

Should Surgical Errors Always Be Disclosed to the Patient?

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Introduction

Robert M. Sade, MD

Mistakes made in the care of patients, especially in the hospital setting, have drawn a great deal of attention since the 1999 report of the Institute of Medicine (IOM), *To Err is Human: Building a Safer Health System* [1]. The IOM famously cited an estimate of 44,000 to 98,000 deaths a year due to medical errors—properly termed “health care errors,” in my opinion, because physicians are only one of many sources of mistakes. The highly intense, complex care required by most cardiothoracic surgical patients might logically seem to provide rich substrate for the occurrence of mistakes. They undoubtedly occur, and surgeons, beginning early in the last century, have created a culture of openly admitting and discussing their mistakes during routine morbidity and mortality conferences.

Open discussion of mistakes, however, has been mostly confined to those weekly conferences; full disclosure to patients has not been as universally practiced. Much of the ethics literature suggest that the best way to handle health care errors is to disclose them fully to patients. This policy is advised in the face of rising incidence and award levels of negligence lawsuits against physicians. Does a policy of disclosure make sense? If we follow such a policy, are we taking the high road or the road to self-destruction? Are we being saints or are we being martyrs?

At the 2004 Annual Meeting of the Southern Thoracic Surgical Association, two of the Association's luminaries, Constantine Mavroudis and Keith Naunheim, argued opposite sides of the debate. Mavroudis played the role of saint, while Naunheim suggested that, at the very least, we ought not to be martyrs.

To focus the discussion, a case was presented in which a surgical error was committed under circumstances that allowed the surgeon the opportunity safely to conceal it.

Case

Mister Sirius Lunger is 51 years old and has a history of smoking (80 pack-years), emphysema, and recent onset of hemoptysis. He is found to have a mass in his right upper lobe, and Dr Waffle, a thoracic surgeon, does a bronchoscopy, which reveals a mass in the right upper lobe bronchus. The biopsy demonstrates squamous cell carcinoma. Doctor Waffle schedules Mr Lunger to undergo right upper lobectomy, but tells the patient and his family (wife and three teenage children) that he may need to remove more than just the lower lobe, which he will decide when he visually inspects the cancer.

During the operation, Dr Waffle, assisted by an operating room nurse, identifies the pulmonary vessels in the hilum, then ligates and divides the anterior trunk to the upper lobe and a second upper lobe branch. As he completes the dissection and is preparing to ligate the pulmonary veins, he realizes that he has inadvertently ligated and divided both the anterior trunk and the ongoing pulmonary artery in the fissure; he has no other choice than to remove the right lung, despite the risks entailed by the patient's chronic lung disease. He completes the dissection of the right pulmonary veins, ligates them, and finally dissects, divides, and oversews the right mainstem bronchus, completing a right pneumonectomy.

Postoperatively, Dr Waffle is uncertain what to tell the patient and his family. He believes that openness and full disclosure is generally the right thing to do, and that, if Mr Lunger does not do well, a lawsuit is less likely if he tells the whole story. He realizes, however, that he has already mentioned to the patient and his family the possibility of a more extensive operation than lobectomy, and he was the only one in the operating room who knew of the misplaced ligature. He also believes that if disclosure of his mistake leads to lengthy malpractice litigation, which is a distinct possibility, it would be a major distraction from his practice and very bad publicity for himself, his partners, and his hospital. A jury would be likely to have great sympathy for Mr Lunger's young family, and this could well lead to an unjustified, emo-

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tionally based adverse verdict and financial ruin for his own family. Doctor Waffle tells the patient and the family that the more extensive resection was required, and does not mention inadvertent arterial ligation.

Because of the chronic lung disease in the remaining lung, Mr Lunger cannot be removed from ventilator support, and ten days later, he develops antibiotic-

resistant pneumonia. Three days later, still on the ventilator, he dies of respiratory insufficiency. Doctor Waffle, as is his usual practice, expresses his sympathy to the family, sends a note of condolence, and attends the funeral, all of which is much appreciated by the family.

Should Dr Waffle have disclosed his technical error?

Pro

Constantine Mavroudis, MD, and Constantine D. Mavroudis

Truth telling in medicine, as in the case in question, isn't always as straightforward as it sounds. Disclosing an error to a patient is never easy and may have important adverse consequences for the doctor. It is not enough to simply state "that truth is always the best policy"; it is important to explore why this might be so.

So, what did Dr Waffle actually do? He performed a comprehensive diagnostic assessment of Mr Lunger. He conducted an informed consent interview with Mr Lunger and his family, which included the possibility that he might have to perform a pneumonectomy if it were found that the tumor spread to adjacent parts of the lung. During the operation, Dr Waffle experienced unknown circumstances that led to errors in judgment-technique. This resulted in an unwanted pneumonectomy instead of the planned lobectomy. Mr Lunger died from pulmonary insufficiency, which may or may not have been prevented, regardless of the extent of pulmonary resection.

What happened to Dr Waffle, who is a board-certified thoracic surgeon with excellent credentials? A root-cause analysis would have to consider the following questions. Were there anatomic anomalies such as distortion of the pulmonary artery due to the tumor that could have been overlooked or unappreciated? Was an informed assistant (senior resident or colleague) in the room during the operation? Were there environmental distractions that were not controlled (eg, loud talking, music playing, excess operating room traffic)? Did Dr Waffle suffer a lapse in concentration due to some psychological or organic reason? The fact still remains that whatever the possible personal or system causes, the complication occurred.

If Dr Waffle (1) decides not to disclose the incident to the patient and family, (2) chooses to hide the incident from his colleagues, and (3) succeeds in his deception, he will have only to deal with his conscience with perhaps Macaulay's well-known adage ringing in his mind, "The measure of a man's real character is what he would do if he knew he would never be found out" [2]. If, on the other hand, Dr Waffle decides to disclose all the facts to the patient and family and offers an apology, he still faces the reality of a litigious society with unjust laws that

treats medical errors in a tort system where there is a milieu of punishment and financial devastation. There is, therefore, significant conflict between ethical considerations (do the right thing) and self-preservation (protect one's self).

Historical Philosophical Considerations

Aristotle did not live in a time of medical litigation and we can only speculate what his thoughts would be concerning this modern day societal problem. His *Nicomachean Ethics* [3] were based on the moral virtues of courage, temperance, prudence, and justice. Moral virtue is the habit of choosing the golden mean between extremes as it relates to an action or an emotion. It is the learned ethical choice, through teaching and experience that has evolved into a conditioned response (second nature) to do the right thing in different circumstances. The moral virtues of courage, temperance, and prudence generally pertain to one's control of inner emotions and thoughts as well as reacting to environmental situations. Justice, however, involves two or more humans whose interests must be considered, according to societal mores and laws, if there is to be a just outcome. We are not referring here to justice that is served in the criminal courts, but rather justice that is met when two or more humans enter into an agreement where the interests of both parties are involved. Aristotle would argue that Dr Waffle and Mr Lunger entered into an agreement, based on the moral virtue of justice. Doctor Waffle would treat Mr Lunger in the same manner that he would want to be treated had he, in fact, been the patient. It would follow that Dr Waffle would be duty bound to disclose the truth in all aspects of care with Mr Lunger based on this situation.

One would assume that Plato would agree with this scenario, except that Plato [4] suggested that lying in certain circumstances is not immoral. For instance, lying or intentional deception to one's enemy would not be immoral. Furthermore, intentional deception, when done in the patient's best interests, is considered by him to be morally justified. The fundamental issue is "when done in the patient's best interests" and who will decide what is best for the patient. Plato's sense of personal and societal moral virtue would support the idea that full

disclosure between humans who are involved in a solemn trust is expected. On the other hand, he has considered that the physician has responsibilities to his patients and could be expected to make moral judgments on what is best for the individual in question. It would be consistent with Plato's philosophy for the physician to intentionally deceive a patient with inoperable lung cancer in order to make his last moments on earth tolerable. There is a fundamental difference, however, between the Dr Waffle–Mr Lungers scenario and the doomed patient with lung cancer scenario. In the former there is an active agreement and sacred trust between the parties, which demands open communication; Dr Waffle's deception would be to protect himself from litigation and does no rational service to Mr Lungers. In the latter case, the relationship is between the lung cancer patient and the disease; the physician is acting as an interpreter of the situation. He did not cause a complication and did not cause the disease; he is reacting to the situation that his patient is suffering and the new paradigm into which he is entering centers on the idea that he will be kind and helpful to his patient in the last days of his life. The physician is gaining nothing in the deception, as misguided as it might be by some accounts.

Kant's moral theory [5] is considered by some to be the foundation of modern bioethics [6]. His basic tenet is the primacy of autonomy and dignity of the individual ("the principle of humanity"). For Kant, morality can exist only by virtue of our autonomy as rational beings. The moral worth of an action is not related to the beneficial outcome that it may bring, but whether it is done from a sense of duty or obligation. Kant's moral law or "categorical imperative" states, "Act only on that maxim through which you can, at the same time, will that it should become a universal law of values." Every act has to stand on its moral virtue and be judged as if it were to become a universal law of nature. Kant could not condone lying for any reason because to do so violates the principle of the "categorical imperative."

Under Kant's moral theory Dr Waffle's only choice is full disclosure of his error to the patient. By lying to the patient he violates the categorical imperative against lying and deprives the patient of his moral dignity as a human being. By seeking only to protect himself, he also violates the principle of humanity that "you should act so that you always use humanity in your own person as well as in the person of any other, never merely as a means, but at the same time as an end."

The English school of Utilitarianism based its moral theory on the "utility" or outcome of an act rather than its motive. To act morally was to act in such a way that the amount of benefit or pleasure achieved was maximized and the harm or "pain" minimized—the "greatest good for the greatest number." John Stuart Mill [7] mitigated Bentham's formulation of utility to emphasize that the quality of the good achieved mattered. For Mill, the good, broadly construed, was not just the good of the individual but the good of society as a whole; "utility would enjoin, first that laws and social arrangement should place the happiness or the interest of every individual, as nearly as

possible in harmony with the interest of the whole." Mill also insisted on the principle of equality; that every person must be considered to count for one and only one. For Mill, what ultimately gave happiness was the sense that one was a good person who acted according to his conscience in treating others well.

At first sight, it may be hard to imagine that much pleasure will be achieved by Dr Waffle telling his patient that he has made a serious error. However, consideration of Dr Waffle's pain takes a far too narrow view of Utilitarianism, which is a doctrine not of personal expediency but a consideration of the greater societal good. Though the patient will almost certainly be upset and angry, he will benefit by having accurate medical information upon which he can base his further treatment decisions and choice of doctor. Other patients may also benefit as disclosure of his error may force Dr Waffle to examine the system in which he works and to make changes which will help prevent errors in the future.

In a Utilitarian framework the medical profession as a whole is also served by openness; to confess error and apologize is a courageous and honorable act that reflects well on the profession and serves to increase public confidence in its integrity [8].

Modern Trends

The stark report by the American Institute of Medicine in 1999, *To Err is Human: Building a Safer Health System* [1], estimated that 44,000 to 98,000 deaths per year in the United States could be attributed to medical error. Medical error was defined as "the failure of a planned action to be completed as intended (ie, an error of execution) or the use of a wrong plan to achieve an aim (ie, an error of planning)." This article led to a myriad of publications dealing with recognizing system errors, reporting of medical errors, and full disclosure to the patient and his or her family.

So what should Dr Waffle do? The proper course of action for this ill-fated surgeon is to do the following: (1) disclose the entire incident as it occurred in a straightforward fashion, indicating that it was an error, (2) try to give the best explanation possible as to why this happened, (3) tell the family what steps that he is taking to prevent such an occurrence from happening again, and (4) apologize. This line of thinking has been reported by multiple authors [8–22] recently and has been supported by classic ethical thought.

Mazor and associates [20] conducted a questionnaire survey, involving 1,500 members of a New England-based health maintenance organization, which yielded a 66% response rate. The authors described various clinical vignettes concerning the severity of complications and physicians' responses relating to the completeness of error disclosure. The results showed that full disclosure yielded better patient satisfaction, an enhanced trust between patient and physician, and a positive emotional response. They recommended that when a patient is harmed by a medical error, the following take place: full disclosure, acceptance of responsibility, an apology, an explanation, and efforts to avoid future occurrences. Even

so, full disclosure did not preclude the possibility of litigation.

Osmon and associates [22] studied the reporting of medical errors in an intensive care unit experience. They concluded that medical errors are common among patients in the intensive care unit and that an error can result in the need for additional life-sustaining treatments, which can contribute to patient death. They urged the development of a nonpunitive reporting system, which could maximize the chance for analysis and improved patient care. Krizek [17] reviewed the ethical issues of adverse events and identified five types of medical errors (judgmental, technical, expectations, systems, and mechanical). He opined that, "Adverse events and medical errors occur when good surgeons are doing their best." He urged that we eliminate the culture of blame, insist on truth telling with full disclosure, and use these opportunities to improve all aspects of patient care. The idea of a blameless environment is not universally accepted. In a study from Australia, Evans and associates [11] conducted a community-based survey concerning medical error. The respondents noted that healthcare workers who make errors should be identified on the report; they did not accept healthcare worker anonymity, even though this may encourage reporting. It appears that the relationship between medical error reporting and efforts to improve the system has been established; nevertheless, punitive measures are still espoused by patients.

The fatal incident surrounding the heart transplant ABO mismatch at Duke University created a large controversy, which evoked incredulous questions such as the following: "How could they have made such a mistake?"; "Didn't anyone look at the match?". When this incident appeared in the national press, most transplant programs recognized that this error could easily have occurred in their own institution. Positive changes were made throughout the country to improve the system and avoid such mistakes in the future. Sloane [8], a lawyer who studied the legal aspects of this case, noted that the clinicians at Duke University performed admirably in their full disclosure and efforts to improve the system. Sloane suggests that more emphasis should be placed on systems rather than on the individual when medical errors occur. Banja [23] opined that full disclosure of medical error builds trust, and may result in fewer malpractice claims. This idea was supported in a Veterans Administration Hospital study [24], which established a policy of full disclosure when medical error caused harm to patients. This policy resulted in both a reduced number of lawsuits and a decrease in settlement awards in their facility. Other reports [10, 25–28] have corroborated and endorsed this policy.

Hall [15] considered the legal consequences of the moral duty to report errors. "In the past," she writes, "this [voluntary disclosure of errors] has been a higher duty than the law required." However, recent attention has made it likely that this will become a legal mandate enforcing the higher moral duty. Already, states have

legislated that medical errors must be reported. The Joint Commission on Accreditation of Healthcare Organizations requires the same when patients have been injured [29]. Hall argues that voluntary reporting of medical errors could adversely affect the reporting groups (hospital administration and physicians) in a tort system because the admission of error would amount to a guilty plea of malpractice with resultant punitive awards. Such a system could "further the trend toward conversion of the free market-based, adversarial advocacy pattern of litigation to a regulated system" as now is the case in workers' compensation and no-fault auto insurance claims. This will require a social paradigm change and new federal legislation for implementation.

Gallagher and associates [13] tested the patients' and physicians' attitudes on reporting medical errors in focus groups. Both groups had unmet needs following medical error events. Patients wanted full disclosure and an apology. Physicians agreed with disclosure but wanted "to choose their words carefully." Moreover, physicians worried that an apology could create legal liability which, in some states, it can. Krizek [17] states, "delivering truth in an artful fashion does not have to be a lie," by which he meant that he would find the correct words to be kind and thoughtful to his patient while disclosing the medical error. However, this raises the slippery slope argument that truths told in an "artful fashion" could shade into intentional deception.

The distinction between lying and intentional deception is discussed by Jackson [30] and later Benn [31]. Jackson notes, "Doctors and nurses, like everyone else, have a prima facie duty not to lie—but again, like everyone else, they are not duty bound to avoid intentional deception, lying apart; except where it would involve a breach of trust" (authors' underline for emphasis). The deontological interpretation of this last phrase is that intentional deception is wrong since it infringes on the patient's right to autonomy or his or her right to be treated with dignity [32]. The "breach of trust" phrase is central to Dr Waffle's dilemma and illustrates the difference between intentional deception to hide an error to fulfill Dr Waffle's interests and intentional deception to hide the diagnosis of a fatal disease where the doctor is presumably trying to serve the patient's interests (however misguidedly) rather than his own. It would appear that even in Jackson's approach, Dr Waffle must disclose the error in a forthright manner in order to avoid violating the breach of trust covenant.

Disclosing a medical error, especially when the physician feels personally responsible, requires a great deal of moral courage [23]. However, as most physicians come to recognize, the practice of medicine itself requires courage, including the courage to honestly face and endure one's mistakes. An act of courage is a highly visible and often inspiring act that leaves an impression on those who observe it [33]. In fact, it is courage that lies at the heart of the therapeutic relationship. From the physician's courage the patient can draw strength; from the patient's courage the physician finds the will and impe-

tus to practice medicine with competence and compassion. Surgical training aims to instill in its future practitioners the habit of choosing the right thing to do so good results will be achieved, even under pressure. The right thing includes an acknowledgement of error and a commitment to excellence. To commit an error may be blameworthy; to lie about it is cowardly.

In the end, it is Kantian ethical theory that best supports full disclosure of medical errors in a forthright and clear manner. A physician must respect the patient's dignity and act with beneficence, sympathy, conscience,

and without arrogance [6]. He is duty bound to maintain the interests of his patients and his profession over his own. These tenets resonate with modern views on disclosure of error and safety standards. As these initiatives are pushed forward, the interrelated courage between patient and physician will allow systems to change for the better and without legal rancor. The expected virtues of competence and compassion of the physician, together with the expected virtues of gratitude and compliance of the patient, will energize the process for an Aristotelian just end [34].

Con

Keith S. Naunheim, MD

My opponent, Dr Mavroudis, has utilized Kantian philosophy, Aristotelian logic, and Platonean ethics as the foundation for his argument. As intelligent and enlightened as these philosophers were, the principles they espoused do not necessarily provide adequate guidance for the 21st century thoracic surgery practitioner. Let us examine the scenario at hand.

First, I think it is important that we make some assumptions regarding this vignette. Those assumptions would include that the practitioner involved, Dr Waffle, was a well-trained and competent thoracic surgeon. Further, I would make the assumption that on the day of the surgery he was unimpaired by drugs or alcohol. Finally, it seems appropriate to believe that the resulting injury was entirely unintentional and that the surgeon did the very best job he could on that given day. If these assumptions are agreed upon then I feel strongly that nondisclosure is an acceptable and preferable option.

There is an underlying ethical paradox in the practice of medicine in the 21st century. Despite the fact that medical mistakes are inevitable, the standard for medical practice has evolved to the point at which only perfection is acceptable. This appears to be the opinion of the lay press as well as politicians and the population at large. It is also true that this belief is inculcated into physicians and surgeons throughout their medical school and residency. During training, we are taught that human life is sacred and nothing less than perfection is acceptable when performing diagnosis and treatment. This goal, while laudable, is entirely unrealistic and ignores the preponderance of literature that demonstrates that human error is a fact of life.

The "science" of human error, which has been extensively studied within business and industry, is not taught during medical training. Rather, students of medicine have been led to believe that error is avoidable and thus any mistake is "wrong." Commonly, errors are treated as a failure of character. Perhaps the best example of this may be the morbidity and mortality conferences attended by most thoracic surgeons during their training.

The overwhelming attitude was "how can there be an error without negligence?" By endorsing this attitude, we have become our own worst enemies. Mistakes in medical care are inevitable and this is now becoming widely recognized.

A study reported in 1989 noted that in the typical medical intensive care unit (ICU) patient there was a mean of 178 activities performed per day during the course of care. A time-function study revealed that there was a mean of 1.7 errors made per day per patient for an overall error rate of 1% [35]. Surgeons, like ICU nurses, are human beings and it is inevitable that they will make mistakes on a daily basis when dealing with patients. Only recently have the frequency and magnitude of these errors come to light with the publication of the monograph *To Err is Human* by the Institute of Medicine [1].

Now that the frequency and potential ramifications of medical error have been more widely recognized, it would seem to become a daunting task to determine how we could possibly right every wrong or set all things straight for every patient. Certainly doing so in the present adversarial tort system would soon lead to a never-ending series of litigation resulting in wholesale bankruptcy for a large proportion of practicing physicians as well as a significant exodus from the profession.

One of the most important things to determine in this patient's scenario is the assignation of "blame." One question that must certainly be asked is whether the operative actions and the resulting mortality were indeed a cause and effect? During training, surgeons are taught that they are responsible for everything that happens to a patient and it logically follows that the surgeon will be responsible for any errors or bad results that occur. While the logic appears sound the conclusion is absurd. Surgeons do not have the power to control all outcomes. In the present case, the patient had serious underlying chronic obstructive pulmonary disease. Such patients are at an increased risk for postoperative pneumonia and ventilator dependence, as occurred in this patient. Although the performance of a pneumonectomy in lieu of a

lobectomy may have increased the risk of respiratory insufficiency and pneumonia, it is impossible to determine that those complications would not have arisen even in the face of a simple lobectomy.

Surgery is a risky business and during the process of informed consent Dr. Waffle certainly communicated that to the patient and his family. The patient accepted the risk for potential complications, including harm, which might come due to a difficult or problematic dissection as occurred. Another perhaps similar scenario might occur following chemotherapy and high dose radiation therapy. What if a thoracic surgeon operated in a patient who had undergone such therapy and during a difficult hilar dissection entered the main pulmonary artery and was unable to control it? This would lead to a salvage pneumonectomy and/or the demise of the patient. Few thoracic surgeons I know would consider this circumstance to warrant a public "confession." Such difficulties are part and parcel of performing surgery, and during the process of informed consent the risks are usually made known to the patient and his/her family. The pneumonia in this patient may very well have occurred no matter what type of operation was performed and assigning direct blame to the surgeon may not be wholly appropriate.

There are many ethical theories that might be applied to this particular clinical situation including Aristotelian ethics, ethical egoism, ethical relativism, deontology, and utilitarianism among others. The vast majority of thoracic surgeons are not experts in the ethical realm but most, I believe, can easily grasp the theory of consequentialism. Consequentialism is a theory in which the determination of whether an act is morally right depends not on circumstances or moral theory, but rather on the net results of that action—does the good outweigh the bad? We surgeons easily recognize this concept of balancing harm versus benefit; this is an exercise we undertake everyday in our practice when trying to determine whether or not surgery is an appropriate therapeutic modality. Consequentialism suggests that one ought to do that act which realizes the best overall net consequences when one considers both the harm and the benefit to all those involved.

In the scenario outlined, one must therefore consider the harm and the benefit to the patient and his family. In addition, however, it is appropriate to consider the harm and potential benefit to the surgeon. The decision that is made regarding disclosure should be the best one with regard to the overall net consequences to both the patient and his family as well as to the physician. It is often suggested that benefits and harms to the patient may carry greater weight than those to the physician.

Thus, reasons to disclose the intraoperative misstep would include any significant benefit to the patient and his family as well as any benefit to the doctor that comes secondary to disclosure. Reasons not to disclose would be those things that cause patient or family harm as well as harm to the surgeon involved.

Theoretically, in many clinical situations acknowledging or disclosing such a mistake may benefit patients in

several ways. Following is a list of the potential "patient benefit" of disclosure as well as the corresponding antagonist view.

1. **Pro:** Disclosure may allow the patient to obtain timely and appropriate therapy to minimize the effect of medical error. An example would be a patient with a retained sponge in whom disclosure will allow for a second procedure to extract the foreign body.

Con: Acknowledging the mistake in this instance will not allow timely appropriate therapy to minimize the effect of the error. The patient is dead and there is nothing that can be done to remedy that.

2. **Pro:** Disclosure can prevent worry about the etiology of the complication and prevent the patient from believing that it occurred secondary to some intrinsic abnormality on his part.

Con: As to preventing worry about the etiology of the complication, that is also a moot point once the patient has expired.

3. **Pro:** Disclosure may help to educate the patient regarding the uncertainty of medicine and that patients would thereafter realize that physicians could make mistakes and that the patients and the families must try to be aware of what is occurring during the therapeutic interchange.

Con: Theoretically, the disclosure might inform the patient about the uncertainty of medicine but once again the death of the patient has obviated that possibility in this case.

4. **Pro:** Disclosure may be able to help promote faith in the patient/doctor relationship once the patient understands the level of honesty being exhibited by the physician.

Con: Since the patient has expired, it is impossible for disclosure to promote a stronger patient/doctor relationship and it is also highly unlikely that doing so would encourage a better relationship between the surgeon and the surviving family.

5. **Pro:** Disclosure can help the patient and the family to seek proper compensation if it is warranted secondary to the mistake.

Con: The only potential "good" that could come from disclosure might be to help the patient and the family to seek compensation. However, obtaining "appropriate" compensation, which is fair both to the patient and to the surgeon, can be quite difficult (if not impossible) to achieve in the current system of medical legal awards.

Thus, the only "patient benefit" or goal that might be fulfilled is the potential for "fair" compensation via litigation. Somehow the words "fair" and "litigation" just don't seem to belong in the same sentence in the 21st century medico-legal world.

There are yet other reasons that could potentially support the decision to disclose. These would be classified as "doctor benefit" and would include the fact that acknowledging a mistake may benefit the doctor in some situations.

1. **Pro:** Disclosure could potentially strengthen the patient/doctor relationship, as much a benefit to the surgeon as it could be to the patient.
Con: It is clear that once again strengthening the patient/doctor relationship is not a possibility due to patient's demise.
2. **Pro:** Disclosure might also allow the surgeon to learn better from his mistakes and thus change his practice accordingly.
Con: Although one might suggest that the surgeon might learn from the mistake and change the practice following confession, I personally believe it is inevitable that after following such a problem a surgeon would learn from the mistake and change his practice regardless of whether or not disclosure occurred. Disclosure would not improve his "education" or the alteration of his practice.
3. **Pro:** Disclosure might help the surgeon psychologically by gaining absolution or a sense of relief from confession.
Con: The idea that gaining absolution or relief from confession might be a benefit certainly could be valid for some, but most thoracic surgeons have a remarkably strong ego and sense of confidence and would not require that sort of psychological absolution.
4. **Pro:** It has been suggested that disclosure can potentially decrease the chance of a lawsuit.
Con: There is but a single study that suggests disclosure may decrease the risk of a lawsuit but other literature and common sense suggest otherwise.

A recent review of the literature by Kachalia and associates [36] examined the hypothesis that malpractice liability might decrease after full disclosure by physicians. The investigators searched multiple electronic databases, performed hand searches of bibliographies, and communicated with a number of recognized experts. Of the estimated 50 to 100 citations only one study was published examining malpractice liability and suggesting that it could be decreased following full disclosure. The authors concluded that it is really not possible to determine whether or not disclosure affects the probability of being sued either positively or negatively.

Another study, by Witman and associates [37], is somewhat enlightening on the topic. The investigators performed a survey of patient attitude towards medical mistakes in the outpatient setting. The population surveyed was predominantly female Caucasians in good health and highly educated, with 77% of the responders either having graduated from college or from graduate school. It would be difficult to imagine a setting more favorable to pro-doctor decisions. This was a highly educated, well-to-do patient population answering questions about purely theoretical "harm" which might be done to them or to a family member. The abstract theoretical nature would minimize the emotional energy normally associated with real world medical liability. Such a survey should provide the most favorable possible results on behalf of the physician.

These respondents were asked to predict their responses to a physician error in six separate settings which comprised three levels of error (mild, moderate, severe) in two different situations; one in which the physician disclosed the error upfront and the second in which the error was discovered by happenstance after the physician failed to disclose the error. The mild error involved a medication error with no adverse outcome, while the moderate error was a medication error which resulted in a mild but wholly reversible stroke. The severe error, most analogous to that presented within our own clinical scenario, was that of a solitary pulmonary nodule which was identified on a chest x-ray report but was not noted by a physician for a full year. After a year the mistake was noted but by that time, the lung cancer proved to be incurable. In this latter situation of a severe error, patients reported whether or not they would (a) keep seeing the physician for care; (b) report the physician to the health regulatory authority; (c) file a lawsuit. With regard to continuing care by the physician, 7% would continue seeing the physician if the physician him/herself disclosed the error; only 3% would continue to see the physician if no disclosure occurred. Regarding reporting to a regulatory agency, 69% of the respondents would report the physician even if he/she disclosed the error, whereas 78% would report the physician if disclosure did not occur; only a 9% difference. Finally, with regard to filing a lawsuit, 60% of the respondents suggested that they would file a lawsuit even if the physician disclosed the error. This increased to a 76% rate of lawsuit if the physician did not disclose the error. This suggests that while disclosure may have some minimal protective benefit, it appears to be very slight. Thus, the arguments that disclosure can help avoid legal action seems naively optimistic and the likelihood of lawsuit avoidance highly improbable.

The above arguments address the pro-disclosure perspective but there is an opposite viewpoint. In consequentialism, one must also consider the reasons why the physician should not disclose the error. The rationale for this approach would include issues of "patients/family harm" and "physician harm." In general, acknowledging mistakes could potentially harm patients in a couple of ways. First, it might inhibit present or future patient/doctor relationships or patient family relationships. Secondly, it could incite greater anger or emotional distress in a patient who has been harmed or in the family of a patient who has been harmed. Of these two, only the latter would possibly come into play. The present and/or future patient/doctor relationship, as has been stated above, has no real role since the patient has expired and the relationship has disappeared. However, there is certainly a chance that there could be greater anger, anxiety, and emotional distress on the part of the family if they were informed that surgical error may or may not have played a role in the death of their loved one.

"Physician harm" must also be considered in consequentialism when considering reasons not to disclose. The doctor could be harmed by inducing anxiety and severe emotional distress during and after disclosure. In

addition, he runs the potential for the loss of respect, patient referrals, hospital privileges, and perhaps even contracts. Thus, there is a significant potential economic loss and almost certitude with regard to an increase in malpractice premiums. None of these potential harms to the doctor is obviated by the death of the patient and thus these must be considered when one thinks of valid reasons not to disclose.

When utilizing a consequentialist approach, the sole reason to disclose the potential surgical error would be to allow for "appropriate" compensation for the patient's family. However, "appropriate" compensation can be difficult if not impossible to achieve due to the vagaries and inconsistencies of the present tort system. Potential reasons not to disclose include creating greater emotional distress in the family as well as significant anxiety and emotional distress in the physician. There is also the loss of respect referrals and the potential economic loss to the physician to be considered.

In summary, the issue can be looked at from a number of perspectives. From the medical perspective, no matter what the surgeon chooses to do, the patient will not "undie." One cannot help the expired patient and there is no medical reason to disclose. From an emotional standpoint, the family will not grieve "better" and the surgeon is not likely to find a great deal of consolation following an act of contrition. The patient/doctor relationship, cited often as a reason to disclose, really does not come into play as the patient has expired. With regard to physician guilt, it is unlikely that unburdening one's soul in and of itself would be beneficial. Most thoracic surgeons have quite strong (perhaps overly strong) egos and are very unlikely to require this for their psychological comfort. As to changing a practice and educating the surgeon, confession is not likely to better motivate a surgeon to undertake these actions. The death of the patient in and of itself is enough to cause the surgeon to undertake action in this area. Finally, it gets down, as it often does, to a question of money. Most surgeons I know would be happy if appropriate compensation could be provided to patients and/or their families without resorting to the legal system. The current tort system is adversarial in nature and it has been demonstrated that monetary awards really bear little correlation to the damage done. Looking to the current medical tort system for economic justice would be like asking a used car dealer for "fair price."

Faith, hope, charity, and a desire for atonement are all important virtues but each can be overdone. A desire to

confess to and compensate for every mistake or complication resulting from the practice of surgery would result in most thoracic surgeons spending a majority of time in depositions and courtrooms. While thoracic surgeons generally have good judgment, nobody is perfect and complications will occur due to the nature of the business.

Like all physicians, we strive to provide fair and ethical treatment for all patients. But fairness and ethics should be a two-way street. Over the last decade, American medicine has been assaulted from many directions. Not only has society as a whole not stepped up to defend our profession, rather they are instigating and driving many of the negative changes. Medicare is widely recognized as providing inadequate reimbursement and does not even cover practice costs. Society has allowed continuing decreases in reimbursement despite widely acknowledged increases in practice costs, thus placing huge economic burden on the physicians caring for the elderly. In addition, Congress has placed increasing regulatory demands and burdens on medical professionals via a number of unfunded mandates. These include the Health Insurance Portability and Accountability Act (HIPAA), the Stark Laws, and Medicare compliance regulations. The Federal Government allows medical insurers to function as an oligopoly, strong-arming individual physicians and practices while at the same time preventing physicians from bargaining collectively due to antitrust legislation. On top of all this, society has failed to push for adequate tort and/or insurance reforms to assist the doctor with their skyrocketing medical liability costs. In short, greater demands are being placed on medical professionals despite declining reimbursements and increasing medical legal pressures. The Platonean idea of virtue was meant to apply to the entire society, not just individuals. Requiring surgeons to be more virtuous than society as a whole, while idealistic, is neither fair nor reasonable.

In the above clinical scenario, the surgeon has no duty to disclose the intraoperative occurrences. The patient had a significant underlying disease and may very well have died no matter what occurred at the time of surgery. Disclosure would provide no significant good or benefit other than subjecting the surgeon to the likelihood of a bitter contentious and ultimately unfair malpractice suit. A disclosure would serve no real principle of justice or fairness. Just because one is a virtuous physician does not mean one must become a martyr.

Concluding Remarks

Robert M. Sade, MD

In analyzing Dr Waffle's error in the operating room, Mavroudis reviews a range of philosophical ethical systems, from the ancient era, through the Enlighten-

ment, to contemporary times. By combining Aristotelian teleological and Kantian deontological approaches, he reaches the conclusion that Dr Waffle should disclose

everything about the error to the patient and the patient's family. Naunheim utilizes a different philosophic system, consequentialism, to reach the opposite conclusion: Dr Waffle should keep the potentially damaging information to himself. Naunheim reaches this conclusion after weighing the benefits and harms (pleasure and pain to a Utilitarian) that will occur to both the patient and the surgeon, depending on disclosure or nondisclosure.

While ethicists have relied on a wide range of philosophic reasoning in constructing ethical systems, the codes of behavior used by physicians for centuries have been based on certain principles that have found broad support within the medical profession. The most fundamental principle, found in virtually every contemporary code, is essentially this: "A physician shall, while caring for a patient, regard responsibility to the patient as paramount" [38]. All surgeons accept this principle and are guided by it every day. Yet, while the patient's best interests are the most important considerations, they are not the only ones. Physicians also have obligations to others: family, colleagues, hospitals, and wider communities. Physicians are not required to place themselves in harm's way to such an extent that their ability to continue to care for current and future patients is *seriously* jeopardized or their personal lives are *gravely* threatened.

Both Mavroudis and Naunheim note that significant benefits may accrue both to the physician—eg, maintaining a virtuous character, which in turn leads to trust and a salutary patient-physician relationship—and to the patient—eg, the power to exercise the right of self determination, which can be done only with accurate knowledge of the relevant details of treatment. Conversely, Naunheim emphasizes that significant harm may come to physicians if they fully disclose errors to patients, through litigation that impedes their ability to continue providing professional services. Thus, to determine what is the right thing to do, physicians need an accurate measurement of the probability that disclosure of an error will seriously harm them and their other patients. The literature, however, does not conclusively document the precise risk faced by Dr Waffle. In the absence of adequate evidence, physicians have no solid grounds on which to decide one way or the other.

It is important for physicians, when faced with great uncertainty in threatening situations, to avoid acting on emotional reactions, such as anger toward society for failing to protect physicians adequately, outrage at trial attorneys for making life miserable for unfortunate physicians who come within their sights, or fear of patients who present real or apparent threats. Physicians faced with threatening situations should be guided by cool reason grounded in the principles of medical ethics. This means that they should give great weight to patients' interests, allowing their own interests to override those of their patients only when the threat of harm is grave and the jeopardy it imposes is serious.

Making the right decision requires that physicians assess as accurately and objectively as possible the real threat to their own interests and to their ability to care for patients in the future. Availability of more complete data

that document actual risks to physicians arising from full disclosure of surgical errors to patients will help us to make better-informed decisions. Our deliberations should also include objective assessment of personal observations and experiences in similar situations.

Various philosophical traditions, as presented by our debaters, have not produced a definitive answer to the question of how Dr Waffle should respond to his dilemma. In all probability, there is no single answer that would apply to all physicians in all situations. Broadly accepted principles of medical ethics can provide a helpful guideline; however, when deliberating on the many factors to be considered, the heaviest weight should be placed on doing what is best for the patient—in this case, disclosure of the facts and the trust such openness generates. At the end of the day, however, we must rely on judgments based on dispassionate interpretation of the inconclusive data that are available, in the context of personal observations, to determine just how much Dr Waffle—and we, when our times come—should tell the patient.

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