
What I Learned from 3,000 Doctors

by Norman Cousins

FOR THE PAST YEAR, I have been the beneficiary of some 3,000 letters from doctors in about a dozen countries. The letters were in response to the article "Anatomy of an Illness (As Perceived by the Patient)," published in *The New England Journal of Medicine* on December 23, 1976, and reprinted in *SR* on May 28, 1977. The article described a recovery from a crippling illness that specialists believed at the time (1964) to be irreversible.

What is most remarkable and gratifying about these letters is the evidence of an open attitude by doctors to new or unconventional approaches to the treatment of serious disease. There was abundant support for the measures that had figured in my own recovery—a well-developed will to live, laughter, and large intravenous doses of sodium ascorbate.* Far from resenting the intrusion of a layman into problems of diagnosis and therapy, the doctors who wrote in response to the article warmly endorsed the idea of a patient's partnership with his physician in the search for a cure.

The letters reflected the view that one of the main functions of the doctor is to engage to the fullest the patient's own ability to mobilize the forces of mind and body in turning back disease. There was general agreement in the letters that modern medication is becoming increasingly dangerous and that, to the fullest possible extent, the careful physician should attempt to educate the patient away from reliance on exotic drugs. The new trend favors an understanding of the powerful recuperative and regenerative forces possessed by the human body under conditions of proper nourishment and reasonable freedom from stress.

Not all the communications came from doctors. One episode involving a layman underlines many of the key points raised by the physicians. A New York lawyer telephoned to say that his four-year-old daughter was in critical condition in Lenox Hill Hospital. She was stricken by viral encephalitis, against which antibiotics have no record of success. The lawyer wanted to know whether, in the light of my own recovery from a severe collagen disease after taking large doses of ascorbic acid, the same treatment might be useful for his daughter.

I told the lawyer that it would be highly irresponsible for me, a layman like himself, to attempt to give medical advice, which in any case I was unqualified to offer. Moreover, there was no way of determining what part of my recovery was due to the intravenous infusion of ascorbate and what part to a full mobilization of the salutary emotions, not excluding laughter and a robust will to live. I suggested that the lawyer consult

his daughter's doctor about the possible use of ascorbic acid

The lawyer said he feared the child's doctor would be scornful of anything as unsophisticated and overpopularized as vitamin C. I then told him of the large number of medical tracts I had received from doctors, in response to my article, supporting the use of ascorbate in a wide range of disorders beyond the reach of antibiotics or other medication.

In particular, I spoke of the work of Irwin Stone, a biochemist in San Jose, who is among the country's leading authorities on the efficacy of ascorbic acid in the treatment of serious disease. I offered to send the lawyer reprints of articles from medical journals about the work of Stone and others on the functions of ascorbate in body chemistry. What seemed especially impressive to me about these papers was the data on the ability of ascorbate to activate and enhance the body's own healing mechanism. I suggested that the lawyer might wish to review this material with the child's doctor in the event he had not already seen it.

The next day I left for a new round of the Dartmouth Conferences in Latvia, U.S.S.R. While abroad, I made inquiries at various medical centers and learned that intravenous infusions of ascorbic acid had been effectively used in a number of cases of viral encephalitis.

On my return to New York, I telephoned the lawyer to ask about his daughter. He said he had spoken with Irwin Stone, who told him about recent experiences in which serious cases of viral encephalitis had been reversed through large doses of ascorbate. Armed with this information and with reprints from medical journals I had sent him, the lawyer had spoken to the child's specialist, only to be rebuffed. When he had offered the materials from the professional journals, the doctor had said he didn't need to be instructed by a layman in medical matters.

The lawyer then decided on a plan of action. Several days later he asked the specialist whether the next time his child came out of the coma he might offer her some ice cream. The specialist encouraged the lawyer to do so. The lawyer bought a pound of powdered sodium ascorbate, which is more soluble and less bitter than the ascorbic acid form. He mixed at least 10 grams of the powder into the ice cream, which the child eagerly devoured. The next day the lawyer again gave her ice cream, enriched this time with an even larger dose of sodium ascorbate. He continued the process day after day. After two weeks the child was taken out of the oxygen tent altogether. The improvement continued steadily in the following days, during which the lawyer gave his daughter an average of 25 grams of sodium ascorbate daily.

The lawyer's voice vibrated with elation as he described the child's complete recovery and the prospect of having her home again. I asked if he had told the specialist what he had done.

* Ascorbate and sodium ascorbate are derivatives of ascorbic acid. These terms are generally used as synonyms of vitamin C.



Richard Bober

"The father was ecstatic about the child's complete recovery and the prospect of having her home again."

"Certainly not," he replied. "Why should I make trouble for myself?"

Obviously, it is poor—and dangerous—policy for any layman to act behind a doctor's back. Yet there may be something about the specialist's attitude that warrants scrutiny. Was there a hardening of the categories that caused him to shut himself off from a serious consideration of alternatives? Was he over-reacting to what he regarded as an intrusion? One of the most striking features that emerged from the letters I received from doctors is the evidence of a new respect for the ideas of non-professionals. "Nothing is more out of date than the notion that doctors can't learn from their patients," wrote Dr. Gerald Looney, of the Medical College of the University of Southern California. "People today are far better educated in medical matters than they were only a quarter century ago. The entire field of nutrition, for example, is one in which many patients can hold their own, to say the least, with their doctors. Maybe the new spirit of consumerism has at last reached medicine. I teach my students to listen very carefully to their patients and to concerned and informed laymen. That's what good medical practice is all about."

One of the attractive characteristics of ascorbate is that it does no harm even if it may do little good. Under these circumstances, was there any justification for the total refusal of the child's specialist to give serious consideration to the law-

yer's request? Is the obligation of the doctor confined only to the patient? What about the legitimate emotional needs of those very close to the patient? The specialist's relationship with the child was limited in chronology and circumstance; the father had a lifetime commitment.

Another example of a problem arising from a doctor's dealings with a relative of a patient concerns the wife of a man dying from cancer in Boston. She telephoned to say her husband had been through the standard treatment—radiation, surgery, and chemotherapy—and she was despairing about the future. She had read that Linus Pauling, the Nobel prize-winning chemist, had said that vitamin C is a cure for cancer. Her hopes had been raised by this prospect, and she wanted to know if, on the basis of my own experience with a supposedly irreversible illness, I thought ascorbic acid ought to be tried.

As in the case of my conversation with the lawyer, I told the woman that it would be highly improper for me to attempt to give advice. I did, however, call her attention to the fact that Dr. Pauling's conclusions were based largely on the research of Dr. Ewan Cameron, of the Vale of Leven Hospital in Loch Lomondside, Scotland. Dr. Cameron has published reports telling of his studies involving 100 patients suffering from advanced malignancies who were given large doses of sodium ascorbate over a period of many weeks. The results

were compared with the experiences of 1,000 cancer patients of similar condition who were given no ascorbate. The average survival time of the patients in the first group was substantially longer than that of the second group. (It is important to note that *substantially* refers to weeks or months, rather than to years. Dr. Cameron makes no claim that sodium ascorbate is a cure for cancer. The significance of his research is tied to the clear indication of an agent in ascorbate that retards cancer.)

Cancer cells, Dr. Cameron says, release hyaluronidase, an enzyme that attacks intercellular cement. "Proliferation will continue as long as hyaluronidase is released; proliferation will stop when the release of hyaluronidase stops." Ascorbic acid, according to Dr. Cameron, strengthens tissue-grounding and therefore counteracts hyaluronidase activity.

Such, at least, was the gist of the material that I offered to send to the woman in Boston whose husband was dying of cancer. I emphasized that ascorbic acid could not be regarded as a sure cure for cancer or other advanced diseases. She asked whether I would be willing to discuss these matters with her husband's doctor. I told her I thought this would be

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inappropriate but suggested that her doctor might like to talk to my own physician, Dr. William Hitzig, who had provided full support for my decision to discontinue aspirin, Butazolidin, colchicine, and sleeping pills—all of which were toxic in varying degrees—and to seek to reverse my condition through a comprehensive regimen, only one part of which was regular intravenous doses of ascorbate.

The woman telephoned two days later to say she had attempted to discuss the possible efficacy of ascorbate for her husband, only to have the doctor cut her short by chanting "quack, quack" and describing the whole business as "b.s."

The woman and her husband decided to discontinue the doctor's services, although he had been a longtime family friend. They also decided to leave the hospital and to return home, where the atmosphere made for a less stressful environment and where a local doctor was glad to administer the sodium ascorbate.

Their course of action produced results similar to the findings reported by Dr. Cameron. The husband has gained some ground. His appetite has improved; and so has his will to live. He is still doomed to die from cancer, but he already has had a few more months of life than seemed possible only a short time ago. Most important, perhaps, he is able to spend his remaining time in congenial surroundings in the company of his wife.

Death is not the ultimate tragedy of life. The ultimate tragedy is depersonalization—dying in an alien and sterile arena, separated from the spiritual nourishment that comes from being able to reach out to a loving hand.

The trend in modern medicine is to move away from the notion that it is always mandatory to hospitalize seriously ill patients. The great technological advances in electronic equipment, typified by the hospital intensive-care unit, are not without their built-in penalties. A patient in the center of an exotic Buck Rogers medical wonderworld is provided with

everything diagnostically necessary in an emergency—everything, that is, except the sense of security and ease that the body needs even more than pinpointed and clicking surveillance. A mood of panic can trigger a cardiac disaster. Today, doctors are increasingly aware of the circular paradox of the intensive-care unit. It provides better electronic aids than ever before for dealing with emergencies that are often made all the more intensive because they communicate a sense of imminent disaster to the patient.

Dr. Jerome D. Frank, of the Johns Hopkins University School of Medicine, told students at the graduating exercises of Johns Hopkins in 1975 that any treatment of an illness that does not also minister to the human spirit is grossly deficient. He cited a 1974 British study showing that the survival rate of patients with heart disease being treated in an intensive-care unit was no higher than the survival rate of similar patients being treated at home. His interpretation was that the emotional strain of being surrounded by emergency electronic gadgets in an atmosphere of crisis offsets any theoretical technological gain.

In that same commencement talk, Dr. Frank referred to a study of 176 cases of cancer that remitted without surgery, X rays, or chemotherapy. One wonders whether a powerful factor in those remissions may have been the deep belief by the patients that they were going to recover and their equally deep conviction that their doctors also believed they were going to recover. Treatment works best when the patient has faith in it. More than 76 years ago, the great Canadian physician-philosopher William Osler referred to faith as the physician's greatest aid.

Hundreds of letters from doctors about the *NEJM* article reflected the view that no medication they could give their patients is as potent as the state of mind that a patient brings to his or her own illness. In this sense, they said, the most valuable service a physician can provide to a patient is helping him mobilize all the resources of mind and body in order to maximize his own recuperative and healing potentialities.

With respect to my own illness, several doctors expressed the view that my will to live represented the primary therapy and that the ascorbate may have been secondary. In my article I allowed for the possibility that I might have been all wrong about the efficacy of ascorbate in my case, and that I could have been the beneficiary of a self-administered placebo.

Dr. Bernard Ecanow and Dr. Bernard H. Gold, of the University of Illinois at the Medical Center, wrote to say that it was a serious error for me to believe that the improvement in my condition after the systematic use of ascorbate was merely a placebo effect. They had done extensive research on the subject, and enclosed papers showing that ascorbate has a dispersal effect on clusters of red blood cells (RBCs). The reason my sedimentation rate had dropped after each intravenous dose of ascorbate, they said, was because it "produced dispersal of aggregated RBCs through its water structure breaking (hydrophobic bond-breaking) effect, breaking up the structural water macromolecular matrix so that the RBCs are no longer held together by it."

I interpreted this explanation to mean that ascorbate was useful in restoring the chemical balances in the blood, or what the famous Walter Cannon termed "homeostasis" some 30 years ago.

Additional supporting data on the improvement in my con-

dition after taking ascorbic acid came from the Lederle Research Laboratories. Drs. Arnold Oronsky and Suresh Kewar reported on research in their laboratories showing that ascorbic acid is essential for the proper functioning of prolyl-hydroxylase, which in turn is essential for the synthesis of collagen. The significance of ascorbate in the treatment of collagen diseases such as arthritis, therefore, seems compelling.

Earlier in this article, I referred to the work of Irwin Stone. With the possible exception of Albert Szent-Gyorgyi, Stone probably has probed more deeply into the phenomenon of ascorbic acid than any other medical researcher in the country.

Stone has attempted to account for the fact that the human species is unable to manufacture or store ascorbic acid, a vital ingredient in the immunological system installed by nature in all members of the animal kingdom except man and several other mammals.

Fascinated by this fact, Stone has pursued his study of the subject both anthropologically and biochemically. He has developed the theory that a genetic defect took place very early in the course of evolution: Human beings lost their ability to make ascorbic acid and have had to depend on food containing the substance that plays so large a part in the immunological system. In areas where citrus fruits and certain vegetables abound, the regular diet has compensated, to a certain extent, for the natural deficiency. In northern climes, however, the absence of citrus fruits has resulted not just in scurvy but in increased susceptibility to a wide range of illnesses, minor and major.

Irwin Stone emphasizes that ascorbic acid, strictly speaking, is not a vitamin but a liver metabolite. Its primary reputation as a vitamin, however, has made it heir to the negative feelings of doctors because of the public's tendency to be attracted to miracle vitamin cures. Stone is hopeful that the medical profession will make a distinction between ascorbic acid and other vitamins not because he undervalues the need for adequate intake of vitamins but because the therapeutic properties of ascorbic acid play such a vital role in the healing process. With respect not just to poor diet but to an environment becoming increasingly burdened with air and water pollution, congestion, noise, and stress, the anti-toxic role of ascorbic acid cannot be underestimated.

One can understand the apprehensions of the medical profession about the absurd notion that vitamins are the answer to any illness. Yet it is also true that some doctors have fostered the equally erroneous idea that the average supermarket shopping basket is insurance against any nutritional deficiency. Considering the preservatives, coloring agents, additives, and sugar overload in many processed foods, the pronouncement of the White House Conference on Food, Nutrition, and Health, in 1969, seems highly pertinent; namely, that one of the great failures in the education of medical students is the absence of adequate instruction in nutrition.

In any event, it is encouraging to me, in going through the mail from doctors, to see the growing evidence of a balanced attitude about nutrition in general and ascorbic acid in particular. The negative views that many doctors held only a few years ago are now being replaced by a willingness to examine new findings and to apply them in proper proportion.

It is also encouraging to know that the medical profession is

giving increased emphasis to immunology and to the natural drive of the human body to heal itself. Considerable mystery still surrounds this process. As indicated earlier in this article, one of the interesting clues now being pursued is the function of ascorbic acid in serving both the immunological and healing processes. In this connection, it is worth calling attention to the current practice of many British hospitals of administering intravenous doses of ascorbic acid instead of antibiotics as a routine postoperative procedure in guarding against infection.

A NUMBER OF DOCTORS felt that my emphasis on the positive emotions was in accord with an important new trend in medicine. They said it was scientifically correct for me to state in the *NEJM* article that, just as the negative emotions produce negative chemical changes in the body, so the positive emotions are connected to positive chemical changes. My attention was called to a paper by Dr. O. Carl Simonton on emotional stress as a cause of cancer and to a paper by Dr. J. B. Imboden and Dr. A. Canter showing that moods of depression impair the body's immunological functions.

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more than electronic surveillance."**

The emphasis I had placed on laughter as therapy drew perhaps two dozen supportive letters. Dr. Walter E. O'Connell, a clinic director at the veterans administration hospital in Houston, sent voluminous materials on the physiological benefits of laughter. These materials indicated that it was no accident that hearty laughter had reduced the pain in my joints and improved the quality of my sleep. Dr. O'Connell referred to the importance placed by Sigmund Freud on humor as a factor in good health. He cited two papers by Freud: "Wit and Its Relationship to the Unconscious" (1905) and "Humour," which was included in a collection of Freud's writings published in 1928.

Several doctors wrote to ask whether I had been influenced in my decision to use large doses of ascorbic acid by the statements and writings of Linus Pauling. My experience with ascorbic acid occurred in 1964. Dr. Pauling's first major work on ascorbic acid (*Vitamin C and the Common Cold*) appeared in 1970. After the publication of that work, I wrote to Linus Pauling about the episode.

Some of the letters from doctors asked whether there had been anything in my medical history to prepare me psychologically and philosophically for the "partnership" with Dr. Hitzig in the diagnosis and treatment of my illness in 1964. There were two such episodes.

My first experience in coping with a bleak medical diagnosis came at the age of ten, when I was sent to a tuberculosis sanitarium. I was terribly frail and underweight, and it seemed logical to suppose that I was in the grip of a serious malady. Later it was discovered that the doctors had mistakenly interpreted normal calcification as TB markings. X rays at that time were not yet a totally reliable basis for complex diagnosis. In any case, I spent six months at the sanitarium.

What was most interesting to me about that early experience was that the patients divided themselves into two

groups: those who were confident they would beat back the disease and be able to resume normal lives, and those who resigned themselves to a prolonged and even fatal illness. Those of us who held to the optimistic view became good friends, involved ourselves in creative activities, and had little to do with the patients who had resigned themselves to the worst. When newcomers arrived at the hospital, we did our best to recruit them before the bleak brigade went to work.

I couldn't help being impressed with the fact that the boys in my group had a far higher percentage of "discharged as cured" outcomes than the kids in the other group. Even at the age of ten, I was being philosophically conditioned; I became aware of the power of the mind in overcoming disease. The lessons I learned about hope at that time played an important part in my complete recovery and in the feelings I have had since about the preciousness of life.

By the time I was 17, I had completely overcome the early frailty. I had fallen in love with vigorous sports; year by year, even in adulthood, my body continued to grow and harden. I also have had the advantage of being married to a woman who has a positive outlook on life and believes deeply in the advantages of good nutrition.

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The second major episode occurred during 1954, in my thirty-ninth year. With increased family responsibilities, I thought it prudent to apply for additional insurance. The company doctors turned me down, saying the cardiograms showed evidence of a serious coronary occlusion. My aunt, who was the insurance agent, was completely frank about the findings of the doctors. She said they urgently advised me to give up almost everything and to take to my bed. I felt demolished by this report. It was inconceivable that I would have to give up my job, my travels, and an active sports life. But here was my aunt telling me that the insurance doctors said that if I became completely inactive, I might be able to stretch out my life for a year and a half.

I decided to say nothing to my wife about the verdict of the insurance doctors. When I came home that night, my little daughters came running up to me. They liked to be thrown high in the air and to dive from my shoulders onto the couch. For a split second, I looked down two roads. One was marked cardiac alley. If I accepted the advice of the specialists, I would never throw my girls in the air again. The second road would find me working full tilt at *SR* and doing all the other things that spell life to me, especially throwing my little girls in the air. It was an easy decision. The second road might carry me for a few months or a few weeks or a few minutes; but it was my road. I threw the little girls higher than I had ever thrown them before. The next day I played in a singles tennis tournament for perhaps a total of 45 or 50 games.

The following Monday I telephoned Dr. Hitzig and informed him of the melancholy verdict of the insurance doctors. He ordered me to his office immediately, then took me to the chief of cardiology at Mt. Sinai Hospital. The hospital cardiograms confirmed the insurance reports. I went back to Bill Hitzig's office. We had a good talk. I told him I intended to do exactly what I had been doing all along and that I didn't

think there was any cardiograph in the world that was smart enough to know what made my heart tick. Hitzig patted me on the back and said he was behind me all the way.

Three years later I met Paul Dudley White, the famed heart specialist. He listened carefully to the account of what had happened, then told me that I had done the only thing that could have saved my life. He believed that sustained and vigorous exercise is necessary for the health of the human heart, even when there is evidence of the kind of cardiac inefficiency that had been diagnosed in my case. He said that if I had accepted the verdict of the specialists in 1954, I probably would have confirmed it.

That meeting with Paul Dudley White was something of a landmark in my life. It gave me confidence in my rapport with my own body. It reinforced me in my conviction that the human mind can discipline the body, can set goals for itself, can somehow comprehend its own potentiality and move resolutely forward.

In recounting this episode, I certainly do not intend to suggest that patients with heart disease should ignore the advice of their doctors. What worked for me may not work for others.

Has my respect for the medical profession diminished as the result of the three episodes? Just the opposite. The thousands of letters I have received from doctors have demolished any notion that physicians are universally resistant to psychological, moral, or spiritual factors in the healing process. Most doctors recognize that medicine is just as much an art as it is a science and that the most important knowledge in medicine to be learned or taught is the way the human mind and body can summon innermost resources to meet extraordinary challenges.

Some of the letters asked whether I would be able, in the event of another serious illness, to mount the kind of total response that I did 14 years ago.

My answer was that I honestly don't know. I don't know how many such efforts are possible in a single lifetime. But I know I would certainly try.

I know I have been lucky. My body has already carried me far beyond the point where the medical experts in 1954 thought it would go. According to my calculations, my heart has furnished me with 871,946,280 more heartbeats than were thought possible by the insurance doctors 24 years ago. I dare not even estimate the number of games of tennis or rounds of golf I have played, or the miles I have sprinted, since then.

It was the sheerest of coincidences that, on the tenth anniversary of what was supposed to have been an irreversible crippling illness, I should happen to meet on the street in New York one of the specialists who in 1964 had made the melancholy diagnosis of progressive paralysis. He was clearly surprised to see me. I held out my hand. He took it. I didn't hold back on the handshake. I had a point I wanted to make, and I thought the best way to do so was through a greeting firm enough to make an impression. I increased the pressure until he winced and asked to be released. He said he could tell from my handshake that he didn't have to ask about my health, but he was eager to hear about my recovery.

It all began, I said, when I decided that some experts don't really know enough to make a pronouncement of doom on a human being. And I said I hoped they would be careful about what they said to others; they might be believed and that could be the beginning of the end. ●

The Assault on Fortress Suburbia

How Long Can the Poor Be Kept Out?



by Roger M. Williams

THE NAMES—Exeter and Oxford drives, Buttonwood Estates—typify the little pretensions of suburbia. But there is nothing pretentious about the place itself: mass-produced, modest-sized ranch houses on small and rather spare plots; working-class white occupants with family incomes of between \$15,000 and \$20,000. Buttonwood Estates is a bit of pure contemporary Americana, the kind of place that does not draw a second look from passersby. Yet Buttonwood, in the town of Brookhaven, on Long Island, stands at the center of a growing and highly emotional national controversy over whether, and to what degree, the suburbs must help to house America's poor.

If the U.S. Department of Housing and Urban Development (HUD), the social reformers, and a Long Island real estate developer have their way, 14 new houses will be built among the 12 that now comprise Buttonwood Estates, and all 14 will be rented, with federal subsidies, to low-income families. That prospect so distresses the owners of the 12 homes already there that they and their neighbors have banded together to demonstrate publicly, to protest to governments near and far, and to seek a court injunction against the project.

With the Buttonwood protesters go the prayers of fellow suburbanites who are fighting or preparing to fight a public policy they bitterly describe as an effort to rid the cities of ghettos—at their expense. Most of the nation's states with large urban areas have had at least one bout with this policy. It is often called scatter-site housing, and it forms the most visi-