



---

## Why Doctors Don't Disclose Uncertainty

Author(s): Jay Katz

Source: *The Hastings Center Report*, Vol. 14, No. 1 (Feb., 1984), pp. 35-44

Published by: The Hastings Center

Stable URL: <https://www.jstor.org/stable/3560848>

Accessed: 21-06-2022 13:34 UTC

## REFERENCES

Linked references are available on JSTOR for this article:

[https://www.jstor.org/stable/3560848?seq=1&cid=pdf-reference#references\\_tab\\_contents](https://www.jstor.org/stable/3560848?seq=1&cid=pdf-reference#references_tab_contents)

You may need to log in to JSTOR to access the linked references.

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



*The Hastings Center* is collaborating with JSTOR to digitize, preserve and extend access to *The Hastings Center Report*

# Why Doctors Don't Disclose Uncertainty

by JAY KATZ

Since the 1760's, whenever judges and counsel have dined at Sargeants' Inn Hall, the traditional toast to "the glorious memory of King William" has been followed by one to "the glorious uncertainty of the law."<sup>1</sup> The toast was first proposed in honor of Chief Justice Lord Mansfield, who had unsettled the legal community by overruling several long established legal precedents and by introducing a number of innovations in the practices of his court. The simultaneous celebration of authority and uncertainty was no accident. Nor was it a coincidence that uncertainty was celebrated when it would only engender momentary laughter before being drowned in ale and wine. This story from legal history serves as a reminder that the disquiet over uncertainty is not restricted to the medical profession.

With the exception of Renée Fox's pioneering studies,<sup>2</sup> the impact of uncertainty on professional practices has received little systematic attention from either lawyers or physicians. On reflection, this is not surprising. It is a fact of life that human beings find it difficult to maintain a consistent, self-conscious appreciation of the extent to which uncertainty accompanies them on their daily rounds and to integrate that uncertainty with whatever certainties inform their conduct. Physicians are not exempt from this human proclivity. They will acknowledge medicine's uncertainty once its presence is forced into conscious awareness, yet at the same time will continue to conduct their practices as if uncertainty did not exist.

## The Gap between Theory and Practice

Medical knowledge is engulfed and infiltrated by uncertainty. In *Clinical Judgment* Alvan Feinstein has argued persuasively that:

[a]lthough anticoagulants, antibiotics, hypotensive agents, insulin, and steroids have been available for 15 to 40 years, many of their true effects on patients and diseases are unknown or equivocal. Clinicians are still uncertain about the best means of treatment for even such routine problems as a common cold, a sprained back, a fractured hip, a peptic ulcer, a stroke, a myocardial infarction, an obstetrical delivery, or an acute psychiatric

depression. . . . At a time of potent drugs and formidable surgery, the exact effects of many therapeutic procedures are dubious and shrouded in dissension—often documented either by the unquantified data of 'experience' or by grandiose statistics whose mathematical formulations are so clinically naive that any significance is purely numerical rather than biologic.<sup>3</sup>

Yet the reality of medical uncertainty is generally brushed aside as doctors move from its theoretical contemplation to its clinical application in therapy and, even more so, in talking with their patients.

A conversation with a surgeon-friend illustrates this point. We first discussed at some length all the uncertainties that plague the treatment of breast cancer. We readily agreed on what was known, unknown, or conjectural about the varieties of therapeutic modalities offered to patients, such as surgery, radiation, and chemotherapy. I then asked how he would speak with a patient about the treatment of breast cancer. Since he had faced this difficult assignment only a few days earlier, he related to me this recent experience.

At the beginning of their encounter, he had briefly mentioned a number of available treatment alternatives. He added that he had done so without indicating that any of the alternatives to radical surgery deserved serious consideration. Instead, he had quickly impressed on his patient the need for submitting to this operation. I commented that he had given short shrift to other treatment approaches even though a few minutes earlier he had agreed with me that we still are so ignorant about which treatment is best. He seemed startled by my comment but responded with little hesitation that ours had been a theoretical discussion, of little relevance to practice. Moreover, he added emphatically that, in the light of present knowledge, radical surgery was the best treatment.

He then asked me what I might have done instead. I told him that I would have first clearly acknowledged our ignorance about which treatment is best. I would then have laid out all treatment modalities in considerable detail and discussed them with the patient. Eventually I would have made a recommendation but only after I had first elicited her preference *and* the reasons for her choice. Holding back for a while on giving her my recommendation would have served two purposes: one, to prevent her being pressured by my professional authority to accept my recommendation; and, two, to provide an additional opportunity to explore—if she had come to a decision unsupported either by the facts I had presented or her stated needs—why she had chosen that particular treatment. We would then have been better situated to clarify whether her decision was affected by a lack of

---

JAY KATZ is John A. Garver Professor of Law and Psychoanalysis at Yale Law School. This article is adapted from a much longer chapter, "Acknowledging Uncertainty: The Confrontation of Knowledge and Ignorance," in *The Silent World of Doctor and Patient*. Excerpted with permission of The Free Press, A Division of Macmillan Inc. Copyright © 1984 by Jay Katz.

understanding of what I had said or whether I had insufficiently appreciated her wishes, needs, and expectations. He responded that the patient we had been discussing—indeed, most of his patients—would not tolerate such explorations. Patients, he went on to say, do not have the capacity to understand such complex matters and, moreover, such conversations would cause them anxiety and intolerable pain. He also pointed to the specific danger of his patient choosing an inappropriate treatment because it seemed more pleasing in the short run, even if it were not in her best interest in the long run. I was particularly struck by his real concern about not causing his patient any pain. Yet, I also silently wondered whether he would have been equally, if not more, pained by having to converse with her about his certainties and uncertainties as to the choice of treatment.

In scrutinizing these two conversations, the surgeon's with his patient and mine with him, I was struck by a number of puzzling facts: First, he and I had been able to talk about the uncertainties surrounding the treatment of breast cancer without undue difficulty. We had agreed that nobody knew what is *the* one best treatment and we had also been able to discuss the specific indications and contraindications of various treatment modalities, their risks and benefits. While we could not do so with complete certainty, we conversed quite intelligibly, and without using many technical terms, about what was known and unknown about the likelihood of recurrence, advantages and disadvantages of deferring adjuvant therapies, like chemotherapy, to a later time, and about the impact of various treatments on longevity. In short, he and I could identify reasonably well the certainties and uncertainties inherent in the various approaches to the treatment of breast cancer. Yet, as he moved from theory to practice, my surgeon-friend—both in his conversation with me and with his patient—suddenly seemed to forget all that he had said about uncertainty. He spoke instead with considerable certainty, but no explanation, about the indication for only one form of treatment: radical mastectomy.

Second, when I challenged him about the discrepancy between his theoretical awareness of uncertainty and his certainty about what was best for his patient, he momentarily seemed surprised that I even would raise that issue. In response to my challenge, he did not address the tensions between theory and practice, but remarked without elaboration that they are separate domains which do not need to be bridged. It seemed to me, as he turned his attention to the clinical problem, that he had suddenly become aware of the existence of uncertainty, that uncertainty had become split off and removed from consciousness.

Third, once challenged, my surgeon-friend spoke with conviction about how his patient could neither comprehend nor tolerate an exploration of the certainties and uncertainties inherent in the treatment of breast cancer. At the same time he admitted that he hardly knew his patient. He hastened to add, however, that his lack of familiarity with

this particular patient was of little moment, because on the basis of considerable "clinical experience," he had learned that patients neither wish to nor can engage in such conversations. When I asked him to give me some examples of when he had tried to converse with patients about such matters, he paused for a while and then said that these incidents had happened so long ago that he could not clearly remember them. The certainty he had expressed about the choice of treatment seemed to be powerfully reinforced by convictions that related not to matters of medical knowledge but to his views about patients and the proper management of the physician-patient relationship.

In trying to make sense out of these observations, three problems that uncertainty of medical knowledge poses for physician-patient decision making deserve separate attention. One is engendered by the interrelationship between certainty and uncertainty inherent in medical knowledge itself. Uncertainty here raises the question: is medicine sufficiently advanced so that doctors can be aware of, and distinguish between, opinions and recommendations based on certainty, uncertainty, or a mixture of both? The second problem is created by disclosures of uncertainties to patients. Disclosure of uncertainty here raises two questions: Can patients comprehend medicine's "esoteric" knowledge, in general, and its accompanying certainties and uncertainties, in particular? And is the impact on patients of such disclosures ultimately beneficial or detrimental? The third problem is created by the impact on physicians of a greater awareness of uncertainty. Awareness of uncertainty here raises the question: would contemplation of medical uncertainties diminish physicians' effectiveness as healers? The fear is that doctors might become so obsessed by questions and doubts that they could no longer act with the necessary dispatch and conviction.

### The Disregard of Uncertainty

Beyond these three specific problems, a more general problem requires attention. Recall that my surgeon-friend initially was not only quite conscious of the uncertainties inherent in the treatment of breast cancer but also could separate uncertainty from certainty reasonably well. Moreover, whenever he disregarded the problem of uncertainty of knowledge and was challenged, he became aware of it once again. Thus a closer scrutiny of our conversation suggests the influence of two modes of thought on what he said to me: he could be fully conscious of, or oblivious to, the uncertainties of medical knowledge. He was more conscious of uncertainty when he addressed theoretical issues and oblivious of uncertainty when he was preoccupied with practical concerns.

The mode of thought that ignores uncertainty found expression in his recounting of how much he had impressed on his patient the need for radical surgery. It is hard to tell, without inquiry, whether he had momentarily, and without

awareness, repressed all his knowledge about uncertainty—that is, denied uncertainty—or whether he was aware of uncertainty and for other reasons decided not to consider it. For now I only wish to point to the fact that it is possible not only to deny uncertainty but also quickly and effectively to suppress the emergence of any thoughts about uncertainty out of a conviction that it is to be eschewed in the practice of medicine. The distinguishing characteristic of this mode of thought is that the physician will tell a false or incomplete story not only to his patient but to himself as well.

The mode of thought that consciously considers uncertainty found expression when my surgeon-friend, once challenged by me, became immediately aware of medicine's uncertainties but proceeded to offer a number of justifications for his personal and professional beliefs. At these times, he did not tell a false story to himself, but felt, based on his "clinical experience" acquired during training and practice, that patients needed to be told a false or incomplete story. It is important to distinguish between these two modes of thought, because denial and habitual suppression of uncertainty make significant information unavailable to physicians themselves; even if they want to, they cannot impart such information to patients. Keeping uncertainty to oneself for other reasons, on the other hand, does not create this problem. Moreover, the reasons for withholding information about uncertainty may point up complex problems about the practice of medicine that deserve examination in their own right.

Our conversation also illustrates that uncertainty of medical knowledge itself is not at issue. To be sure, our conversation would have proceeded along different lines if medicine were not beset by pervasive uncertainties. One may wish it to be otherwise but this does not change the fact that uncertainty of knowledge will for a long time remain an essential characteristic of the practice of medicine. In fact, my surgeon-friend and I were able to talk comfortably and intelligibly about certainty and uncertainty. He only disregarded uncertainty when he was speaking about or to the patient. The actual or intrapsychic presence of the patient might have made him shift from one mode of thought to the other. In the presence of his patient his awareness of uncertainty became compromised, which precluded contemplation of the idea of acknowledging uncertainty to her. Thus the problem posed by uncertainty of knowledge for mutual decision making is how to keep the existence of uncertainty clearly in mind and not replace it by certainty whenever one moves from theoretical to practical considerations. Put another way, the problem is not uncertainty of medical knowledge but the capacity to remain aware of, and the willingness to acknowledge, uncertainty.

The defenses that physicians employ against an awareness of uncertainty have been well described by Renée Fox, who has made important contributions to the study of medical uncertainty. She identified "three basic types of uncertainty" that isolate particular stresses that affect physicians:

The first results from incomplete or imperfect mastery of available knowledge. No one can have at his command all skills and all knowledge of the lore of medicine. The second depends upon limitations in current medical knowledge. There are innumerable questions to which no physician, however well trained, can as yet provide answers. A third source of uncertainty derives from the first two. This consists of difficulty in distinguishing between personal ignorance or ineptitude and the limitations of present medical knowledge.<sup>4</sup>

Fox emphasized the stresses caused by deficiencies in individual and collective professional knowledge, as well as by the difficulty of making clear distinctions between these two sets of deficiencies.

In her detailed study of doctors and patients on "Ward-F Second," a metabolic research unit, Fox documented the pervasive presence of uncertainty as a third party.<sup>5</sup> The doctors who worked on this ward were deeply committed to getting the better of uncertainty and they persevered despite many failures and the considerable stress that their dual obligations as investigators and clinicians imposed on them. Since the stresses were quite noticeable, Fox became intrigued to learn more about how the doctors coped with the stresses of uncertainty. She identified some of the defenses physicians employed against uncertainty—the "counterphobic impious grim joking . . . to come to terms with the most stressful aspects of their situation" and "the game of chance . . . the wagering behavior in which they engage" when predictions were hazardous. She emphasized that they devised "nonempirical or magical techniques to 'enable them to carry out their . . . tasks with confidence and poise.'" . . .

The failure to acknowledge uncertainty could have resulted from a denial of uncertainty, from traditional ideas about the ethical conduct of physicians toward patients which can exist side by side with an awareness of uncertainty, or from habitual thoughts about the proper exercise of one's professional responsibilities which quickly suppress any budding awareness of uncertainty. The difficulty of making such distinctions has led me to encompass all three under the term *disregard of uncertainty*. The important lesson to be learned from Fox's study, as is equally true for the conversation with my surgeon-friend, is how pervasive the disregard of uncertainty becomes whenever uncertainty ceases to be merely theoretical and impinges on "the stressful aspects of [the doctor's] situation" in actual clinical encounters. Fox's observations compellingly illustrate the difficulties of coping with uncertainty, if by coping is meant "struggling with, contending with," and not trying to put it out of mind. Thus, while the very existence of uncertainty imposes burdens on physicians, the greater burden is the obligation to keep these uncertainties in mind and to acknowledge them to patients.

Another example, provided by George Crile, Jr., illustrates a more total denial of uncertainty, caused by psychological forces that are deeply embedded in the unconscious

and difficult to overcome. The existence of such defensive operations defines some of the limits of human capacities to become aware of uncertainty. These limits must be accepted, although the restrictions they impose on awareness can be moderated. Crile wrote that his father, George Crile, Sr., a renowned surgeon of the early twentieth century under whom he trained, “*never did a radical mastectomy.*”<sup>6</sup> Instead, his father always employed a less mutilating surgical procedure. George Crile, Jr., continued, “[d]uring my residency at the Cleveland Clinic, I was also exposed to the influence of Dr. Tom Jones, who *always* did a radical mastectomy. Being a rebellious child, I discounted my father’s ideas, adopted the Jones technique, and for seventeen years I performed only radical mastectomies.” Now, however, Crile concluded, “[c]onventional radical mastectomies are not done” at the Cleveland Clinic.

Having been trained by his father and Jones, Crile was aware of the uncertainties that surrounded the proper treatment of breast cancer, but he was compelled to deny uncertainty and substitute an uncompromising certainty in its place for powerful personal reasons. His conversion raises many questions. In now following his father, has he merely become a compliant child? How can he know? Or, put differently, to what extent can he demand that patients trust him implicitly since he was so readily affected by oedipal conflicts, which he fought out over the bodies of countless Jocastas? Indeed, to what extent do many surgeons, trained by other illustrious “fathers,” replicate this struggle by performing only procedures prescribed by their elders’ paternal authority, to which they submit passively because they have not sufficiently resolved their conflicts with their biological fathers? I enlist these psychological considerations both to emphasize how these and other powerful forces can defeat an awareness of uncertainty and to encourage a more self-conscious and reflective recognition of the constant presence of uncertainty in medical practice. Such heightened awareness may alert physicians to the fact that something may be amiss whenever single-mindedness dominates their therapeutic interventions.

The denial of uncertainty, the proclivity to substitute certainty for uncertainty, is one of the most remarkable human psychological traits. It is both adaptive and maladaptive, and therefore both guides and misguides. In one of his earlier works, *The Interpretation of Dreams*, Freud observed how, immediately upon awakening, the dreamer distorts the senselessness of his dream as dreamt by giving it a coherence that it did not possess. He wrote:

[I]t is our normal thinking that . . . approaches the content of dreams with a demand that it must be intelligible. . . .

\* \* \*

It is the nature of our waking thought to establish order in material of that kind, to set up relations in it and to make it conform to our expectations of an intelligible whole. . . . An adept in sleight of hand can trick us by relying upon this intellectual habit of ours. In our efforts at making an intelligible pattern

of the sense-impressions that are offered to us, we often fall into the strangest errors or even falsify the truth about the material before us.<sup>7</sup>

Similarly, other studies have demonstrated how witnesses at scenes of accidents unwittingly fill in their incomplete perceptions and recollections with “data” that will give coherence to both their certainties and uncertainties about what has transpired.

Human beings’ defensive and adaptive needs to make both their internal and external worlds intelligible, to shun incomprehensibility, doubt, and uncertainty, are formidable. In dreams, it is the simultaneous presence of contradictory, “absurd” and irrational unconscious thoughts and of more accustomed rational thoughts—all of which make up the content of dreams—that is largely denied. Witnesses to accidents defend against the faulty nature of their external sense perceptions. Both examples illustrate the pervasive and fateful human need to remain in control over one’s internal and external worlds by seemingly understanding them, even at the expense of falsifying the data.

Physicians’ denial of awareness of uncertainty serves similar purposes: it makes matters seem clearer, more understandable, and more certain than they are; it makes action possible. There are limits to living with uncertainty. It can paralyze action. This is particularly true, as John Dewey noted, in practical affairs, as in the practice of medicine, where decisions must be made. He chided his fellow-philosophers on their futile quest for certainty to obtain relief from the tremendous insecurities of human existence. He argued that “the idea of any complete synthesis of knowledge upon an intellectual basis” is an impossible quest. “Man has never had such a varied body of knowledge in his possession before, and probably never before has been so uncertain and so perplexed as to what his knowledge means, what it points to in action and in consequences.”<sup>8</sup> This insight did not suggest to Dewey an abandonment of the quest for greater certainty. He concluded instead that it is “the vital office of present philosophy . . . to search out and disclose the obstructions; to criticize the habits of mind which stand in the way [of] the development of an [integrated] system of thought.” This objective, too, has its limits because of the constant admixture of certainty and uncertainty. Nevertheless, it should be the “vital office” of scientific medicine to develop systems of thought and action that will permit physicians to account more fully for both the certainties and uncertainties that shape their practices. To achieve such an objective will not prove easy, for formidable obstacles, to which I now turn, impede the awareness and acknowledgement of uncertainty in the practice of medicine. . . .

### Conformity and Orthodoxy

Conformity and orthodoxy, playing the game according to the tenets of the group to which students wish to belong,

are encouraged in medical, as in all professional, education; they further compromise awareness of uncertainty. I recall that during my first year at medical school we were one day instructed by the faculty of one distinguished university hospital that anticoagulant therapy was the treatment of choice for threatening pulmonary embolization and that any other therapy constituted unprofessional conduct, while at another equally distinguished hospital, we were informed that the only correct treatment was the surgical ligation of the inflamed veins. One could view such an exposure to controversy as training for uncertainty. I believe it is not. In neither hospital were we exposed to the complexities of decision making in the light of each hospital's successes and failures with this treatment as contrasted with alternative treatments; nor were we encouraged to keep an open mind. In both we were educated for dogmatic certainty, for adopting one school of thought or the other, and for playing the game according to the venerable, though contradictory, rules that each institution sought to impose on its staff, students, and patients.

Kathleen Knafl and Gary Burkett described similar events in the training of orthopedic residents.<sup>9</sup> For example, a not unusual controversy over the indications for subjecting a 13-month-old girl to a leg-lengthening procedure led to the following stand-off. A fourth year resident, quoting from the scientific literature that favored one particular approach, was interrupted by the attending surgeon: "I know that's what he says, but that's *not the way we do it here*." Then another attending surgeon interjected, "[t]hat's *the way some of us do it*!" Again, this is not an example of teaching uncertainty; rather, it is an illustration of the rejection of scientific controversy in favor of personal preferences, of teaching conformity to one point of view or another. It was done by an appeal to clinical judgment and clinical experience. However important they are in their own right, clinical judgment and the adoption of one school of thought harbor their own built-in dangers. They constitute effective defenses against uncertainty. As Donald Light, Jr., observed:

Clinical judgment and emphasizing technique redefine competence and mistakes in terms of technique, . . . But good technique in turn rests with the clinical judgment of the professional, which is essentially individual judgment. Thus in gaining control over their work by acquiring a treatment philosophy and exercising individual judgment without question, professionals run the danger of gaining too much control over the uncertainties of their work by becoming insensitive to complexities in diagnosis, treatment, and clients relations.<sup>10</sup>

The assertion of clinical wisdom, based on personal experience, is difficult to refuse; it can only be arbitrarily accepted or arbitrarily rejected.

Little seems to have changed with regard to "training for uncertainty" since Fox's studies and my experiences as a medical student. A few years ago in a seminar at the Yale

Law School a young surgeon who had recently completed his training with a renowned surgeon, one of the most uncompromising advocates of radical breast surgery, joined my class of law students. During our discussion of a great many medical articles on the controversy over the treatment of breast cancer, he was unusually quiet. I finally turned to him and invited his comments. In an uncharacteristic outburst of temper, he pounded the table and practically shouted, "Anything but radical mastectomy is criminal conduct!" Subsequently, though still firmly committed to his views, he apologized for his "unpardonable" behavior. I thanked him because he had provided me and my students with a rare opportunity to experience the relentless power of deeply held personal and professional beliefs. Such orthodoxy will always remain a foe of an awareness and acknowledgment of uncertainty. As Thomas Kuhn has documented in his book, *The Structure of Scientific Revolutions*, shifts in paradigms may overturn orthodoxy, but only to clear the way for the establishment of a new orthodoxy.<sup>11</sup> One can only acknowledge this dynamic phenomenon and resist its excesses as best one can.

### Specialization

In addition to the pressures of socialization and conformity, specialization, so prevalent in contemporary medical practice, contributes in its own way to the flight from uncertainty. Although specialization is to begin with an adaptive response to the vastness of medical knowledge, which no practitioner can master in its entirety, and, thus, ostensibly is an attempt to cope better with some forms of uncertainty, it paradoxically makes a significant contribution of its own to a spurious sense of certainty. Specialization tends to narrow diagnostic vision and to foster beliefs in the superior effectiveness of treatments prescribed by one's own specialty. This effect of specialization is reflected in the contemporary treatment of most diseases. Again, breast cancer provides a good illustration. Surgeons, radiation therapists and chemotherapists are in vehement disagreement over the respective merits of their treatments, usually without sufficiently doubting the effectiveness of their own treatment or respecting their competitors' treatment. As a consequence, a chance first encounter by a patient with one or another therapist may influence the treatment ultimately "chosen," regardless of what the patient might have chosen if provided with other options that are equally approved medically.

The public, and professionals as well, need to become more aware of the fact that many disparate groups now live under medicine's tent. Contemporary medicine is not a unitary profession but a federation of professions with differing ideologies and senses of mission. This diversification has changed medical practices. At the turn of the century, when allopathic physicians were first given an exclusive legislative mandate to superintend the health care of the nation, allopathic medical practices were more uniform. A



clearer appreciation by patients that, in today's world, uncertainty over the treatment of breast cancer can lead one specialist to recommend surgery and others to recommend radiation treatment or chemotherapy—all of which may be viable alternatives—could in itself moderate the evils of specialization.

Great tensions are created by the conflict between the quest for certainty and the reality of uncertainty. The resolution of these tensions in favor of certainty have been abetted by a number of assumptions of what constitutes good patient care. I now want to explore some of the assumptions that emphasize the importance of faith, hope, and reassurance, rather than of ambiguity and doubts, in the treatment of disease.

### **The Placebo Effect of the Physician**

The importance that physicians have attributed throughout medical history to faith, hope and reassurance seems to demand that doctors be bearers of certainty and good news. Therefore, the idea of acknowledging to patients the limitations of medical knowledge and of doctors' capacities to relieve suffering is opposed by an ancient tradition. The controversy over the employment of placebos, whose effectiveness supposedly depends so much on the certainty with which they are prescribed by doctors and accepted by patients, provides a specific example of the tensions between faith and certainty, on the one hand, and acknowledgment of uncertainty, on the other. Therefore, an examination of the function of placebos in the contemporary practice of medicine—since their employment can be viewed as an attempt to hide lack of knowledge and uncertainty—may contribute to setting limits on the need for certainty in physician-patient interactions.

Traditionally placebos have been defined as any pills, potions or procedures whose effectiveness is not attributable to their pharmacologic or specific properties.<sup>12</sup> This definition only scratches the surface. Let me postpone looking more deeply into the definition and ask a question first: Why has the use of placebos been defended so apologetically and embarrassedly by their advocates and been attacked so vehemently by their opponents? That their use constitutes deceptive practice cannot be the whole answer, for the need for deception in the practice of medicine has had many defenders. For example, the lack of full disclosure of postoperative risks is justified on the ground of speeding recovery. Nor can the answer be found in the nonscientific basis of placebo treatments, for doctors continue to employ therapeutic agents such as steroids, chemotherapy and antibiotics for many diseases, even though the scientific rationale for their use remains obscure. Recently, one of my students made the astute observation that the controversy over placebos brings to the surface more acutely and undeniably the discomfort physicians have generally experienced over the fact that the effectiveness of so many of their

practices is strongly influenced by symbolic powers that reside in the silent laying on of hands and is not merely a result of their scientific treatments.<sup>13</sup> The demonstrable effectiveness of placebos affirms this reality and contradicts the prevailing idea that only biological agents and specific physical interventions are curative. Moreover, placebos point to the need to assign psychological influences emanating from doctors, and not only from patients, a respectful place in the cure of disease. Thus, the discomfort that placebos engender in the hearts and minds of physicians may have to do less with an uneasiness over dishonesty, full disclosure, or a lack of knowledge of their scientific rationale, and more with a disquiet over the implications of placebo treatments for the overall practice of medicine.

For example, if placebos were to be acknowledged as effective in their own right, it would expose large gaps in medicine's and doctors' knowledge about underlying mechanisms of cure and relief from suffering. Whatever embarrassment such admissions would create, acknowledgment of placebos' effectiveness would also demand their incorporation into the practice of medicine as significant adjuvants to good medical care. To keep such disturbing problems out of mind, physicians either have interdicted the employment of placebos altogether or have used them furtively or secretly. Placebos deserve a different fate. Physicians must ask: What is the inherent strength in placebos that makes them such a powerful ally to treatment? It cannot reside in the pill itself, for by definition it is an inert substance. . . .

If physicians themselves are the placebos, then they are powerful therapeutic agents in their own right. Their effectiveness is probably augmented by the positive transferences patients bring to their interactions with physicians. It is also likely that the placebo effect is unconsciously mediated. Deep in patients' unconscious, physicians are viewed as miracle workers, patterned after the fantasied all-caring parents of infancy. Medicine, after all, was born in magic and religion, and the doctor-priest-magician-parent unity that persists in patients' unconscious cannot be broken. The placebo effect therefore attests to the power of the unconscious. Yet, patients are defined by their consciousness as well. On a conscious level, patients are aware of the limitations of medicine and physicians. They have learned of these limitations from personal suffering, from illnesses and deaths of loved ones. Patients know that miracles are only occasionally the lot of mankind. They may hope for miracles, but they are also resigned to the reality of their rarity.

Two interrelated questions can now be asked: Will acknowledgment of the limitations of medicine and of physicians undermine the placebo effect? And will not expressions of hope and reassurance cement faith and augment the placebo effect? Let me first comment on the second question. It can only be answered affirmatively. The evidence of the positive impact of a doctor's reassuring pro-

nouncements on patients is overwhelming. Thus when the placebo effect and the patients' self-healing capacities work together and patients get well, one can only ask: Why not accept this remarkable gift that human nature has bestowed on us? But often patients do not improve. Then they can only feel deeply disappointed and deceived. Are hope and reassurance worth this price?

A new question arises: Can hope and reassurance be offered to patients without resorting to deception and without inviting disappointment? Or put in terms of my initial question: must acknowledgment of the limitations of medicine and of physicians undermine the placebo effect? Here the answer is not as clear. Such acknowledgments may indeed reduce that initial sense of well-being that magnificent promises engender. Yet, acknowledgment of limitations leaves plenty of room for hope and faith. Patients do get well. The unconscious and transference here come to the aid of physicians and patients. Both factors will exert their influence if physicians can be trusted. Moreover, uncertainty itself comes to the aid of their interactions because it too leaves room for hope and faith. Therefore it may turn out that an acknowledgment of uncertainty will enhance physicians' therapeutic effectiveness, because it demonstrates honesty in the face of uncertainty and a willingness to be more engaged with their patients than is possible when communications are beset by evasions, half-truths, and even lies. Patients hear these things, even if they dismiss them at first and bask in the heady transference feelings that . . . are prominent early in treatment. It must also be recognized that the failure to acknowledge uncertainty can create a sense of psychological abandonment in patients that is as real as physical abandonment, for the withholding of crucial information compromises intimacy, and physicians and patients can only engage in arm's-length transactions. If that happens, the placebo effect is undermined rather than strengthened.

If one surveys these unresolved questions, another one arises that may point us in the right direction: What kinds of faith, hope, and reassurance do patients wish to place in and obtain from a doctor? The answer may very well turn out to be that patients hope that physicians can be trusted to observe carefully, to treat them with care, to alleviate unnecessary suffering, to discuss with them the implications of uncertainty's inevitable presence, to give the unpredictable forces of nature a helping hand, and, above all, to remain honestly present and not abandon patients when they need them most. . . .

### Intervention or Delay

. . . Physicians have also justified their tendency to intervene on the ground that patients demand that something be done for them. Doctors have overlooked, however, the contributions of their own long-standing preference for resolving any ambiguity about treatment in favor of intervention

to the creation of such "demands." Fostering such expectations in patients makes acknowledgment of uncertainty about action or delay unnecessary, since both parties seemingly share the same preference. Yet, the preference for treatment over watchful waiting has many consequences. It can make patients out of persons who do not need to be so confirmed and who should be educated to rely more on their own self-healing capacities. It exposes such patients unnecessarily to the iatrogenic complications of the powerful treatments of modern medical technology, when either no treatment or a less drastic therapy is a viable alternative.

In a posthumously published paper, Franz J. Ingelfinger, the editor of *The New England Journal of Medicine*, noted the high incidence of patients' visits to doctors for illnesses that are either self-limited or beyond the curative capabilities of medicine.<sup>14</sup> He quoted the frequently given high figure of 90 per cent, but since "substantiating data [were] fragmentary," he did not state whether he believed the figure to be actually that high. His observations attest to the importance of an unexplored phenomenon. They also attest to the need for physicians not only to become more aware of their ignorance about when to delay and when to intervene, but also to acknowledge these uncertainties to patients. The high rate of "unnecessary" surgery, of resort to antibiotics and to tranquilizers, bears testimony to physicians' propensity to resolve uncertainty and ambiguity by action rather than inaction. To turn the tide requires a massive reeducation of physicians and patients. Both must learn that there is considerable value in living with uncertainty and not resolving it peremptorily in favor of action. The latter course imposes its own risks to life and health and its own considerable economic costs to individuals and society. Lest I am misunderstood, let me note that I favor neither action nor delay, but only the proposition that both are meaningful alternatives and that ultimately a patient must decide which route to follow. The traditional certainty with which intervention has been defended has obscured the uncertainties which beset such recommendations.

### The Conflict between Art and Science

A related problem resides in the uncertainty of whether to base the practice of medicine on its modern science, its ancient art, or both. Even though the age of science has been with us for over one hundred years, the commitment to its scientific principles, appearances notwithstanding, is not solidly established within the medical profession. A telling example is the recent rush to coronary bypass surgery, a costly and hazardous procedure, based largely on clinical judgments rather than carefully controlled and reasonably conclusive experimental studies.<sup>15</sup> Nor have many older procedures, like tonsillectomies and hysterectomies, been subjected to rigorous verification despite considerable doubts about whether such interventions are indicated as



frequently as they are being performed.<sup>16</sup> The uncertainties tend to be resolved by appeals to clinical judgment—the practice of the art of medicine—even though medicine’s science, which is a better judge of the merits of the procedure than is clinical experience, cannot confirm such judgments. At a minimum, the conflicts between medicine’s art and science should be brought to patients’ awareness.

### Professional Authoritarianism and the Mask of Infallibility

The lack of acknowledgment of uncertainty to patients is also reinforced by the traditional authoritarian relationship that governs interactions between physicians and patients and that doctors seek to foster. Professing certainty serves purposes of maintaining professional power and control over the medical decision-making process as well as of maintaining an aura of infallibility. Physicians’ power and control are maintained not only by projecting a greater sense of certainty than is warranted but also by leaving patients in a state of uncertainty, not in the sense of shared uncertainties but in the sense of keeping patients in the dark. In a review article that is critical of such practices, H. Waitzkin and J. D. Stoeckle have persuasively argued that

*a physician's ability to preserve his own power over the patient in the doctor-patient relationship depends largely on his ability to control the patient's uncertainty.* The physician enhances his power to the extent that he can maintain the patient's uncertainty about the course of illness, efficacy of therapy or specific future actions of the physician himself.

\* \* \*

... The less uncertain the patient becomes about the nature of his illness and the effects of treatment, the less willing he may be to relinquish decision-making power to the physician. . . .<sup>17</sup>

Doctors’ acknowledgment of their uncertainties would significantly lessen this source of patient manipulation.

Donning a “mask of infallibility” is another way of maintaining professional control. Samuel Gorovitz and Alasdair MacIntyre observed that “[a]t present the typical patient is systematically encouraged that *his* physician will not make a mistake, even though what the physician does may not achieve the desired medical objectives and even though it cannot be denied that some physicians do make mistakes.”<sup>18</sup> They went on to point out that

[t]he first reaction of physicians to the invitation to dispense with the mask of infallibility is likely to be a humane alarm at the insecurity that a frank acceptance of medical fallibility might engender in the patient. But we wonder whether the present situation, in which the expectations of patients are so very often disappointed during medical treatment, is not a greater source of insecurity.

Physicians would admit to each other in private that infallibility eludes them, but they would at the same time also assert that they often have to conduct themselves vis-à-vis

patients as if they possessed it. Masks can deceive not only the audience but the actor as well. The mask of infallibility makes it more difficult than it otherwise would be for physicians to explore their own doubts and uncertainties, and precludes acknowledging them to patients. Moreover, since infallibility is cousin to omnipotence, patients often are unwittingly led to expect too much from doctors’ interventions and later will bitterly complain about the result obtained. Physicians then generally overlook the fact that such “ungrateful patients” are their own creation.

Acknowledgments of fallibility could bring uncertainties into the open and reduce the possibility of a misunderstanding based on mixed messages in doctors’ orders, which occur whenever doubts remain unexpressed. More generally, it could reduce the existing gulf of inequality between physicians and patients and make its own contribution to a better appreciation that both are voyagers on the high sea of uncertainty. The extent to which patients can and wish to interact with doctors on such an unaccustomed basis . . . is unclear. At a minimum, however, some patients do wish to be treated in this manner. It will only become apparent how many patients feel this way once the curtain of silence, of mistrust in patients’ capacities to engage in such conversations, is lifted.

### The Fear of Quacks and Concern over Costs

Two additional arguments that physicians have advanced against the acknowledgment of uncertainty deserve consideration. One speaks to fears that such revelations will drive patients into the arms of quacks who promise so much more, and the other speaks to concerns about the economic costs of more thorough-going conversations between physicians and patients. With respect to the first argument, I do not wish to suggest that a shift in professional practices toward greater acknowledgment of uncertainty will satisfy all patients or indeed, that it will not penalize some patients for whom blind faith in physicians is therapeutic. . . .

Perhaps those patients who need miracles do not belong in doctors’ offices. Yet physicians have all too unquestioningly accepted the burden of being healers to all the ills of mankind. This self-imposed duty, based in part on the highest motives of not turning suffering persons away, is also in need of reexamination. The commonly advanced justifications that patients have nowhere else to turn or that they must be kept away from nonphysician healers who will only endanger their health by administering quack remedies are unsatisfactory.

If, after doctors have acknowledged their limitations and promised only that they will try to do their best, patients decide to turn to faith healers, so be it. Physicians should not foreclose such moves by patients, if only to reassure the vast majority of patients who remain in their care that physicians will exercise only those skills they truly possess. Acting out of fear that any acknowledgment of medicine’s

---

limitations will drive patients into the arms of quacks has its own dangers. In promising more than medicine can deliver, physicians adopt the practices of quacks and are themselves transformed into quacks.

---

*If greater awareness and acknowledgment of uncertainty are too much to ask, at least it must be recognized that, in physician-patient interactions, professionals' defenses against ignorance and uncertainty are a greater problem than patients' ignorance.*

---

With respect to the economic argument, let me first observe that, particularly in recent years, physicians have been accused along with quacks of being guided more by economic than therapeutic considerations in the conduct of their practices. It has been asserted, for example, that the performance of radical surgery for breast cancer over less extensive procedures is influenced too much by the higher fees that the former operation commands, that appropriate referrals to other medical specialists are impeded by prospects of losing a fee, and that organized medicine's fight against nonmedical practitioners, including quacks, is dictated largely by economic considerations. While there is truth in these contentions, too much has been made of them; other less obvious but equally important issues that affect therapeutic practices adversely have been overlooked. I have been chided, and correctly so, that in my prior writings I have made too little of these economic pressures. At the same time, I still hold to the view that doctors' unwillingness to come to terms with their uncertainties about what properly falls within the domain of scientific medicine—whether to base their evaluation of a patient's condition on scientific or intuitive grounds, whether to delay or to intervene, and whether or not to share with patients their bafflements and even ignorance—influence their propensity to err on the side of intervention as much as do economic considerations. In not facing up to all these issues, doctors and patients have become victims of too many unnecessary interventions. That there is money to be made out of all this is true, but it is not the whole story.

Physicians themselves have employed economic arguments by contending that greater fidelity to disclosure and consent will be costly both in physicians' time and patients' fees. While the concern over cost must be taken seriously, it is not at all clear how much time conversation will take once doctors know what needs to be talked about, and how and why they should talk.

Moreover, physicians have always maintained that cost should not be an impediment to good patient care. If conversation with patients constitutes good patient care, then

the expense can be justified on this ground. Physicians have not been averse to justifying the high costs of renal dialysis and coronary bypass surgery on the grounds that they are essential to good patient care. Furthermore, conversations about medical uncertainty may in fact reduce costs, for patients may decline interventions once they learn that they are optional rather than medically necessary. Once these and other issues have been scrutinized it may turn out that physicians' concerns over the economic costs of conversation may also mask an underlying concern: avoidance of the uncomfortable role of being the bearer of uncertainty. . . .

### Coping with Uncertainty

The question of how to moderate the defensive disregard of uncertainty must now be addressed. Not surprisingly, the poet, John Keats, points the way. As Freud frequently observed, writers and poets are possessed of remarkable psychological insights from which we can profit. Shortly before Christmas of 1817, Keats wrote to his brothers about a "disquisition" he had had with his friend Charles Wentworth Dilke, a very intelligent but highly doctrinaire young man:

I had not a dispute but a disquisition with Dilke on various subjects; several things dove-tailed in my mind, and at once it struck me what quality went to form a Man of Achievement, especially in Literature, and which Shakespeare possessed so enormously—I mean *Negative Capability*, that is, when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason. . . .<sup>19</sup>

He went on to say that "if pursued through volumes, [it] would perhaps take us no further than this, that with a great poet the sense of Beauty overcomes every other consideration, or rather obliterates all consideration."

In an essay on Keats's letters, Lionel Trilling observed that Keats tried to convey that in obliterating "all considerations of what is disagreeable or painful," one betrays the sense of Beauty, resulting in "a statement that really has no meaning."<sup>20</sup> Trilling juxtaposed Keats's letter to his brothers with his famous poem "Ode on a Grecian Urn" and its closing lines

'Beauty is truth, truth beauty,'—that is all Ye Know on earth,  
and all ye need to know.<sup>21</sup>

Trilling went on to observe that, like Shakespeare and other great poets, Keats looked at human life not only in terms of beauty but also in terms of its "ugly or painful truth."<sup>22</sup> Thus, unlike Dilke, whom Keats described as "a man who cannot feel that he has a personal identity unless he has made up his mind about everything," Keats emphasized the capacity for negative capability, "the faculty of not having to make up one's mind about everything." Trilling commented that this capacity depends "upon the sense of one's personal identity and is the sign of personal identity. Only the self that is certain of its existence, of its identity, can do

without the armor of systematic certainties. To remain content with half-knowledge is to remain with contradictory knowledges; it is to believe that 'sorrow is wisdom' and also that 'wisdom is folly.' "

Keats knew illness; he had not walked the hospital wards for nothing. He was concerned with the "truth which is to be discovered between the contradiction of love and death, between the sense of personal identity and the certainty of pain and extinction." Physicians need to be like poets and in two senses. They are practitioners of the art of medicine, an art akin to that of the poets, who seek to discover beauty in its life-affirming and life-destroying dimensions. Yet, they are also practitioners of the science of medicine who seek to discover truth in the beauty of discovery and in the ugliness of ignorance.

Thus, physicians need to be educated not only to "a more reasonable awareness of uncertainty, a less dogmatic clinging to presumed certainties, a greater ability to face uncertainty with equanimity,"<sup>23</sup> as John C. Whitehorn has put it, but also to learning how to remain "in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason."<sup>24</sup> What has been neglected in professional training is learning how truly to cope with uncertainties, how to avoid paying mere lip service to them and becoming paralyzed by them. . . .

It is possible to escape the tyranny of first impressions and naive preconceptions. Consider once again Halsted's radical mastectomy or coronary bypass surgery or the implantation of pacemakers. A greater appreciation of inevitable medical uncertainty could have led to more modest initial claims of the effectiveness of these procedures and to their less aggressive employment until effectiveness had been more clearly established. The example of penicillin, so frequently cited as a warning against delay, is not apposite. Its effectiveness was quickly established for a great many conditions that had been beyond medical control before its discovery. That its administration also had other consequences, discovered only later, like allergic sensitivity reactions or resistance to effectiveness, only speaks to what is true for all medical interventions: they must be administered judiciously.

If greater awareness and acknowledgment of uncertainty are too much to ask, at least it must be recognized that, in physician-patient interactions, professionals' defenses against ignorance and uncertainty are a greater problem than patients' ignorance. Such recognition will shift the burden of improving their conversations from patients to doctors. Moreover, shifting the focus from the uncertainty of medical knowledge to the ways in which professionals have coped with these uncertainties again places the burden on medicine's practitioners.

Patients' supposed intolerance of medical uncertainties may thus turn out to be a reflection less of an inherent incapacity to live with this tragic fact and more of an identification with the perceived incapacity of physicians to live with

it. Patients' supposed intolerance may turn out to be significantly affected by a projection of physicians' intolerance onto patients. If so, then new paths can open up for trust. It could now travel along a two way street, from patient to doctor and from doctor to patient. Trust could be grounded in a mutual recognition of the capacities and incapacities of both parties for coping with human (professional and patient) vulnerabilities engendered by uncertainty. . . .

## REFERENCES

- <sup>1</sup>100 *Gentleman's Magazine* 98 (August, 1830).
- <sup>2</sup>See, generally, Fox, R., *Experiment Perilous: Physicians and Patients Facing the Unknown* (Glencoe, Ill.: Free Press, 1959); Fox, R. and Swazey, J., *The Courage to Fail: A Social View of Organ Transplants and Dialysis* (Chicago: University of Chicago Press, 1974 and 1978 [2nd ed.]); Fox, R., "Training for Uncertainty." In: *The Student-Physician*, eds. R. Merton, G. Reader, and P. Kendall (Cambridge: Harvard University Press, 1957), p. 207.
- <sup>3</sup>Feinstein, A., *Clinical Judgment* (Baltimore: Williams & Wilkins Co., 1967), pp. 23-24.
- <sup>4</sup>Fox, R., "Training for Uncertainty," *supra* note 2, pp. 208-209.
- <sup>5</sup>Fox, R., *Experiment Perilous*, *supra* note 2.
- <sup>6</sup>Crile, G., Jr., "How Much Surgery for Breast Cancer?," *Modern Medicine* (June 11, 1973), p. 32.
- <sup>7</sup>Freud, S., "The Interpretation of Dreams," 5 *The Standard Edition of the Complete Psychological Works of Sigmund Freud* (London: Hogarth Press, 1953), p. 499.
- <sup>8</sup>Dewey, J., *The Quest for Certainty: A Study of the Relation of Knowledge and Action* (New York: Minton, Balch and Company, 1928), pp. 312-313.
- <sup>9</sup>Knafl, K. and Burkett, G., "Professional Socialization in a Surgical Specialty: Acquiring Medical Judgment," 9 *Social Science and Medicine* 397 (1975).
- <sup>10</sup>Light, D. Jr., "Uncertainty and Control in Professional Training," 20 *Journal of Health and Social Behavior* 310 (1979), p. 320.
- <sup>11</sup>Kuhn, T., *The Structure of Scientific Revolutions*. (Chicago: University of Chicago Press, 1970) (2nd ed.).
- <sup>12</sup>Wolf, S., "The Pharmacology of Placebos," 11 *Pharmacological Reviews* 689 (1959). Also see generally, Bok, S., "The Ethics of Giving Placebos," 231 *Scientific American* 17 (1974); Bok, S., *Lying: Moral Choice in Public and Private Life* (New York: Random House, 1978).
- <sup>13</sup>Remarks of Dr. Dean Hashimoto, then a second year student at Yale Law School.
- <sup>14</sup>Ingelfinger, F., "Arrogance," 303 *New England Journal of Medicine* 1507 (1980), p. 1509.
- <sup>15</sup>See, for example, Braunwald, E., "Coronary-Artery Surgery at the Crossroads," 297 *New England Journal of Medicine* 661 (1977); McIntosh, H. and Garcia, J., "The First Decade of Aortocoronary Bypass Grafting, 1967-1977: A Review," 57 *Circulation* 405 (1978); "Effects of Coronary-Artery Bypass Grafting on Survival: Implications of the Randomized Coronary Artery Surgery Study," 309 *New England Journal of Medicine*, 1181, 1983.
- <sup>16</sup>See, for example, Bakwin, "Pseudodoxia Pediatrica," 232 *New England Journal of Medicine* 691 (1945).
- <sup>17</sup>Waitzkin, H. and Stoeckle, J., "The Communication of Information about Illness: Clinical, Sociological, and Methodological Considerations," 8 *Advances in Psychosomatic Medicine* 180 (1972), p. 187-188.
- <sup>18</sup>Gorovitz, S. and MacIntyre A., "Toward a Theory of Medical Fallibility," 1 *Journal of Medicine and Philosophy* 51 (1976).
- <sup>19</sup>Forman, M., *The Letters of John Keats*. (London: Oxford University Press, 1931), p. 72.
- <sup>20</sup>Trilling, L., *The Opposing Self* (New York: Viking Press, 1955), p. 35.
- <sup>21</sup>Keats, J., "Ode on a Grecian Urn." In: *The Major Poets: English and American*, C. Coffin ed. (New York: Harcourt, Brace & World, 1954).
- <sup>22</sup>Trilling, *supra* note 45, p. 37.
- <sup>23</sup>Whitehorn, *supra* note 25, p. 122.
- <sup>24</sup>Forman, *supra* note 19, p. 72.