## Standards of Care: Subjectivity and Persuasion

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n April 1996, a 58-year-old man presented to the hospital with 2 days of anginal symptoms consistent with an ST-elevation myocardial infarction. As a late presenter from the onset of symptoms, he underwent revascularization on the following day with percutaneous coronary intervention. He was found to have significant systolic dysfunction on echocardiography, and an 8-beat run of non-sustained ventricular tachycardia was seen on telemetry. He was discharged from the hospital 8 days after his index myocardial infarction. Two days later, he was found dead at home by his 2 sons and wife. In 1998, the family filed suit for malpractice and wrongful death against the cardiologists on the basis that discharge from the hospital was premature and that the negligent physicians should have seen the warning signs. It was argued that a longer hospitalization would have allowed for inhospital resuscitation, and that placement of an implantable cardioverter defibrillator would have been lifesaving. Eight years later, the jury found the physicians responsible for the death and awarded the family a total of \$5.2 million for anguish, loss of companionship, and economic losses. (Pile v. Carr and Ghitis, Case 98-4657, Broward Circuit Court, Florida)

There is an uncompromising societal expectation placed upon physicians to make perfect decisions. When it comes to our families and loved ones, we inherently adopt a zero tolerance policy for medical error and ignorance. As physicians, we are taught to base our medical decisions on scientific evidence, philosophical principles, and prudence. Although the fear of litigation is not a motivation that is ever taught to factor into decision-making, it is universally felt. Due to the unpredictable nature of death, we often succumb to the practice of defensive medicine, which is cost-ineffective and has not been shown to be life-saving by clinical evidence. The abovementioned case illustrates a medical decision that is defensible on scientific and philosophical grounds, but due to a horrific outcome, it could not withstand the scrutiny of our legal system and society. What and who should determine the "standard of care"?

What is the state of clinical evidence for defibrillator therapy pertaining to this case, both then and now? Although evidence-based medicine does have its limitations, it is important to note that when the abovementioned patient was discharged from the hospital in April 1996, not a single randomized trial demonstrating defibrillator therapy efficacy had been published. The 2 immediately relevant trials were published subsequently: the Multicenter Automatic Defibrillator Implantation Trial (MADIT)<sup>1</sup> on December 26, 1996 and the Multicenter Unsustained Tachycardia Treatment Trial (MUSTT)<sup>2</sup> on December 16, 1999. Additionally, the protocol in both of these trials would have mandated the induction of sustained ventricular arrhythmias on electrophysiologic study prior to implantable cardioverter defibrillator (ICD) implantation. Although MADIT excluded patients within 30 days of myocardial infarction, only 16% of the patients in MUSTT sustained a myocardial infarction within 1 month of enrollment.

More interestingly, when the case went to trial in June 2006, the Defibrillator in Acute Myocardial Infarction Trial (DINAMIT),3 which demonstrated lack of mortality reduction with prophylactic ICD therapy in the immediate postinfarction period (< 40 days), had already been published more than 2 years earlier. The 2004 American College of Cardiology/American Heart Association guidelines for management of patients with ST-elevation myocardial infarction specifically excluded patients who were within 30 days of postmyocardial infarction from ICD therapy,4 and the update in September 2006 revised this to 40 days in accordance with DINAMIT.5 Although premature discharge from the hospital was argued in the case described above, nowhere in any published guideline statement is there a suggestion that prolonged hospitalization 8 days after index myocardial infarction is necessary. It appears that there is and was no scientific evidence to support the claim that the patient was prematurely discharged or that a defibrillator was indicated, in both 1996 and in 2006. Yet, the physicians were still found negligent.

One of the fundamental reasons for the discordance between medical and legal "standards of care" is rooted in the discordance between how physicians are forced to act and how their actions are judged. Ideally,

physicians would be able to see into the future by moonlighting as soothsayers. Although we are highly skilled at citing numbers and probabilities from large population studies, the probability of an occurrence in an individual patient is ultimately either zero or 100%. Because we are not privy to the consequences of our actions at the time that we make decisions, we must abide by the principles of nonmaleficence and deontology. Deontology is an approach to ethics that focuses on the rightness or wrongness of actions themselves, as opposed to the rightness or wrongness of the consequences of those actions. According to these principles, we perform our duty by incorporating all of the available evidence to help us make the best decision at a given point in time, with an understanding of all potential risks and benefits. The rightness of the decision is based on this synthesis of data, principle, and consistencynot on the ultimate outcome.

In contrast, teleology is the philosophical utilitarian view that an action's ethics is determined by its good or bad consequences. This "ends justifies the means" approach should not apply to medical practice, although decisions are inevitably scrutinized when "bad" outcomes result. If the abovementioned patient were alive today, would there still be a case against the treating physicians? A "good" outcome cannot and should not justify a "bad" medical decision. In the legal world, "good" outcomes often cover up "bad" decisions, as no adverse events are brought to light. In truth, there are likely a larger number of "bad" decisions made that unwittingly enjoyed "good" outcomes. However, it remains that physicians fundamentally operate on purely deontologic means, and yet are judged on teleologic ends.

As a human being, internist, cardiologist, and electrophysiologist, the outcome of this case frightens me—both for the loss of life and the suffering, as well as for the legal ramifications of a decision that is frequently encountered in clinical practice. How will this outcome alter my practice and ability to make medical decisions? Although the patient was at high risk for ventricular arrhythmias, the implantation of a defibrillator is not and was not a Class I guideline recommendation, which is thought to be synonymous with the "standard of care."

Why did the jury decide in favor of the victim's family? In Aristotle's Rhetoric, he describes 3 methods of persuasion: ethos (appeal by authority and moral competence), logos (appeal by reason), and pathos (appeal to emotions). It appears that the pathos of this case was simply too overwhelming. The "rightness" of our medical duty as physicians, which is rooted purely in medical ethos and scientific logos, can be difficult to substantiate in a society that is so vulnerable to pathos and the persuasive ethos of plaintiff attorneys and "expert" medical witnesses. How is it possible that "objective" expert witnesses can interpret the available scientific evidence so differently? Which form of persuasion should determine the standard of care for our patients? Should standard of care be rooted in scientific journals or in courtrooms?

One thing is clear: physicians who fail to communicate with their patients are at the highest risk for lawsuits. Litigation seems to arise out of situations where there is a discrepancy between patient expectations and outcomes. The patient-physician interaction should focus not only on empathy but education, as the word doctor comes from the Latin root docēre, to teach. I believe that the only way to narrow the gap between discrepant "standards of care" is for physicians to relearn how to introduce pathos into their daily patient encounters. We must serve as the bridge between science and society. Although our patients expect black-and-white answers and outcomes, we should not shy away from revealing shades of gray. We must learn how to inform while not being afraid of expressing our limitations, as well as our emotions.

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