of stock in her own intuition and dreams. All through her life, she had a recurring dream in which a birthday cake with 42 candles appeared (once, it was 42 birthday cakes). Targ became convinced this was a sign that she would die. At 42. Next year. 2003.

All of which raises the question: Does her backstory as an ESP hobbyist make us regard her work with some suspicion? It has to - in the same way that her Stanford Medical School degree affords her legitimacy. The whole point of randomized, double-blind trials is to eliminate bias. On TV, Targ presented herself as just another medical researcher, but if she spent her entire life in search of the paranormal, it's not surprising that she eventually found traces of it.

HER ONGOING STUDY

Targ originally chose to study AIDS because it was a "gnarly disease," medical science's greatest riddle.

During the AIDS pilot study, one of the patients developed brain cancer.

Amazingly, this patient did not die and eventually made a full recovery. As it turned out, he had been in the treatment group - he had been prayed for. Fred Sicher, Targ's coauthor, reminded her of this patient after a confirmation study was completed. Although AIDS was no longer a death sentence, brain cancer still was.

Could a healer 1,500 miles away really shrink a brain tumor?

Targ learned all she could about a type of brain cancer called glioblastoma multiforme.

In 2000, she applied to the National Institutes of Health's Center for Complementary and Alternative Medicine for \$1.5 million to cover two 150-patient

trials - one on brain cancer, and another confirmation study on AIDS. The NIH had never granted money to study distant healing. But people with brain cancer were dying, and nothing seemed to work. Her grant was approved.

The data from the trials will not be available for at least three years. Her work is a linchpin in the history of scientific research; if these trials find a prayer effect, it will open the door to much more. If they fail to find one, this kind of research will retreat beyond the fringe.

WHAT WE KNOW ABOUT BRAIN CANCER

Glioblastoma multiforme (GBM) is the most malignant of cancers. For those with a grade-4 tumor, survival rates are uniformly poor. Only 2 percent live more than three years. The average lifespan from diagnosis is 12 months - and that's for patients who receive surgery, chemotherapy, and radiation. Without intervention, patients live about six months.

GBM is one of the rarest cancers. In the US, about 7,000 people die from it every year. (Far more develop cancer of the brain as a result of metastases originating in some other organ, but that's different.)

With GBM, it's not the brain's neurons that are cancerous, it's the cells that feed and physically support them - the neuroglial cells. The tumor can double in size every 10 days.

It is the cancer we understand the very least. We have no clue what causes it or who is likely to get it.

Chemotherapy offers scant hope. The most recent drug enlisted to fight brain cancer is Temodar. In clinical trials, Temodar slowed the progression of some GBM tumors, but its effect on life expectancy was insignificant.

ABSOLUTLEY THE MOST ODDS-DEFYING, EYE-POPPING DISCOVERY IN THE LIFE AND WORK OF

ELISABETH TARG

Targ was 40. She'd always wanted a family. She and Comings made plans to get married, in May 2002, and in March she took a leave from research to begin in vitro fertilization treatments. After the first round of eggs were implanted in her uterus, she began to notice that it was hard for her to pronounce words containing the letter b; one morning, in the mirror, she noticed that the left side of her face had gone slack. The usual line of diagnosis would suspect a stroke - yet she felt fine. She'd never had a physical malady - not even bad eyesight or a single cavity. Could it be a symptom of the IVF? She went to the emergency room, not wanting to take chances. They said it was nothing. It persisted. She was scared. They took an MRI of her brain. "Call back for the results tomorrow." She called. They asked her to come in. "Bring your boyfriend."

Targ could read the MRI herself. She'd become an expert. She knew exactly what to look for, exactly what she was looking at.

A tumor.

In her brain, small star-shaped cells were dividing.

It was a coincidence of infinite implausibility.

HOW BAD WAS IT?

The tumor appeared to be small and near the skull - it would be easy to remove. Her doctor thought it might be diffuse astrocytoma, a survivable type of brain cancer not as deadly as glioblastoma. Reason to hope! Spread the word! But this is science, which always looks twice. She went back to the hospital for a high-resolution MRI.

This MRI showed the tumor mass near the skull was connected by a tendril to a larger lesion in the thalamus, several twisted layers down, which would be impossible to remove without cutting Targ's brain in half. Her cancer was

upgraded from grade 2 to grade 4. Mitchel Berger, her surgeon, wanted to operate immediately. Five days after the initial diagnosis, she was wheeled into surgery at UCSF, where Berger spent six hours performing the craniotomy. Much of the tumor could not be excised.

When she woke up, her close friends and family were crowded around her bedside. They hugged her, stroked her, showed no fear. They told her not to worry. Her fellow researchers joked that they would make her the poster girl for their cause. Of course she would pull through. She was their leader.

Then Berger came in and told her that the tumor was, indeed, GBM. It would take a miracle to keep her alive. He recommended she begin radiation treatments. She considered it.

She went home, to the house she shared with Comings in Bernal Heights. Her voice was two octaves higher - "like Marilyn Monroe on helium," she joked, and so she rented a bunch of Marilyn Monroe movies. Otherwise, she seemed miraculously fine. She responded to email and talked on the telephone in the afternoons. Each morning, she followed a disciplined schedule to get her energy flowing: 6 am, qigong; 7 am, yoga; 8 am, walk; 9 am, meditation.

One night, 10 days after the surgery, Targ came down to the living room, where Comings was working. She sat in his lap and cried as she told him her fear:

"Knowing where this tumor is located, there's a good chance I will end up with thalamic pain syndrome. It's the worst thing one can possibly get."

Two days later, the early symptoms began. Pain on her left side. Needing a lot of assistance to walk, then needing a wheelchair. She could no longer see the computer screen, let alone focus her eyes - indication the tumor had reached the optic nerve, which runs through the thalamus. She went to the hospital, and another MRI revealed that the tumor was spreading in great long tentacles over the corpus callosum, from the right brain to the left. Berger described it as "galloping," and he insisted she begin five-day-a-week radiation immediately. This time she relented.

WERE THE HEALERS SHE BELIEVED IN ANY HELP?

They tried. Word of Targ's illness had spread worldwide. Web sites kept track of her progress and made it seem that she would survive. Healing circles everywhere prayed for her. On Wednesday nights on a hill above Silicon Valley, friends and followers gathered in prayer. Many had never met Targ, but they knew her work and thought of her as their patron saint. They had fought off death themselves, or they had lost loved ones, and had felt the power of prayer in their own battles.

Her bedroom turned into a circus. Healers from everywhere showed up wanting to help. It was rarely peaceful and quiet. There was Phillip Scott, a Lakota sun dancer who burned sage; Nicolai Levashov, a Russian psychic who waved his hands; Harriet Bienfield, an acupuncturist with rare Chinese herbs; Desda Zuckerman, an energy worker who used techniques inspired by the ancient methods of the Miwok peoples. The reverend Rosalyn Bruyere phoned often, trying to get on Targ's schedule. And, of course, there was her father, Russell, urging her to meditate, calm her mind, go to that place.

Targ tried. She didn't believe that any particular one of these healers had the power to cure her, but she believed in the general notion that her life was in the hands of a mystical force. She knew her medical doctors had practically no chance of saving her life. We are optimistic beings - we choose to live - and our hope has to vest in something.

In the future, there may be a breakthrough in screening procedures and chemotherapy regimes so that brain cancer is somehow treatable. But that future is no help today. To science, Targ is just a data point. On the value of her

life, on the possibility of saving it, science faded into a mute bystander. So she put her faith in these healers, and some tried to take advantage of it. One was a man who claims to be the last existing Druid. Targ felt he really had a gift. Now she needed him. But he was stuck in France, recently deported. He offered to help if she would clear up his INS problems; then he wanted Comings to get him a job at the NSA in counterterrorism. Then he called again; this time, he offered to help for free, if Targ would convince another family to pay him \$250,000 to save their dying loved one.

Nicolai Levashov urged Targ not to have radiation. He argued that it was killing her healthy brain cells. The radiation was painful; it left purple burns on her scalp. She dreaded the late-morning sessions. Levashov insisted he had been able to stop the cancer telepathically and isolate it inside a membrane. An MRI showed the tentacles had retreated; this was almost certainly due to the radiation, but Levashov claimed credit for it. His words finally won her over. One morning, she woke up and announced, "That's it. I'm not going to submit myself to the fire-breathing dragons." She picked up the phone, called the radiology department, and told them, "I feel like you're burning me at the stake!" She stopped going.

A week later, the pain worsened, and she checked herself into the hospital. Now admitted, Targ would receive radiation whether she liked it or not. So one morning, the orderly arrived at her room to wheel her to radiology. Targ was wearing a Viking hat over a gold foil wig and waving a staff that had once belonged to an African shaman. She pronounced, "I am going to slay the dragons!" The orderly didn't recognize her. "Who are you?"

"I am a psychiatrist on the staff of this hospital!" she stated proudly.

Why did she join the circus? As the cancer progressed, Targ felt increasingly guilty that she was letting the movement down. Forget the year and a half most people get. Her charts told her she had only months. To send all the healers away would signal the end of hope.

So she let the circus go on, even though its zaniness brought chaos rather than peace. She ate her miserable macrobiotic gruel, and she meditated as best she could despite the excruciating pain. There was a poster on the wall in her hospital room on how to go about adopting a baby. She read it in tears, knowing even if she survived they would never let her adopt. So she and Comings decided to get a puppy. And they had the wedding exactly as planned.

On May 4, she and 150 of the Bay Area's parapsychology royalty converged in Tiburon, on waterfront land owned by the Audubon Society. She could barely walk down the aisle. She'd had a craniotomy and was missing her hair. Her wedding dress had to be refit twice because she'd lost so much weight. The left side of her face was not working properly. Yet she sat nobly and beamed. When most people get married, there's a part of the ceremony about always sticking together, for better or for worse. Targ's worse was already upon her. There would be no honeymoon. Making a lifetime commitment in the face of that tragedy left no eyes dry.

Back at the hospital, she wore her ring proudly.

She had one friend with whom she let her guard down, let herself be a normal dying person. When her friend walked into the room, they would both burst into tears.

"What are we going to do!?" they cried.

"I'm craving chocolate," Targ once confessed to her friend. "Sneak me some?"

"Why? Jesus, if you've only got four weeks, don't make it torture. Enjoy what you can."

"I don't want them to know." She was supposed to be macrobiotic.

Her friend became angry. There was too much pressure on Targ to be that poster girl. Targ didn't think of it that way. She was a doctor. She knew her bounds: When someone is about to lose a loved one, never deny them their faith. Even if you are that loved one.

WHAT TOO FEW PEOPLE KNOW ABOUT TARG'S FAMOUS AIDS STUDY

That her study had been unblinded and then "reblinded" to scour for data that confirmed the thesis - and the Western Journal of Medicine did not know this fact when it decided to publish.

Her famous study was not, as its reputation suggests, designed to measure the number of AIDS-related illnesses. Targ and Fred Sicher had targeted their study to measure mortality but were caught off-guard by triple-drug anti-retroviral therapy, which became common practice one month into the six-month trial. When biostatistician Dan Moore broke the randomization code to unblind the data, it told them nothing - since only one patient had died, the data was meaningless. Moore brought Targ and Sicher into his office and showed him the data on his computer. Moore thought this new triple-drug therapy was nothing short of a medical miracle, the triumph of science. It was saving lives! But Targ and Sicher didn't want to see it that way. Targ asked him to crunch the numbers on the secondary scores - one a measure of HIV physical symptoms, the other a measure of quality of life. These came out inconclusive; the treatment group didn't score better than the control. Not what they wanted to find. In dismay, Targ called her father. He calmed her down, told her to keep looking. She had Moore run the mood state scores. These came out worse - the treatment group was in more psychological stress than the control group. Same for CD4+ counts. Targ flew down to Santa Fe to attend a conference at a Buddhist retreat run by her godmother. When she called back to Moore's office, Sicher answered. Moore was crunching the last data they had, hospital stays and doctor visits. "Looks like we have statistical significance!" Moore announced. Sicher told Targ, who turned and yelled out to her friends and the conference.

Bingo.

Later that week, Moore met with an AIDS physician at California Pacific Medical Center. This doctor thought distant healing was bogus but agreed to give advice. He remarked that the length of hospital stays wasn't very meaningful. Patients with health insurance tend to stay in hospitals longer than uninsured ones. He pointed Moore to an important AIDS paper that had been recently published. It defined the 23 illnesses associated with AIDS. He told Moore they ought to have been measuring the occurrence of these illnesses all along. Moore took this list to Targ and Sicher. There was only one problem. They hadn't collected this data.

They gathered the medical charts and gave them to their assistant to black out the names of the patients. This done, Targ and Sicher began poring over the charts again, noting the data they hadn't previously collected. Since Sicher had interviewed many of these patients (up to three times), Moore worried Sicher could recognize them just by the dates they came to the hospital and what they were treated for. Sicher admitted he could (there were only 40). He had also seen which group each patient was assigned to, treatment or control, but he swore he didn't remember and maintained he was therefore impartial. (Sicher remembers this differently. He insists he couldn't recognize the patients from their charts and never knew which group each was in.) Targ told her boyfriend she was worried about Sicher's impartiality, but she took him at his word, even though Sicher was an ardent believer in distant healing, by his own frequent admission. He had put up the money himself for the pilot study (\$7,500), had paid for the blood tests. He had a vested interest in the outcome.

This isn't what science means by double-blind. The data may all be legitimate, but it's not good form. Statisticians call this the sharpshooter's fallacy - spraying bullets randomly, then drawing a target circle around a cluster. When Targ and Sicher wrote the paper that made her famous, they let the reader assume that all along their study had been designed to measure the 23 AIDS-related illnesses - even though they're careful never to say so. They never mentioned that this was the last in a long list of endpoints they looked at, or that it was data collected after an unblinding.

I learned all this from Dan Moore and confirmed it with Mark Comings. Moore seemed unaware how explosive his version of the story was. "I was always troubled over the sifting it took for the data to hold together," he said. "I think Fred and Elisabeth missed the real story, which was the difference between medical science and alternative medicine. Triple-drug therapy was literally saving lives. We were only looking at secondary things."

With this information, I reread the paper with an awe for how carefully they chose their words. Only with the benefit of this hindsight do holes emerge, ones that had been clouded by the scientific language and statistical commentary. David Spiegel, who runs the PsychoSocial Research Lab at Stanford, was the primary reviewer of Targ's paper for the *Western Journal of Medicine*. Targ's work, he said, deserved its reputation as the best-designed study measuring distant healing. Then I told him about the procedural flaws.

"I'm even more troubled by the multiple endpoints than the unblinding," he said with increasing concern. "It's a little post hoc. Normally, we accept the standard that a finding must have less than a 1-in-20 chance of randomly occurring. When you're on your third or fourth attempt, it's much more likely a 1-in-20 event will occur, so the standard has to be higher. You divide the alpha by the number of attempts, thus 1 in 60, 1 in 80, et cetera. There was no indication of this recast standard."

Spiegel continued: "It does change her work considerably. It puts it into more of an exploratory study, rather than a confirmatory study. It would be wrong to say it'd been proven."

WELL, WHAT ABOUT THE PILOT STUDY, IN WHICH THOSE WHO DIED WEREN'T "TREATED" WITH DISTANT HEALING?

Age was a confounding variable. Most of the 20 participants were in their mid-twenties to early thirties, but four were older. Three in their late thirties, and one in his sixties. Those oldest four patients died. They were all in the control group.

In other words, the study provided fairly convincing evidence that if you had AIDS back in the mid-1990s, the older you were the more likely you were to die.

WHETHER THE DETERIORATION OF TARG'S HEALTH MADE THE SLIGHTEST DIFFERENCE IN PEOPLE'S CONVICTION THAT PRAYER WORKS

Not at all, because people who devote themselves to the thin line between life and death don't just measure "healing" as saving a physical body. Those who've watched a lot of people die learn to find their victories in good deaths. Your body might be dying, but you can still repair your relationships, old emotional wounds. You can restore parts of your personality that you had let wither. You can become a better person, even as your body goes.

Targ was one of the first people to know that she would die quickly. Gradually, people around her came to accept this. Even those who had never met her became fairly sure something was up, because there were no more encouraging updates posted on the Web site that tracked her recovery.

And they continued to pray - to heal her soul - so that she might die with the

kind of peaceful bliss and tranquility she desired. Even if she couldn't live, they wanted her to die rightly, to be a poster girl for the right kind of death. At peace, not in pain. In the arms of those who loved her, not in the cold clutches of hospital care. To let go freely, to embrace the other side when she was ready.

More generosity: They all wanted to be a part of her death, and she gave this to them.

They moved Targ from her hospital to a farm in Portola Valley that had been important to her mother. She stopped the radiation.

When she was suffering, she would telephone her godmother, Joan Halifax, a Buddhist priest, and receive ministry.

With a few weeks to go, she was troubled by her inability to meditate. She cried out to a friend, "My mind hasn't quieted!"

A week later, she could only communicate through hand squeezes and eye blinks. She'd tapered off her pain medication but was not in pain. It was possible that her pain center was being affected by the cancer. It was also possible that her soul was becoming detached from her body, getting ready to depart.

"Do you know it's me?" her friend Adrienne Mohr asked.

Two squeezes. Yes.

"Is it busy inside your head?"

One squeeze. No.

"What's going on? Is it getting spacious?"

Two squeezes.

"Are you there again?"

Two squeezes.

"Babe, you're there."

Two squeezes.

She'd always preferred situations that couldn't be explained - she liked the mystery. Targ's research was designed not to find answers but to force us to behold the inexplicable, to admit our limits of narrative. And in her death, she succeeded grandly. She gave us an incomprehensible mind-bender - how can it be only coincidence that a doctor who did not believe in coincidences was afflicted by the very cancer she was studying?

WILL HER RESEARCH LIVE ON?

Targ's colleagues are seeing her work to completion. The brain cancer study has been taken over by Andrew Freinkel, and her third AIDS study by John Astin. Both doctors are sympathetic to the cause and are still enrolling patients at California Pacific.

AFTER ALL, IT'S HARMLESS, RIGHT?

With complementary medicine, the usual assumption is "If it helps, great - it can't hurt."

But it can. Consider the Russian psychic Nicolai Levashov. He urged Targ to cease radiation treatment and then convinced Comings that the cancer was no longer killing her; it was the necrotic cancer tissue, Levashov insisted, that was poisoning her body. It had to be cut out or she would die. Comings wasted the last month of his wife's life on a wild goose chase, desperately calling every brain surgeon in the country, begging them to perform this surgery. In her final week, he made an appeal to the tumor board at Stanford. He gave them her MRIs and medical charts. The board met on Thursday; they made a decision but didn't call until the next morning.

"We're sorry," he was told. "We've looked carefully at it. We disagree with what you've been told. The tumor growth is killing her. We can't do the surgery."

"You're too late anyway," he returned. "She died last night."

THE END

The time for miracles had run out on Elisabeth Targ. It was a scary moment for the uninitiated, her lungs suddenly gasping for air, trying to hang on, hyperventilating, nearly barking, spasming for more than half an hour. But this literal last gasp is how most die, and Comings knew this, so as he held her in his arms he felt relieved that she would soon be free of the illusion that is this world.

He didn't call the coroner right away. He laid her body out on her bed, and the next morning, friends gathered around her and circled in prayer. They took photographs. It helped them, somehow, to see her resting in peace, and they wanted a picture to remind them later, when they would inevitably struggle with the tragedy of a life cut short. The aura of mystery that always surrounded Targ did not end at her death. She died at 11:11 pm, exactly 111 days after she was diagnosed. The meaning of that numeric alliteration was just beyond their reach, but it titillated, as Targ's work always had. And then talk turned to those dreams of birthday cakes with 42 candles. Elisabeth Targ died two weeks short of her 41st birthday. Not evidence of anything, but too close to just ignore, too close not to ponder.

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