

## HISTORY OF MEDICINE

### How Navigating Uncertainty Motivates Trust in Medicine

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#### Abstract

Three significant factors in the shaping of modern medicine contribute to broad perceptions about trust in the patient-physician relationship: moral, professional, and epidemiological uncertainty. Trusting a physician depends first on trusting a person, then trusting a person's skills and training, and finally trusting the science that underwrites those skills. This essay, in part based on my book, *Trusting Doctors: The Decline of Moral Authority in American Medicine* (Princeton University Press, 2008), will address the forms of uncertainty that contribute to the nature of difficult encounters in the patient-physician relationship.

#### Introduction

The social boundaries of trust extend from the interactions between people familiar with one another to the complex realm of civil society. Few are unfamiliar with the breakdown in trust between people whose relationships are primarily emotionally based (as divorce statistics indicate). Furthermore, few doubt the contentiousness of contemporary politics in which trust between different groups has broken down. Physicians have navigated these boundaries for millennia. Oaths and—since the nineteenth century—codes of ethics [1] have iterated expectations that are intended to shape the scope of responsibilities that at once define the meaning of profession and, I argue, vocation.

From this perspective, trust in medicine can be conceived on a continuum: it is manifest at one end in patients' reliance on the person and character of their physician and, at the other end, in both patients' and physicians' reliance on medical-scientific research and a particular treatment's effectiveness. Between these two ends is the idea of professionalism represented as "detached concern" [2, 3]. Such concern speaks to a tension between empathy and emotional over-identification; that is, a physician must preserve a measure of respectful distance but nevertheless display some measure of concern that is felt by the patient. Somewhere along that continuum at the center of professionalism, the kinds of uncertainties to be elaborated here help explain how difficult encounters in medicine emerge. Such encounters may at first be attributed to patient behavior alone, but physician behavior can also contribute to [difficult encounters](#).

### **Moral Uncertainty**

Various behaviors on the part of physicians implicate them in moral failings of different kinds. The “impaired physician” represents the pathological side of moral trust in medicine [4]. An impaired physician violates expectations of competence but also patients’ elemental expectations of trust about the person attending to them [5]. The nature of difficult encounters with patients is reflected in part in the [litigation](#) of malpractice suits or criminal prosecutions. For example, a physician who breaks the law—for example, by participating in Medicaid and Medicare fraud, particularly when the motivation is pecuniary rather than an interest in the patient—is also morally untrustworthy [6]. Finally, concerns about a physician’s ties to larger commercial interests remain a matter of perennial scrutiny [7]. Such forms of behavior are first defined in terms of the actions of persons, although a focus on systemic problems in the delivery of medical care sometimes obscures the actions of individuals [8, 9]. Moral uncertainty, then, is distinct from the larger social forces that are intertwined with politics in particular.

### **Professional Uncertainty**

In recent years, the emergence of online evaluations of individual practitioners has become nearly ubiquitous. Surveys abound sent by corporate-run health care systems that ask patients to evaluate a particular clinical visit, including questions about the cordiality and professionalism of staff [10]. Historically, professionalism was dictated by physicians themselves in the careful organization of training from the start of medical school through residency [11]. What has not changed substantially is the locus of oversight for medical training, although there has been a rebalancing such that now patient care receives as much attention as medical training. This rebalancing occurred as a result of the well-known Libby Zion case, in which a young woman died because the resident physicians treating her were not aware that the painkiller they administered interacted with the antidepressant she was taking [12, 13]. Controversy over responsibility to patients implicated attending physicians and residents alike in unanticipated ways and introduced a new layer of policy oversight involving [resident duty hour requirements](#) that reverberates now throughout the health care system [14]. Unlike moral uncertainty, professional uncertainty is a result of increased surveillance of clinical practice, expressed as an increase in testing for ever-more refined diagnoses, some of which tests are helpful and some of which create unnecessary anxiety from false positives, as in the cases of cervical, breast, and prostate screening [15, 16]. These false positives consequently contribute to a diminution of physician authority. Patient distrust of medical professionals is also evident when patients use the internet to find information that can be used to question an individual physician’s authority [17].

### **Epidemiological Uncertainty**

The foundation of trust in modern medicine is symbolized by the scientific progress in all medical specialties and, indeed, in specialization itself. Trust in medical knowledge gave

rise to what has been called the “golden age” of medicine, roughly from the beginning of the twentieth century until the 1950s [18]. Striving to meet the challenge to reduce the onset and spread of infectious and chronic diseases and their attendant morbidity and mortality has been central to that progress. What is described as the “epidemiologic” or “epidemiological” transition—changing population patterns of mortality and causes of death, for example—has been a subject of long-standing debate among medical historians, especially in the role that chronic disease epidemiology has played in the evolution of public health [19, 20]. Factors that have contributed to more than a century’s decline in infectious disease and a corresponding increase in chronic illness have given rise to important ideas such as “risk factors” as one important basis of modern public health [21].

The history of tobacco consumption and its control introduced, by way of prospective epidemiological studies, a new understanding of the causal relationship between behavior (e.g., smoking) and the delayed onset of chronic illnesses [22, 23], in which uncertainty will always remain. Physicians were faced with providing advice based increasingly on the estimated risk of developing lung cancer or another disease [24], which cannot predict whether a particular person will develop the disease in question. Although a patient’s behavior becomes a clinical problem only with the onset of a chronic illness, epidemiological knowledge offers a basis for predicting the chance of developing a specific disease over the course of a lifetime [24]. The focus on tobacco and its association with chronic illness led to several generations’ worth of epidemiological investigations of the relationship between individual behavior and the risk factors heretofore less understood [25].

The decline in confidence in [professional authority](#) in particular is linked to the new forms of knowledge about health. The risk estimates yielded by prospective studies are the twenty-first century source of anxiety about how health and disease are to be understood [26, 27]. Confidence in the care offered by physicians is mediated and potentially undermined by this epidemiological uncertainty, especially among the worried well [28, 29]. The gap between knowledge of the cause of disease and uncertainty about whether it will occur in any particular individual is a great source of anxiety among these same people [28, 29].

### **The Significance of Trust for the Medical Vocation**

The advancement of medicine as a profession and as a foundation of effective knowledge has deep cultural roots that are inevitably tied to the ways that human beings understand and experience suffering. William James recognized that, by the end of the nineteenth century, what he described as “a strange moral transformation” had already preceded scientific advances in the alleviation of pain and suffering. He wrote in his chapter on “Saintliness” in *The Varieties of Religious Experience*:

A strange moral transformation has within the past century swept over our Western world. We no longer think that we are called on to face physical pain with equanimity. It is not expected of a man that he should either endure it or inflict much of it, and to listen to the recital of cases of it makes our flesh creep morally as well as physically. The way in which our ancestors looked upon pain as an eternal ingredient of the world's order, and both caused and suffered it as a matter-of-course portion of their day's work, fills us with amazement [30].

In one sense, what James identified was very much the opposite of the nearly canonical view today that progress in scientific understanding and technological innovation outpace our moral capacity to respond to them [31]. On the contrary, the most significant cultural change began to take shape over a century ago in the rhetoric of suffering, the strange moral transformation that pain and the suffering caused by it were not and did not have to be inevitable. This change alone has been instrumental in encouraging the ambitions of both science and technology to the present moment [32].

Physicians and patients face challenges in an era of uncertainty about whether the authority of practitioners is vested in the person, the profession, or medical knowledge; and the different forms of uncertainty stemming from these respective domains contributes to the nature of difficult encounters in the patient-physician relationship. In all three cases, public anxiety has steadily grown as trust has declined, contributing to difficult encounters between patients and their caretakers. Although outright violence against physicians is rare, physicians' failures to communicate uncertainty effectively to patients and their families can result in tremendous disappointment and distrust [24].

In recent years a significant movement has emerged composed of practitioners in health care who have sought to revitalize the calling of medicine by improving contact and communication with patients and their families and by appealing to what the faith traditions might contribute to a more fulfilling practice of medicine [33-35]. At the same time, physicians and others have written on a renewed sense of the calling of medicine in the face of the inevitable and larger reality of health care challenges and reform, arguing for exemplary forms of commitment to patients by each practitioner [36-39]. Resistance to various macro-social types of managed care—whether corporate, governmental, social-scientific, or bioethical—has grown from the bottom up, as it were, led by individual doctors and nurses who recognize the need to resist certain transformations in the practice of medicine that have exacerbated uncertainties about diagnosis, treatment, and outcome. These transformations were noted forty years ago by the sociologist Talcott Parsons [40], who spoke about three models in medicine:

The first is the *market* model which regards the patient as a "consumer" with the implications that the health care agent, notably the physician,

should be regarded as the seller of a service, and that the basis of the relationship is primarily economic. The second model is that of *bureaucratic organization* which would be appropriate to predominantly administrative functions as in the tax collection agency.... Closely related to the bureaucratic model is the notion of the proletarianization of the medical profession. The third model, which appears on a more implicit level, is that of the doctor-patient relationship as a *democratic association*. While each of these models has a range of applicability, each also has serious limitations [41].

Parsons identified two new models, the patient as consumer (i.e., a market model) and the physician as employee (i.e., a bureaucratic model), which a half-century later have their advocates and critics. But he was not arguing against a reality in which "health care is a service and ... must be financed in some way or other" [41] and in which consumerism and proletarianization would be the new and dominant forces in its provision. Rather, he was lamenting his social science colleagues' macro-social assessments that such a reality would inevitably take a certain shape or should be further pursued or advocated. He sought to acknowledge physicians' asymmetric power by placing it in a larger context of their necessary and inevitable authority that should not be bought and should not be defined by bureaucratic fiat.

These developments at the macro-social level have complicated physician-patient encounters in both measurable and immeasurable ways, making trust all the more difficult to sustain and creating the contexts that make difficult encounters more likely. The sentiment that the practice of medicine involves an encounter first and foremost between persons remains the medical profession's *raison d'être*.

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