Penn Statim
Online Companion to Penn State Law Review

The Lasting Legacy of a Case that was "Lost"

Steve Cohen*

Hospitals can be very dangerous places. Between 44,000 and 98,000 patients are killed every year in hospitals—and many more are injured—due to medical error. A landmark study, "To Err is Human," conducted by the Institute of Medicine ("IOM") uncovered these findings in 1999.[1]

Josef Stalin is reputed to have said, "A single death is a tragedy; a million deaths a statistic." The 1984 death of 18-year-old Libby Zion was a personal tragedy for her family. For the next ten years, that death was writ large on the public stage—first by criminal investigations, then by political inquiries, next by regulatory action, and finally by a civil suit whose trial was covered gavel-to-gavel by Court TV. Today, medical education throughout the United States has changed dramatically with regard to the number of hours young interns and residents can work, and how much supervision is required in teaching hospitals. These practices are guided by what are colloquially known as the "Libby Zion rules."

I. ONE NIGHT

In March 1984, Libby Zion was a Bennington College freshman living at home in New York during the Vermont school's winter-work term. She was just finishing up an internship in the office of Manhattan

* Steve Cohen is an Associate at Kramer Dillof Livingston & Moore in New York. Before completing law school and passing the Bar at age 62, he was a publisher at Time and Scholastic, and was CEO of three digital media start-ups. He is the author of six books and a regular contributor to *The New York Times*, *The Wall Street Journal*, *City Journal*, and other publications. He co-chaired the Clinton White House task force The Prescription for Reading Partnership and served as a Director of the United States Naval Institute and Reach Out and Read. He attended the United States Naval Academy and received his A.B from Brown University and his JD *cum laude* from New York Law School.

1. INST. OF MED., TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM 1 (Mike Edington ed. 1999).

Borough President Andrew Stein. On Sunday night, March 4th, Libby was at home with her two brothers, recuperating from a tooth extraction several days earlier. Her parents, who had been hesitant to leave Libby at home, were at a friend's party at an apartment nearby.Although she had been running a fever that occasionally spiked as high as 106 degrees, she reassured her parents that she was feeling a little better and would get some rest. At about 9 PM, Libby's brother Adam called their parents: Libby's fever was spiking again, and she was terribly agitated. The parents returned immediately to their Upper West Side apartment.

Upon seeing their daughter, her parents called Libby's pediatrician. Unable to reach the pediatrician, Sidney reached out to his doctor, Raymond Sherman, who had treated Libby occasionally over the past three years. Dr. Sherman advised Sidney to take Libby to the emergency room (ER) at New York Hospital where he was an attending, and that he would alert the ER staff to see Libby at once.

Libby, accompanied by both her parents, arrived at the emergency room at about 11:30 PM. Several different doctors and nurses questioned Libby and her parents about Libby's medical history. The medical records show that Libby told them she was on a medication for depression called Nardil, along with erythromycin for her tooth extraction, and an over-the-counter cold medicine. The medical staff also asked Libby whether she had recently used any illicit drugs, both in her parents' presence and when she was alone. Both times, she said no.

The young doctor in charge of Libby's examination in the ER turned her care over to another second-year resident, Dr. Gregg Stone. Dr. Stone took yet another medical history and then conducted his own examination. He initially diagnosed Libby as suffering from some sort of unspecified viral infection, along with "hysterical symptoms."

Following this diagnosis, Dr. Stone called Dr. Sherman at home, and they agreed that Libby should be admitted to the hospital. Dr. Sherman directed Libby to be admitted to a section of the hospital called Payson 5. There, Libby would come under the care of a first-year resident, Dr. Luise Weinstein, who was responsible for patients on Payson 3, two floors away. Dr. Stone ordered that Libby be given Demerol to stop her shaking—which were attributed both to rigors associated with fever and an undefined underlying illness—and then left the hospital to catch a few hours of sleep. Dr. Weinstein ensured that Libby received the prescribed medication.

As the night wore on, nurses on Payson 5 reported to Dr. Weinstein—who was two floors away, caring for other patients—that Libby's condition was getting worse. She was increasingly agitated and still had a fever. Dr. Weinstein ordered that Libby be given Haldol, another sedative. Later, fearing that Libby's thrashing would injure

herself, Dr. Weinstein ordered that Libby's hands and feet be tied to the hospital bed. Libby seemed to calm down.

At about 6 AM, nurses checked on Libby and found that her temperature had risen to at least 107 degrees. They immediately tried to cool her, but Libby suddenly suffered a cardiac arrest. An emergency response team—known as a code—was called, but the medical team could not resuscitate her. Libby Zion died at approximately 7:30 AM on March 5, 1984.

Although investigations into Libby Zion's death would continue for nearly 10 years, one thing was immediately clear: prescribing Demerol was contraindicated in a patient who was taking Nardil.[2] The Physicians' Desk Reference—the Bible for all medications kept at each nurse's station—made it clear that the combination of the two drugs could cause death.[3]

II. SIDNEY ZION AND HIS BATTLE FOR CHANGE

Sidney Zion could have been a character from a Damon Runyon story; a larger-than-life figure who knew politicians and gangsters, held court at Elaine's—the Upper East Side celebrity-filled watering hole—and often wrote about crime and corruption. A Yale Law School graduate, Sidney Zion had worked as an Assistant U.S. Attorney in New Jersey before becoming a legal reporter for the New York Times. He subsequently worked as a columnist for the New York Post and the Daily News, and co-founded Scanlan's Monthly, a short-lived magazine of muckraking investigative journalism of the early 1970's. He fought the battle for Libby on two fronts, first in encouraging hospital reform and second, in a civil trial against New York Hospital and the treating physicians.

Within days of Libby's death, the City Medical Examiner conducted an autopsy, and Sidney began pushing for Manhattan District Attorney Robert Morgenthau to launch a criminal investigation. In 1986, the results of the investigation reached a grand jury. Sidney Zion wanted all of the doctors involved in Libby's care to be charged with criminal negligence, but the grand jury refused to indict them.[4] The District Attorney did, however, make a public statement: "Evidence showed that

2. Contraindicated is a widely used term in medicine that refers to two medications that should not be given at the same time.

3. *See Drug Summary: Demerol Injectable*, PDR.NET, http://www.pdr.net/drug-summary/demerol-injectable?druglabelid=688#7 (last visited Sep. 1, 2014).

4. NATALIE ROBINS, THE GIRL WHO DIED TWICE: THE LIBBY ZION CASE AND THE HIDDEN HAZARDS OF HOSPITALS 201 (1995).

junior interns were making life-and-death decisions without any supervision. This has to be changed."[5]

Two key issues emerged during the investigation: 1) the number of hours interns and residents worked, and 2) the amount of supervision they received while they were on-call. Intern describes those in their first year of training after graduation from medical school. Residents are typically those in the second, third, and sometimes fourth year of in-hospital training following medical school graduation. Third year residents are expected to help train second-year residents, and second-year residents to train first-year interns. More senior doctors on the hospital staff—known as attending in private practice—are, however, technically in charge of the patients' care.

The various investigating panels pointed to several problems in Libby Zion's care centering on these issues. First, the intern and residents on duty that night had been working long hours and may have been sleep-deprived—thereby leading to the administration of Demerol even though it was contraindicated with the medication Libby had told the doctors she was on: Nardil. Second, no senior doctor attended that night to supervise the relatively inexperienced residents. Although Dr. Stone consulted with Dr. Sherman, an attending, Dr. Sherman remained at home that night.

Later, during the multiple investigations, Sidney wrote newspaper columns and spoke on television programs about the issues he believed had caused his daughter's death. In 1986, Libby's mother Elsa began working for Manhattan Borough President Andrew Stein. On January 21, 1986, Stein held the first of three public forums that focused on medical malpractice and patient safety and cited a Ralph Nader Health Research Group study that estimated that there were 200,000 Americans injured or killed each year because of medical negligence.[6] Along the way, other columnists picked up Sidney's cry for stricter regulation of errant doctors and greater patient safety measures.

The 1986 grand jury report also severely criticized aspects of medical education, particularly the long duty hours, sleep deprivation, and lack of adequate supervision of interns and residents.[7] An article in the January 1987 issue of *The New England Journal of Medicine* stated that the grand jury report "was, in effect, an indictment of American graduate medical education."[8]

5. *Id.* at 202.
6. *Id*. at 198.
7. *Id.*
8. David A. Asch & Ruth M. Parker, *The Libby Zion Case: One Step Forward or Two Steps Backward?*, 318 NEW ENG. J. MED. 771, 772 (1988).

In response, New York State's Health Commissioner Dr. David Axelrod convened a blue ribbon panel to investigate charges of negligence.[9] The Bell Commission—named after its Chairman, Dr. Bertrand Bell, a primary care physician at Albert Einstein College of Medicine in the Bronx—recommended a series of changes in graduate medical education.[10] Among the most far-reaching was a limitation on the number of hours residents could work at a stretch and in a given week: no more than 24 consecutive hours and no more than 80 hours in one week.[11]

The changes were to be implemented in all 152 hospitals throughout New York State by July 1, 1989.[12] Officially known as "405 Regulations," after the state health code section number, they became unofficially known as the Libby Zion rules. The Hospital Association of New York filed suit in the state's supreme court to block the rules' implementation because of the anticipated additional costs. With interns and residents working fewer hours per shift—and the need to have a certain number of doctors on duty to care for patients loads—hospitals would have to hire more experienced, and more costly, doctors to make up the difference.[13]

In addition to the increased costs, the 405 regulation changes challenged many doctors' sense of professionalism and independence. A 1988 article in *The New England Journal of Medicine*, titled "The Libby Zion Case: One Step Forward or Two Steps Backwards?," lamented the new rules. The new "shift work . . . subjects patients to a succession of physicians, exposes residents to patients in fragmented blocks of time, and subordinates the Samaritan aspects of physicianship to shift loyalty and the organizational needs of the system."[14] Identifying the problems inherent in "handoffs"—shifting patient care and knowledge about the patients from one set of doctors going off duty to another set coming on—the authors noted, "Doctors form relationships with their patients and have a sense of responsibility to them that does not start and stop at scheduled times. At some point, however, the benefit of having a patient's own physician available is offset by that physician's fatigue."[15] At the conclusion of the article, the authors lamented, "The heroic image

9. Barron H. Lerner, *A Case That Shook Medicine*, WASH. POST (Nov. 28, 2006), http://www.washingtonpost.com/wpdyn/content/article/2006/11/24/AR2006112400985.html.

10. *Id.*

11. *Id.*

12. Howard W. French, *Hospitals Hurrying to Meet New Regulations on Residencies*, N.Y. TIMES, June 18, 1989, at 28.

13. *Id.*

14. Asch & Parker, *supra* note 8, at 774.

15. *Id.*

of the physician is fading."[16] "You have to remember," said Dr. Bertrand Bell in an interview for a New York magazine article, "that you're dealing with a firmly entrenched structure for graduate medical education that is essentially unchanged since it was invented at Johns Hopkins over 100 years ago. And if you know anything about these kinds of systems, you know how doggedly they resist change."[17]

Writing about the early reaction to the Bell Commission regulations, journalist Craig Horowitz claimed, "for the first 10 years that the 405 regulations were in effect, they were essentially ignored by the hospitals. It was a kind of 'don't ask, don't tell' situation."[18] Then, in 1997, eight full years after the 405 regulations took effect, another New York City political figure, Mark Green—the then-public advocate of New York City and a future Democratic mayoral candidate[19]—released a report detailing hospital non-compliance.[20] The New York State Health Department, embarrassed by the revelations, "cracked down with serious financial penalties for hospitals that [didn't] comply."[21]

III. THE CIVIL TRIAL: ZION V. NEW YORK HOSPITAL[22]

Alongside his reform efforts, Sidney Zion sought justice in court. In 1985, Zion initiated a negligence case against Dr. Sherman, the intern Dr. Luise Weinstein, two residents, and New York Hospital. It took ten years for the case to reach trial. Zion was represented by Thomas "Tom" A. Moore, and his wife, Judith A. Livingston, also a senior partner at the same firm.[23]

The defendants were represented by three attorneys: Frank Bensel, assisted by Peter Crean, represented the hospital, the intern, the emergency room resident, and the private attending, Dr. Sherman. The

16. *Id.* at 775.

17. Craig Horowitz, *The Doctor is Out*, N.Y. MAG. (Nov. 3, 2003), http://nymag.com/nymag/features/n_9426/.

18. *Id.*

19. Green lost to Michael Bloomberg in the mayoral election.

20. MARK GREEN, PUTTING PATIENTS AT RISK: HOW HOSPITALS STILL VIOLATE THE "BELL" REGULATIONS GOVERNING THE RESIDENT WORKING CONDITIONS (1997); *see also*, Esther B. Fein, *Flouting Law, Hospitals Overwork Novice Doctors*, N.Y. TIMES, Dec. 14, 1997, at 2.

21. Horowitz, *supra* note 17.

22. Zion v. N.Y. Hosp., 590 N.Y.S.2d 188 (N.Y. App. Div. 1992).

23. Full disclosure: I am a new associate at the firm, having recently been admitted to the New York Bar at age 62. I first met Tom Moore in 1990 after I was a juror on one of his medical malpractice cases. After the trial, which resulted in one of the largest verdicts in state history, I wrote a cover story for New York Magazine about the experience.

other resident, Dr. Gregg Stone, was represented by Luke Pittoni.[24] Stone did not share representation by the hospital's counsel because he and Sherman were at odds. Stone claimed that Sherman, in a telephone call, had approved giving Libby Demerol. Sherman denied this.[25]

The case's ten year journey to trial was an unusually long time even in New York, where medical malpractice cases might not go before a jury for five or six years. Tired of the bad publicity, New York Hospital wanted to settle the case. Sidney Zion also seemed willing to settle but demanded that the hospital publicly take full responsibility for the death of his daughter. He wanted headlines to read: "New York Hospital Admits Doctors Caused Libby Zion's Death." The hospital refused, and the trial commenced.[26] Pretrial motions began in April 1993, and the trial itself began in November 1994.[27]

In an unprecedented move in New York state courts, presiding New York Supreme Court Justice Elliot Wilk allowed Court TV to televise the entire case live, gavel-to-gavel. Other television networks broadcasted clips from the proceedings on a regular basis, and all of the major New York newspapers had reporters covering the trial—I attended much of the trial, researching a potential profile of Tom Moore for *Esquire Magazine*.[28] Both viewer and reader interest was piqued in part because Court TV's major promotional ad campaign, plastering giant photographs of Tom Moore on the sides of most NYC busses.[29]

The plaintiff's theory of the case was straightforward: Libby Zion received inadequate care from almost the moment she arrived at New York Hospital's emergency room until her death seven hours later. It was, as Moore often repeated, "a litany of errors that never should have happened."[30] The errors began in the emergency room when doctors misdiagnosed Libby's underlying problem as a viral infection. The more egregious mistake, according to Moore, was that the doctors never really looked for a bacterial infection as the underlying illness. Despite increases in her white blood count revealed by a blood test soon after Libby arrived at the hospital should have clearly indicated the presence

24. Pittoni and Moore have known each other since they were students at Fordham Law School, and it was no secret that they did not like each other. Jan Hoffman, *Reporter's Notebook; At the Zion Trial, or In re Lawyers on Parade*, THE NEW YORK TIMES, December 11, 1994, *available at* www.nytimes.com/1994/12/11/nyregion/reporter-s-notebook-at-the-zion-trial-or-in-re-lawyers-on-parade.html.

25. ROBINS, *supra* note 4, at 247.

26. *Id*. at 245.

27. *Id.* at 246–56.

28. *Id.* at 266.

29. *Id.*

30. Transcript of Record at 93, Zion v. N.Y. Hosp., 590 N.Y.S.2d 188 (N.Y. App. Div. 1992).

of such an infection. In addition, Moore pointed out that the medical examiner's autopsy found pneumonia, a bacterial infection, in Libby's lung. Had the doctors diagnosed her properly in the ER, they would have treated her differently. [31]

The plaintiff alleged two fatal errors committed by the defendants that directly led to Libby's death. The first fatal error was prescribing Demerol to a patient who was taking Nardil. The second fatal error was sending Libby to Payson 5, a floor of the hospital without adequate monitoring, rather than to the Intensive Care Unit (ICU). On Payson 5, Libby was essentially "abandoned," as evidenced by the nurses' multiple calls to the intern to come see the patient because her condition was deteriorating; Libby was agitated and trying to climb out of the hospital bed.[32] Dr. Weinstein, however, did not go to Libby's side. These actions, Moore would argue over and over again, clearly departed from good and accepted medical care, constituting negligence. For that negligence, Moore would ask the jury for a symbolic monetary award of $1 for wrongful death and $2 million for the pain and suffering Libby endured while in New York Hospital.

But Moore and Sidney Zion wanted something else as well: punitive damages against New York Hospital for the system that required interns and residents to work long hours with inadequate supervision. In order to prove punitive damages, the plaintiff must prove gross negligence. Moore argued that these sleep-deprived, relatively inexperienced doctors practicing with inadequate supervision were evidence of gross negligence. It was, not surprisingly, a long-shot. Not only are juries reluctant to find doctors guilty of malpractice—about 75% of trial verdicts are for the defendants[33]—but, prior to 1994, there were only two instances of New York juries awarding punitive damages against hospitals.[34]

On the other side, the defendants' strategy was bifurcated. First, what happened to Libby Zion was tragic but unforeseeable. Every one of the doctors who saw and treated her acted responsibly and within the bounds of good and accepted standards of care. The doctors' observations of Libby's condition and test results led to a differential diagnosis of an unspecified viral infection. The diagnosis was reasonable, as was the treatment. Hindsight, the defense argued, is not a basis for declaring malpractice.

31. *Id.* at 131.
32. ROBINS, *supra* note 5, at 113.
33. David A. Hyman & Charles Silver, *Five Myths of Medical Malpractice*, 143 CHEST J. 222, 224 (2013).
34. ROBINS, *supra* note 4, at 268.

The second prong of the defense strategy, however, was more offensive: blame the victim. It was revealed that Libby had used cocaine sometime before going to the emergency room. In addition to Demerol, cocaine also has a potentially deadly interaction with Nardil. And when asked by the doctors and nurses—several times—whether she had used any illicit drugs, Libby denied it. Had Libby simply admitted the truth, the defense posited, their treatment of her symptoms would have been far different.

The trial lasted almost three months. Expert witnesses testified about what the various tests, examinations and symptoms really meant, how they should have been interpreted, and how Libby should have been—or was—treated. Some of the defense witnesses argued that the dose of Demerol given to Libby was too small to have killed her. Others, including several of the defendants, admitted that the Demoral should not have been administered.

Both sides called in experts sleep deprivation. The plaintiff's expert testified that the cumulative effect of many sleepless nights on call slowed and clouded the young doctors' judgment. The defense witness, unsurprisingly, argued the opposite.

Occasionally, counsel elicited truly shocking admissions from the witnesses. On the third day of the trial, plaintiff's counsel Moore questioned Dr. Sherman, one of the defendants. Moore asked: if Libby had been transferred to the ICU as late as 5:30 in the morning, would she have survived? Even Moore was surprised by the doctor's answer: "Possibly. Possibly."[35]

At this, Moore spun towards the jury and declared, "The case is over. Negligence has been declared."[36]

Defense attorney Frank Bensel immediately asked Judge Wilk to declare a mistrial. In response, Moore apologized for saying the case was over. The judge denied the defense's request for a mistrial but admonished Moore: "Apologizing doesn't always correct the error."[37]

Both the plaintiff and defense lawyers' superb trial abilities were evident to those in the courtroom and commented upon regularly by the reporters. "Mr. Moore and Mr. Pittoni are open-throttle, high-energy examiners, exhaustively prepared, with the light of the moral high ground flashing in their eyes," said the reporter for *The New York Times*.[38] "With his Irish brogue, Mr. Moore has a more finely calibrated sense of theatrics. Exuberantly articulate, he wheels, he paces, he works

35. Transcript of Record at 569, *Zion*, 590 N.Y.S.2d 188.
36. *Id*. at 570.
37. *Id.* at 578.
38. Hoffman, *supra* note 24.

those semaphoric eyebrows. Mr. Pittoni, who is more of a flurry puncher, often looks aggravated by Mr. Moore's antics."[39]

The trial's most spectacular fireworks focused on the question of Libby's cocaine use. Libby had told the doctors in the emergency room that she had not used any illegal drugs. But the defense's main argument—elicited via hypotheticals posed to its experts—was that had Libby snorted cocaine at home before she arrived at the hospital it would have explained her agitation and fever.[40] Cocaine would also have interacted dangerously with the Nardil that Libby was taking. The defense introduced evidence from the autopsy that revealed two possible indicators of cocaine use: a blood test and a nasal swab.[41]

A radioimmunoassay of the nasal swab revealed trace amounts of cocaine, but a gas chromatography did not confirm the finding.[42] Moore was relentless in pointing out that without the standard, more sensitive, follow-up test one couldn't accurately confirm the presence of cocaine; the incidence of false-positives from the radioimmunoassay was simply too high.[43] With respect to the nasal swab, Moore also argued that there were significant chain-of-custody issues. Moore elicited testimony from defense witnesses who reluctantly admitted the tested medium might not have even been a nasal swab or that it came from Libby.

Moore then attacked an autopsy test of Libby's blood that suggested the presence of cocaine. Moore pointed out that the sample that the blood sample was one-tenth Libby's blood, and nine-tenths a culture medium that came from New York Hospital. The error rate for identifying cocaine through blood sampling is 50% when there is no culture medium, and even higher when a culture medium is used. With respect to blood, a second test of Libby's blood done when there was no culture medium used, showed no traces of cocaine.[44]

Most importantly, Moore argued that the most definitive test for cocaine, urine, twice came back negative, once from urine taken before Libby died, and once after.[45] That, combined with the fact that Libby's blood pressure was low when she came into the hospital—cocaine use triggers high blood pressure—argued Moore, should "put the lie" to any cocaine use by Libby.[46]

39. *Id.*
40. Transcript of Record at 8545, *Zion*, 590 N.Y.S.2d 188.
41. *Id*. at 8546
42. David Asch and Ruth Parker, *The Libby Zion Case*, 318 N. ENG. J. MED. 771, 771-75 (1988).
43. Transcript of Record at 8601-03, *Zion*, 590 N.Y.S.2d 188.
44. *Id*. at 122-24.
45. *Id*. at 8583.
46. *Id*. at 8597.

Closing arguments took place over three days: January 30, 31, and February 1, 1995. The defense lawyers spoke first and remained consistent with their strategy, excerpting their experts' testimony that each doctor's performance was appropriate and conformed to good medical practice. Then they challenged Moore's experts, outright stating that they were not credible witnesses. Lastly, the defense repeated that this was a tragic outcome, and it occurred only because Libby had not been honest about her cocaine use.

Moore's closing argument spanned two days. He reconstructed the chronology of events of that fateful night and created an overlay of each witness's testimony relative to the departures from good medical practice by each doctor. Then it was time for his peroration:

> The only life she had is gone. But her message can live forever. It can't be business as usual. I said to you on opening statement: despite all that has been written and talked about, the Libby Zion story has not been told. Well, now it has been told, almost. But you are the authors of the final chapter. And ladies and gentlemen, the final words in that final chapter would fittingly be, never.again.[47]

When the jury finally began to deliberate, it used a 17-page verdict sheet that included 48 questions. Most of the questions had two parts: was a particular action (or failure to act) by a specific doctor a departure from good and accepted medical care? And if so, was that departure a substantial contributing factor in Libby Zion's death?

After four days of deliberation, the jury forewoman, Janet Dubin, announced its decisions. Only five of the six jurors had to agree to reach a verdict on each count. If a decision on a particular count was not unanimous, the dissenting juror's number would be noted on the verdict sheet. Dubin, who would later write a letter to the editor of *The New York Times* explaining her votes—as did the lone dissenter—, read from the verdict sheet. The jury found no departures from good and accepted standards of medical care on 35 of the 45 yes-no counts.

The jury ruled that Dr. Sherman was not negligent. It found that he was not required to show up in the middle of the night to see his patient, nor that failure to admit Libby to the ICU constituted negligence. The jury similarly ruled that Dr. Leonard, the emergency room resident, had not departed from good and accepted standards of care in Libby's treatment. [48]

The jury found that Dr. Stone, the second year resident, was not negligent when he failed to order a neurological exam, arterial blood gas

47. *Id.* at 8752.
48. ROBINS, *supra* note 4, at 271.

tests, additional hydration, antibiotics, and several other measures. The jury also found that the intern, Dr. Weinstein, was not negligent on most of the counts against her.

The jury did find, however, that Dr. Sherman, Dr. Stone, and Dr. Weinstein had departed from accepted practice by giving Libby the dose of Demerol. With respect to damages, the jury accepted Moore's request to award a symbolic $1 for wrongful death. However, the jury rejected his suggested $2 million request for pain and suffering damages and instead awarded the Zion family $750,000. In a finding that shocked those in the courtroom, the jury announced that Libby was 50 percent at fault by not telling doctors she had taken cocaine and a host of other prescription drugs. The monetary award was thus halved to $375,000.[49] Finally, as the New York Times reported the next day, New York Hospital was "absolved" and "its system of training was not to blame."[50]

A week after the verdict, jury forewoman Dubin published a letter-to-the-editor in *The New York Times*.[51] In it, she wrote that the jury's decision was based solely on the evidence presented. "It is possible that had we pursued our own agendas the verdict would have looked drastically different."[52] She also noted that the jury did not learn until after the trial was over about New York's 1987 legislation changing duty hours and supervision. This act by the state "proves that Libby Zion's death was not in vain. Perhaps other states will follow before more lawsuits are filed."[53]

A week later, the lone dissenting juror had her own letter-to-the-editor published in *The New York Times*.[54] She said her fellow jurors were "swept away by the cocaine theory."[55] Because Libby "attended a prestigious school and came from a wealthy family," they "presumed a certain lifestyle. Furthermore, whether she took cocaine is actually unimportant. What mattered was the quality of care she received."[56] Ms. Andrews also noted, "even though the care the hospital gave was in keeping with accepted medical standards, I found those standards woefully inadequate and inferior."[57]

49. *Id.*
50. *Id.*
51. Janet Dubin, *Zion Case Verdict Vindicates Training System; On the Evidence*, N.Y. TIMES, Feb. 14, 1995, at A18.
52. *Id*.
53. *Id.*
54. Loretta Andrews, '*I was Juror No. 6, the Lone Dissenter in the Libby Zion Case'*, N.Y. TIMES, Feb. 21, 1995, at A18.
55. *Id.*
56. *Id.*
57. *Id.*

Rikki Klieman, a legal analyst for CBS News, was the chief legal correspondent for Court TV at the time of the Libby Zion trial. "I spent many hours watching the trial, even when I wasn't assigned to cover it," she said.[58] "Tom Moore is the best trial lawyer I've ever seen, and the legal equities were with the Zions. But the jury got swayed by the cocaine theory. It was a different time and drug use was looked at differently. It was an unfortunate result, terrible."[59] Twenty years after the trial, Klieman could still relate numerous facts from the case and a multitude of errors by the hospital. "It never left me," she said.[60]

A month after the trial, acting on motions from both sides, Justice Wilk amended the verdict. He set aside the part of the verdict ruling that Libby's death was due to cocaine and granted Zion's request for a new trial on that single issue. This decision was not based on the weight of the evidence but on a defense witness's impermissible testimony about Libby having used drugs at other times. At the same time, Judge Wilk reduced the jury's $750,000 award by half to $375,000.[61] The two actions, described by some as Solomonic, allowed Sidney Zion to say that his daughter's name had been cleared but, at the same time, did not change the defendants' financial liability. Judge Wilk then got the parties to settle: Sidney would not pursue a new trial, and the defendants would not appeal. The case was over.[62]

IV. MEDICAL EDUCATION REFORM: DUTY HOURS AND SUPERVISION

A. A Short History of National Reforms

Even before Libby's death in 1984, medical educators had been aware that doctors-in-training made mistakes, lots of them. A Texas study completed the year before Libby died found that first year interns ("PGY1s") made errors 15.6 percent of the time.[63] Second year doctors-in-training ("PGY2s") made fewer mistakes, but the error rate was still 13.1 percent.[64]

58. Telephone Interview with Rikki Kleiman, News Anchor, Court TV (July 28, 2014).

59. *Id*.

60. *Id*.

61. Because the jury deemed Libby 50% culpable – deciding she had used cocaine and not told the ER doctors – the actual award to the Zion family would be only $375,000. By Judge Wilk eliminating Libby's 50% contributory reduction, the amount the defendants would pay would remain $375,000.

62. Robins, *supra* note 4, at 287.

63. *Id.* at 177 (citing NELDA P. WRAY & JOAN A. FRIEDLAND, DETECTION AND CORRECTION OF HOUSE STAFF ERROR IN PHYSICAL DIAGNOSIS, 249 J. AM. MED. ASS'N. 1035, 1035 (1983)).

64. *Id.*

Following the verdict in the *Zion* case, the debate within the medical profession regarding residents' duty hours and supervision escalated to the national stage. The medical community's attention to the matter was likely accelerated by two events. First, the National Labor Relations Board reversed 20 years of precedent when it ruled in a matter involving Boston Medical Center, that medical students were also employees of the hospital.[65] Suddenly, there was a very real chance the federal government might step in to regulate duty hours. Second, soon after the NLRB decision, Congressman John Conyers introduced legislation to limit residents to an 80-hour workweek.[66] To head off this legislation, the Accreditation Council for Graduate Medical Education (the "ACGME"), the governing body for all medical training programs in the United States, announced that it would place formal limits on resident hours.[67] By 1998 ACGME had started implementing an 80-hour work-week with one 24-hour period off every 7 days. Young doctors would work every third night, on average.[68]

The ACGME was not oblivious to problems with the duty hour standards for residents. The rules imposed costs on teaching hospitals and inflexible standards were being circumnavigated. In 2000, it conducted a survey of medical education programs and found that 29 percent of programs were in violation of duty-hour regulations.[69] *The New York Times* reported:

> Moreover, after years of debate, some experts now say that sleep-deprived doctors are more likely than other physicians to make mistakes, threatening patients' safety. Medical errors are attracting increasing attention, and the government is contemplating new steps to strengthen how they are reported and corrected.[70]

That increased attention to medical errors was in large measure due to the IOM report, four years after the *Zion* decision, *To Err is Human*[71], which estimated that between 44,000 and 98,000 deaths occur due to

65. Anthony Ciolli, *The Medical Resident Working Hours Debate: A Proposal for Private Decentralized Regulation of Graduate Medical Education*, 7 YALE J.HEALTH POL'Y L. & ETHICS 175, 190 (2013), *available at* http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1145&context=yjhple.

66. *Id.* at 192.

67. *Id.* at 193.

68. ACGME TASK FORCE ON QUALITY CARE AND PROFESSIONALISM, THE ACGME 2011 DUTY HOUR STANDARD: ENHANCING QUALITY OF CARE, SUPERVISION AND RESIDENT PROFESSIONAL DEVELOPMENT 5, https://www.acgme.org/acgmeweb/Portals/0/PDFs/jgme-monograph%5B1%5D.pdf.

69. Robert Pear, *Interns' Long Workdays Prompt First Crackdown*, N.Y. TIMES, June 11, 2000, at 18.

70. *Id.*

71. *See* INST. OF MED., *supra* note 1 and accompanying text.

avoidable medical error in hospitals every year.[72] The report received front-page coverage *in The New York Times*, *The Washington Post*, *USA Today*, and other daily newspapers. Even two broadcast networks—NBC and ABC—started their evening news shows with stories on the report. The IOM also weighed in on the question of duty hours with its own study.[73]

ACGME's initiative to establish national standards of duty-hours had an immediate nation-wide impact when implemented in 2003. At that time, only New York had state-wide standards.[74] ACGME's new national standards[75] were virtually identical to New York's 405 Regulations.

As part of the 2003 ACGME reforms, the organization stated that it would perform a comprehensive review of the changes after five years.[76] Its task force met 12 times in 2009 and 2010, and by 2011 the group had released a report calling for further refinements in the duty-hour regulations.[77] More importantly, according to many observers, it addressed shortcomings in the supervision of interns and residents—precisely the failings that led to Libby Zion's death.[78]

In the two years following ACGME's latest set of regulations, the medical community has debated the value of the duty-hour and supervision changes vociferously. *The New England Journal of Medicine* published numerous articles on the subject[79] and held a round-table debate on the subject that was videotaped, transcribed, and published on its website.

72. INST. OF MED., *supra* note 1, at 1.

73. INSTITUTE OF MEDICINE, RESIDENT DUTY HOURS: ENHANCING SLEEP, SUPERVISION, AND SAFETY (2008), *available at* http://www.iom.edu/Reports/2008/Resident-Duty-Hours-Enhancing-Sleep-Supervision-and-Safety.aspx.

74. Horowitz, *supra* note 17.

75. ACCREDITATION COUNCIL FOR GRADUATE MED. EDUC., ACGME DUTY HOURS, *available at* https://www.acgme.org/acgmeweb/tabid/271/GraduateMedicalEducation/DutyHours.aspx (last visited Aug. 22, 2014).

76. *See* Letter from Thomas J. Nasca, CEO, Accreditation Council for Graduate Med. Educ., to Program Directors et al. (May 4, 2010), *available at* https://www.acgme.org/acgmeweb/Portals/0/PDFs/nascalettercommunity5_4_10.pdf.

77. *Id.*

78. Darshak Sanghavi, *The Phantom Menace of Sleep-Deprived Doctors*, N.Y. TIMES (Aug. 5, 2011), http://www.nytimes.com/2011/08/07/magazine/the-phantom-menace-of-sleep-deprived-doctors.html?pagewanted=all&_r=0.

79. *See, e.g.*, Rosenbaum L. and Lamas D., *Resident Duty Hours—Toward an Empirical Narrative*, 367 N. ENG. J. MED. 2044 (2012); Lockley S.W., Cronin J.W., Evans E.E., et al., *Effect of Reducing Interns' Weekly Work Hours on Sleep and Attentional Failures*, 351 N. ENG. J. MED. 1829 (2004).

B. The Debate on the Impact of Duty-Hour Reforms

The debate about the impact of the duty-hour and supervision reforms focuses on three overlapping dimensions: resident well-being, patient care, and resident education.[80] There is no real debate about the last dimension: everyone in the medical community whom I interviewed for this article agreed that interns and residents have a far more "normal", less stressful, less sleep-deprived life during their medical training.

Similarly, no one disagrees with the objective of greater patient safety. When Dr. Perri Klass, a pediatrician at New York's Bellevue Hospital, professor at NYU, and a regular columnist for *The New York Times*, recently wrote an article for *The New England Journal of Medicine, she* lamented – somewhat tongue-in-cheek—the loss of the "bad old days" of 36-hour shifts.[81] But she was clear about the benefits to patients: "I can't defend it from the perspective of patient care, and I wouldn't willingly put anyone else through it. And yet when I look back on certain aspects of that crazy, dangerous schedule, the memories have a certain sweetness."[82] Yet she was clear to recognize that patients were less safe—as was she driving home—after long, sleepless shifts.

C. Patient Care

The issue of patient care is relatively well understood, even if the impact of the duty-hour changes is mixed. Dr. Thomas Nasca, the CEO of ACGME and one of four authors of a paper analyzing 1,515 studies that examined the impact of duty-hour reforms since the original Bell Commission changes in New York, discussed the findings of the study with me in telephone conversation.[83] The conversation revealed that there are clear benefits to fewer duty hours in several areas, including internal medicine and anesthesiology.[84] The research shows that emergency room doctors do better when limited to 12 hours of intense work, including sign-off.[85] Dr. Nasca likened anesthesiologists to airline pilots: take-offs and landings are the most difficult parts of flight, just as

80. *See generally* ACGME TASK FORCE ON QUALITY CARE & PROFESSIONALISM, THE ACGME 2011 DUTY HOUR STANDARDS: ENHANCING QUALITY OF CARE, SUPERVISION, AND RESIDENT PROFESSIONAL DEVELOPMENT (Ingrid Philbert & Steve Amis, Jr. eds. 2011), *available at* https://www.acgme.org/acgmeweb/Portals/0/PDFs/jgme-monograph[1].pdf.

81. Perri Klass, *Getting Through the Night*, 369 N. ENG. J. MED. 2779, 2779, 2281 (2013).

82. *Id.* at 2280.

83. Telephone Interview with Dr. Thomas Nasca, CEO, ACGME (July 28, 2014).

84. Internal medicine accounts for about 40% of all residents. *Id.*

85. *Id.*

putting patients under with anesthesia and bringing them out after the operation is completed are the most difficult parts of surgery.[86] But like a pilot paying attention to the autopilot in mid-flight, the anesthesiologist must remain vigilant through the entire procedure.[87]

In some areas, however, the results are counter-intuitive, with surgery being a good example. Dr. Nasca explained that no two people have exactly the same anatomy.[88] Surgeons learn and practice standardized procedures, but these must be customized to the individual. When a surgical resident completes a procedure and is ready to go off duty, it is almost impossible to transmit all the knowledge gained during surgery to the on-coming resident. In addition, the on-coming resident cannot anticipate the particularities of the patient. If the patient develops a complication in the hours immediately following the procedure, the surgical resident who performed the operation—although tired and beyond the duty-hour limits—is more likely to have a sense of worrisome sutures or which organ was in a slightly unexpected position.[89]

According to Dr. Nasca, challenges remain in the transitions, the hand-offs between shifts.[90] Dr. Mitchell Driesman, a Connecticut cardiologist and clinical professor at Yale Medical School (and my roommate at Brown University), echoed this view. "Do you remember the children's game of telephone? That is the danger of hand-offs."[91] Good hand-offs are essential to good continuity of care. And on this measure, the Nasca review of the literature shows mixed results.

D. Resident Education

The third dimension of the debate focuses on doctor education. There are multiple aspects to the question of the impact of duty hours. The first is relatively simple: are residents being short-changed in their education because of less time-on-task. With fewer working hours per week allowed and no lengthening in the number of years of most specialty residency programs, young doctors simply get less hands-on experience. This is offset somewhat by a greater emphasis on didactic

86. *Id.*
87. *Id.*
88. Nasca telephone interview, *supra* note 83.
89. *Id.*
90. *Id.*
91. Telephone Interview with Dr. Mitchell Driesman, Director, Cardiac Catheterization & Interventional Cardiology, Bridgeport Hospital, Yale-New Haven (July 28, 2014).

learning. The Nasca literature review suggests "little to no effect on preparedness for practice."[92]

Further, there is the question of how increased supervision affects a doctor's ability to make decisions under pressure. Every doctor I interviewed said they had no doubt that patients are better off with the increased level of oversight. But almost all questioned whether having such back-up relieves young doctors of having to learn how to make the tough decisions. More than a few also lamented that the nature of medicine has changed. "For this generation of doctors it is no longer an avocation but a profession," said Mitch Driesman, "it is not 9 to 5, but it is a lot more like working at IBM than it used to be."[93]

V. LOOKING BACK, LOOKING AHEAD

Thirty years after Libby Zion died—and 20 years after the civil trial—one thing is absolutely clear: the medical profession has addressed the issues of doctor training, mistakes caused by fatigue, and supervision very seriously. It is hard to identify other fields of professional education that have self-examined their traditions, procedures, and results as comprehensively.

All of this change points back to young Libby Zion, her father who would not let the issue die with his daughter, and a lawsuit that drew national attention to the problems. The obvious question is: what will it take to get similar attention and action on the larger problems of patient safety?

At the outset of this article, I cited the 1999 IOM study, *To Err is Human*, which estimated that between 44,000 and 98,000 people died in hospitals every year due to avoidable medical errors.[94] Since that study was published 15 years ago, more refined tools have been developed to identify medical mistakes. Sadly, more advanced tools do not paint a pretty picture. *Health Affairs* published a story in 2011 with the headline "'Global Trigger Tool' Shows That Adverse Events in Hospitals May Be Ten Times Greater Than Previously Measured."[95] The study suggests that as many as one-third of all hospital admissions result in adverse events.[96]

92. Philibert et al., *supra* note 80, at 469.
93. Driesman telephone interview, *supra* note 91.
94. INST. OF MED., *supra* note 1, at 1.
95. David C. Classen et. al., *'Global Trigger Tool' Shows That Adverse Events in Hospitals May Be Ten Times Greater Than Previously Measured,* 30 HEALTH AFFAIRS 581, 581 (2011), *available at* http://content.healthaffairs.org/content/30/4/581.full.pdf+html?sid=12a58f52-f76e-4e45- 859d-081bfdcfbace.
96. *Id.*

Questions about patient safety, and ways to enhance it, are frequent topics of conversation in our family, as several close relatives are doctors. This is usually a heated discussion, given my work in a leading plaintiff's medical malpractice law firm. Recently, however, when I was sharing my thoughts about this article with my niece and her husband—both of whom are finishing medical school—I was struck by how hopeful I was concerning patient care improvements coming out of the duty-hours and supervision reforms.

"Perhaps that is the benefit of having a single entity responsible for all medical education," said Sar Medoff, a fourth year medical student at Mt. Sinai Medical School who is simultaneously completing his Masters Degree in public policy at Harvard's Kennedy School of Government.[97] "Compare that to the very different experiences in patient safety of the Ob-Gyns and anesthesiologists."[98] Medoff was referring to an article I recently wrote for KevinMD, a leading health policy site, in which I compared the responses to malpractice litigation of the American Society of Anesthesiologists and American Congress of Obstetricians and Gynecologists ("ACOG").[99]

When faced with a horrific rate of adverse events in the 1970's and early 1980's, the anesthesiologists conducted a comprehensive assessment of the causes of patient injuries. Doctors in that field used the study to revamp their procedures, establishing mandatory monitoring, improving training, limiting the number of hours anesthesiologists could work without rest, redesigning machines and outfitting others with safety devices.[100] Within ten years, the mortality rate from anesthesia dropped from 1 in 6000 administrations to 1 in 200,000.[101]

Conversely, the ACOG has refused to formally adopt a series of 21 changes tested and implemented by New York Presbyterian Hospital ("NYPH") between 2002 and 2009.[102] The NYPH changes reduced the incident of sentinel events—unanticipated events that result in death or serious injury to patients—from 1.04 per 1000 deliveries in 2000 to zero in 2008 and 2009.[103] To put that into perspective, in 2003 the hospital

97. Telephone Interview with Sar Medoff, Student, Mt. Sinai Med. (Aug. 3, 2014).

98. *Id.* (referring to *Neurological Birth Injury*, *infra* note 100).

99. Steve Cohen, *Malpractice Lawsuits Aren't Just About Money,* KEVINMD.COM (June 15, 2014), http://www.kevinmd.com/blog/post-author/steve-cohen.

100. Robert L. Conason & Steven E. Pegalis, *Neurologic Birth Injury*, 31 J. LEGAL MED. 249, 258–60, (2010).

101. Cohen, *supra* note 99.

102. Email from Greg Phillips, Dir. of Media Relations, Am. Coll. of Obstetricians & Gynecologists, to Steve Cohen, Assoc., Kramer Dillof Livingston & Moore (June 14, 2013).

103. Amos Grunebaum, Frank Chervenak & Daniel Skupski, *Effect of a Comprehensive Obstetric Patient Safety Program on Compensation Payments and Sentinel Events*, 204 AM. J. OBSTETRICS & GYNECOLOGY 97, 97 (2011).

and its doctors paid victims of sentinel events more than $50 million in compensation.[104] In 2009, they paid $250,000— a remnant of a malpractice case that predated the reforms.[105] Yet despite these clear successes, the ACOG refuses to recommend the reforms on the grounds that they may infringe on individual doctor or hospital prerogatives.

Perhaps young doctor-to-be Medoff is right: it may require an entity with more clout and perspective than a single medical specialty to initiate and implement systemic changes. While ACGME had the good sense to pre-empt Congressional regulation, there are pockets throughout the medical field that do not have the desire or willpower to take similar action. Hopefully, it will not require more Libby Zions to trigger much-needed reforms towards greater patient safety.[106]

104. *Id.* at 102.

105. *Id.*

106. A final note: New York Hospital -- now called New York Presbyterian Hospital -- the site of Libby Zion's death and the defendant in the lawsuit, refused to comment for this article. Email from Myrna Manners, Vice President & Chief Public Affairs Officer, New York-Presbyterian Hosp., to Steve Cohen, Assoc., Kramer Dillof Livingston & Moore, July 29, 2014.