Bertrand Bell, MD '55

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By Nicole Peradotto

A Most Vexing Issue

Residency work hours, and the alumnus at the center of the debate

Late on the night of March 4, 1984, an 18-year-old college freshman was admitted to the emergency room at New York Hospital–Cornell Medical Center with an earache. Seen by a first-year resident and intern, with no attending physician present, she was admitted, became agitated, and was sedated with Demerol, even though she was taking the antidepressant Nardil.

After receiving the injection in the early-morning hours, she grew increasingly restless. No house officer visited her bedside for about four hours, during which time she thrashed about violently. When the nurses could not calm her they paged the intern. She called back from another floor, ordering that the patient be restrained.

By 6 a.m., the young woman's temperature read 107.6 Fahrenheit. Half an hour later, a nurse noticed that her breathing had become shallow and called a code. Before a team arrived, she had stopped breathing. Although they worked on Libby Zion for 45 minutes, they failed to revive her. Throughout the crisis, and during her entire stay in the hospital, she was never seen by an attending.

In the wake of Zion's death, her father, Sidney Zion, a *New York Times* reporter and former federal prosecutor, pressed for criminal prosecution of the hospital and four of its doctors, accusing them of murder. Although a Manhattan grand jury cited "woefully" inadequate care and mistakes made by unsupervised and inexperienced physicians—including the restraints and the Demerol, both of which may have contributed to her death—its members found insufficient evidence to indict.

Instead, they implicated the entire institution of postgraduate medical training. Convinced that the conditions that led to the woman's death were not unique to the New York Hospital, they called for sweeping reforms in the century-old system to ensure that residents and interns were more closely supervised and worked fewer grueling hours.

Their findings prompted New York State Health Commissioner David Axelrod to appoint a panel of nine physicians to investigate emergency care, including the training of young doctors. It was headed by Bertrand M. Bell, MD '55.

His supporters might say that Bell was tailor-made to play a pivotal part in such a thorny matter. Years before taking the helm of the New York State Ad Hoc Advisory Committee on Emergency Services—which came to be known as simply the Bell Commission—the Bronx native had established himself as a maverick medical educator, relentlessly pushing for reforms regardless of their popularity.

In 1968, he reviewed health care in New York City jails and wrote a report for the city's Health Department detailing the poor services available and emphasizing the dire need for psychiatric care.

During the 1970s he successfully lobbied for the creation of a residency program in emergency medicine—and later, an academic department in that field—at Albert Einstein College of Medicine, where he currently is Distinguished University Professor, professor of medicine and professor of family medicine.

The recipient of a Commonwealth Fellowship, Bell spent a year in the Netherlands studying the Dutch health-care system. Upon his return to the United States he then began what would amount to a 20-year campaign to form an academic department in family medicine at Einstein. He also helped launch the first paramedic training program in the Northeast, and in 1978 was instrumental in convincing then-mayor Ed Koch to install window guards in housing projects to prevent occupants from falling or leaping to their deaths.

On the opinion page of the *New York Times*, Bell's name was, and continues to be, a familiar one. Starting in 1969, a couple of his letters a year have been published on the paper's editorial page, a platform he uses to express his opinion about a number of matters related to the medical profession.

Despite his long history of activism, none of the causes he has championed has come close to causing the outcry that followed publication of the Bell Commission's final report. When its five-page findings were leaked to the *New York Times* in 1987, physicians objected vociferously to a single passage: the one advocating that residents work no more than 80 hours per week averaged over a four-week period, with a maximum of 24 consecutive hours.

According to one story the newspaper published, the New York medical establishment "lambasted" Bell for proposing the 80-hour work week. It was widely conjectured that he was dismissed from his position as director of ambulatory care services at Bronx Municipal Hospital Center in retaliation for promoting it.

"It was very contentious at the time," Bell recalls. "There were many people who were very angry with me. After these stories were published, the perception was that I had done the whole thing, even though everyone on the commission had signed off on it. But people were outraged. They stopped talking to me after this happened. It was the precipitating event that got me kicked out of my administrative job."

Despite the controversy, the commission's guidelines were incorporated into the state health code in 1989, making New York the only state to regulate residents' work hours and supervision.

A decade and a half later, Bell remains supremely confident that he fought the good fight. The state regulations—known as the 405 regulations or the "Bell Regulations"—are having a "salubrious" effect on patient care, he maintains, and on postgraduate medical training.

Then, in 2003, when the Association of American Medical Colleges' Accreditation Council for Graduate Medical Education (ACGME) made the 80-hour work week standard for residency programs nationwide—threatening to revoke the accreditation of those that do not comply—Bell felt further "vindicated" for all of his efforts. He points out that, in recent years, things have improved on a personal level, too: "The number of people who want to kill me has fallen off dramatically."

Still, even though Bertrand Bell is no longer in the eye of the storm, the debate over these regulations lingers. Many medical professionals, particularly surgeons, question whether such limitations do in fact create a better training environment for residents as well as improve patient care. Perhaps the only point in the debate that all sides agree upon is that it's one of the most vexing issues the medical community has confronted in recent memory.

Acceptance and Resistance

Roseanne Berger, MD, senior associate dean for graduate medical education (GME) in the UB School of Medicine and Biomedical Sciences, says that acceptance of the regulations has "varied" among faculty members over the years.

"Initially, many faculty ignored the requirement and felt it was another New York State regulatory effort that was ill designed and an overreaction to one bad case. With time, a cadre of people said, 'We really can't ignore it. The penalties

The most significant result of the duty-hour rules is "the recognition that residency is an educational endeavor as opposed to a service endeavor," says Berger, senior associate dean for graduate medical education at UB.

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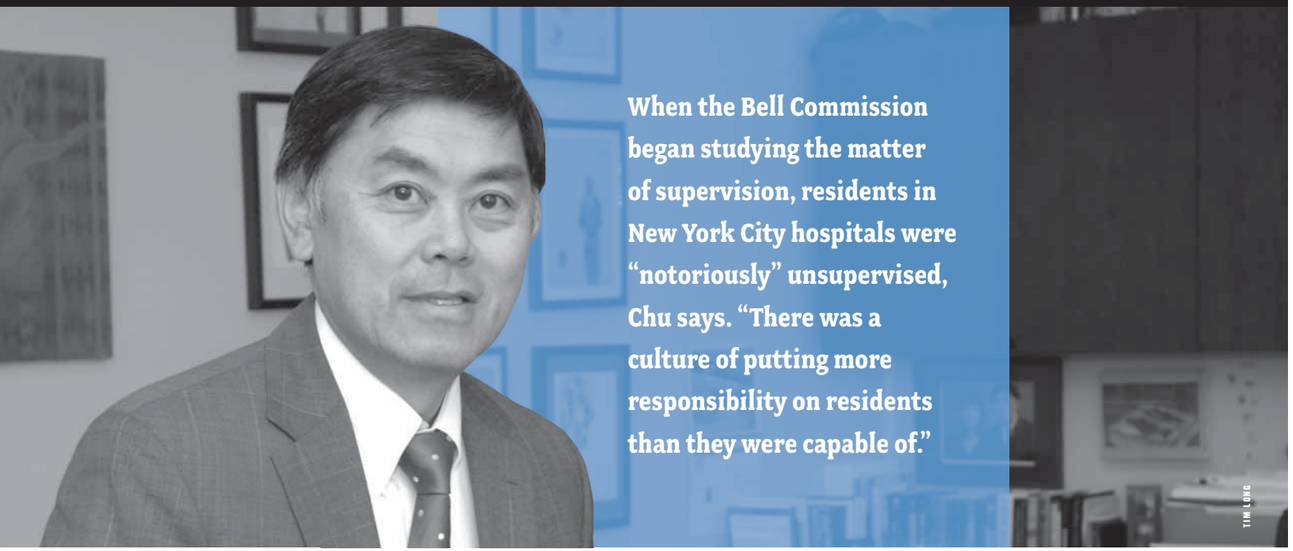
Roseanne Berger, MD



Benjamin K. Chu, MD

have been ratcheted up, and New York State is serious about monitoring it.' Gradually faculty began to embrace the restrictions because they recognized the benefits to graduate education and patient care. That perspective is not universal."

The most significant result of the duty-hour rules is "the recognition that residency is an educational endeavor as opposed to a service endeavor," says Berger, who is board certified in family medicine and geriatrics.

"Patient care and teaching go hand in hand," she adds. "You can't have one without the other. But the balance was weighted on service in the past. The adoption of work-hour requirements acknowledges that residents must devote time to and place a priority on learning. Conferences and lectures must occur within a reasonable work week, when residents are fairly rested and alert and able to think straight. Faculty are challenged to make this happen while closely supervising patient care."

The case for abridged work hours has been bolstered in recent years by an increased awareness of the health benefits of adequate sleep, and compelling research about the dangers of sleep deprivation. In 2004, the Harvard Work Hours, Health and Safety Study group found that first-year residents in hospital intensive-care and coronary-care units who worked longer than the mandatory limit of 80 hours a week made significantly more serious medical errors and had more lapses in attention than those who worked fewer hours and got more sleep.

For Bertrand Bell, such research only confirms what he's always known. As a teacher and an attending physician, he routinely observed the ill-effects of weariness on his charges. "I spend a lot of time with medical students and house staff," he says, "and I used to go crazy when I would show up and we would go over cases and the kids would fall asleep."

He also saw the long hours taking their toll on his youngest of four daughters. When the Bell Commission was writing its recommendations, she was completing an internship in family medicine. "It was outrageous," he remembers. "They didn't give her time to go to the bathroom, to go to the bank, to be with her husband or anything."

At the same time, Bell was coming to appreciate how challenging it would be to overhaul residency training. Proponents of the original model maintained that medicine didn't lend itself to "bankers' hours." The system in place, they argued, was the only way to allow young doctors to study the progression of illness and ready them for the rigors of the field. Many simply dismissed the connection between a lack of sleep and diminished performance.

"People thought we were going to bring down academic medicine," recalls Benjamin K. Chu, MD, one of the nine physicians on the Bell Commission, who is now president for the Southern California region for the Kaiser Foundation Health Plan and Hospitals.

The ideas put forth by the Bell Commission were considered "very radical" at the time, he adds. "They were untried, and there was not a lot of data out there. So we would have a whole day's session where people argued about whether or not fatigue could be a quality issue. Can you believe that? Some people were coming in and saying, 'There's no evidence that someone working 100 hours is any less effective.' That was a big debate."

The most junior physician on the commission, Chu was four years removed from his residency training when it convened, one of the key reasons Bell asked him to serve. "I had that perspective freshly emblazoned in my mind. I was probably still sleep deprived," he says with a laugh.

The Continuity-of-Care Controversy

Even decades after their training, physicians carry vivid images of themselves as bleary-eyed residents pining for catnaps. James Nolan, MD, former chair of UB's Department of Medicine, recalls routinely putting in 120-hour work weeks as a chief resident in medicine at Yale University during the 1960s.

"You were on every other night, and if you were off for the weekend you spent most of the time sleeping," says Nolan, who is a past chair of the Board of Regents for the American College of Physicians. "When X-rays were shown and the lights went off, everyone was nodding off."

Still, he never considered sleep deprivation germane in the death of Libby Zion. In fact, he testified to the grand jury on behalf of the physicians involved.

Although Nolan is pleased to see his successors working more manageable hours, he has reservations about the disruptions to patient care that the 80-hour work week creates. Furthermore, he finds it objectionable that the state punishes teaching hospitals for minor breaches of resident-hour rules.

"In New York State, IPRO"—the peer review committee that monitors compliance of the 405 Regulations—"comes to Kaleida [Health System], seven people pore over the house staff records and there are huge fines if they're working 15 or 30 minutes over what they should be doing.

"What they're really doing is punishing conscientiousness on the part of residents who felt that they had to see the patient at a critical hour instead of just packing up and leaving. I can't think of another career where conscientiousness is looked at negatively."

Nolan refers to 1993 research published in the *Journal of the American Medical Association* that found an increase of in-hospital complications and diagnostic test delays after the New York regulations went into effect. One possible explanation for the findings is that the hour reforms increase the amount of "cross-coverage" time, in which patients are covered by physicians who are not primarily responsible for their care.

"We're constantly turning over patients from one doctor to another," says Nolan, who currently serves on the board of administrators for Kaleida. "The concept of fewer hours is a good one, but it has affected continuity. It has led to a lack of a resident's ability to follow patients. The house staff never gets to know their patients as well as they used to."

Nolan first voiced his qualms about work-hour regulations when New York was still considering enacting them into law. After the Bell Commission published their recommendations, he unsuccessfully lobbied Commissioner Axelrod for more "flexibility" with regard to the hours. His counterparts in surgery were more successful; it's the only specialty that's allowed an 88-hour work week.

Supervision at the Heart of the Matter

Bell has been listening to the continuity-of-care argument since the 1980s. He sums it up with one word: "palaver."

"Is continuity of care served by a chronically sleep-deprived person? Is that a good person to be passing on a patient's information?

"The thing that I stress is the 'R' word – responsibility. If you understand what it means to be a doctor, there's no shift-worker mentality. And there's nothing in these regulations that says that you're going to make sure that the shift-worker mentality triumphs over responsibility."

Bell maintains that patients are best served when their care is under the control of attending physicians, and when residents aren't expected to make decisions beyond their level of training and expertise. To that end, he's deeply disappointed that the national debate over work hours has overshadowed the issue of supervision, which was at the heart of the Zion case and the Bell Commission's findings.

"Who is responsible for the patient? It's the attending doctor who has to be responsible and should be there to see that nothing terrible happens to this patient," he contends.

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“For all these years a patient has been looked on as if he were the resident’s patient. What I’ve been yelling about is that it’s my responsibility. I am teaching the graduate medical students, and if they’re going to have responsibility it’s because I give it to them.

“I give students the right to make decisions on my patients,” he adds, “but when I’m the attending they have to call me. To this day, that’s still controversial.”

When the Bell Commission began studying the matter of supervision, residents in New York City hospitals were “notoriously” unsupervised, Chu says. “There was a culture of putting more responsibility on residents than they were capable of. Can you imagine being two or three years out of medical school, and you’re the most senior person in the hospital? That’s one reason I was as impassioned as Bert was about this. I thought it was totally wrong to put patients and residents in that position.”

However, even years after the 405 regulations were incorporated into the health code, many hospitals flouted the law. The state didn’t commit resources to crack down on violators until 2000, when the Health Department was given sufficient funds to conduct yearly staffing audits and unannounced site visits and issue hospitals fines of up to $50,000. (Hospital violations are also publicized.) Two years later, 54 of 82 New York hospitals surveyed were found to be out of compliance.

As senior vice president, and later president, for the city’s Health and Hospital Corporation in the early and mid-1990s, Chu was responsible for developing monitoring systems and implementing programs, such as night-float coverage, that would make it easier for city hospitals to adhere to the regulations and more feasible for whistleblowers to come forward when they weren’t.

Even with all the measures that have been taken, Chu maintains that residents still feel pressured not to speak up. “It’s hard to change the culture,” he says. “There’s really so much power that the chief of service has, when you think about it. If you’re a resident at a big, high-powered academic center and you were slaving your entire life to get there, are you going to anger the chief of surgery, who’s a nationally renowned figure?”

Self-regulation, a Thing of the Past

John Naughton, MD, chair of the New York State Council on Graduate Medical Education, points out that when any establishment that historically regulated itself must accept oversight by an outside agent—whether it be the state, the ACGME or, in New York State’s case, both—the transition is bound to be bumpy.

“The GME programs grew from the experience in the profession. The people who started these different programs were leaders in their own fields, and they exerted their own control over the programs,” says Naughton, who was dean of the UB School of Medicine and Biomedical Sciences from 1975 to 1996.

“Mandating that you have to do it differently isn’t easy to swallow,” he continues. “There’s a lot of pride in the strides medicine has taken in patient care throughout the whole 20th century, and now into the 21st century. So some people question whether they need all these people looking over their shoulder. There’s some resentment to that.”

At the national level, the ACGME monitors compliance by conducting confidential resident surveys and by interviewing program directors, staff and residents during accreditation site visits.

Last year, two years after the duty-hour standards took effect, ACGME’s administration found that the vast majority of programs were following them: Of 50,000 residents surveyed, only 3 percent reported working more than 80 hours. Of the 2,002 programs reviewed during the academic year, 7 percent received citations related to duty-hour noncompliance.

“We have been amazed and gratified to the extent to which programs have come into compliance,” comments Ingrid Philibert, ACGME’s director of field activities.

ACGME’s leadership remains concerned that residents may be unwilling to expose hospitals breaching the duty-hour standards, she adds. The issue has been a source of debate between that organization and the Committee of Interns and Residents (CIR).

The nation’s largest union of residents and physicians, CIR/SEIU* advocates federal legislation to enforce work-hour limitations, arguing that it would create an atmosphere more conducive for young doctors to report violations.

“I know from speaking to people in New York that they don’t feel any more free to turn their programs into IPRO [because it’s a state law],” Philibert counters. “There is just a reluctance on the part of people to be whistleblowers.”

On the other hand, she notices that the current generation of residents are by and large “less reverent” than their predecessors, making them more inclined to speak out against unfair working conditions.

Since the regulations were enacted, both in New York and by the ACGME, surgeons have been their most outspoken opponents, contending that such limitations actually hurt patient care by reducing hands-on training.

Five years into her surgery residency at UB, Sarina Bax-DeBiaso, MD ’01, hasn’t seen that happen. “I personally don’t think there have been any ill effects from us going home [at a scheduled time] or any patients suffering from any mistakes. But the potential is there if you’re not diligent.

“I think most people, attendings and staff, are supportive of them,” Bax-DeBiaso adds. “Sometimes you hear comments like, ‘When I was a resident, we did it this way, and we were there every other night.’ But even though they say that, they admit that a lot of those hours were wasted because they were so tired.”

While she acknowledges that the previous generation of surgeons was better able to follow patients’ progress after surgery because they didn’t have to watch the clock, Bax-DeBiaso maintains that she’s better off, personally and professionally, because of the limitations.

“In surgery, you just feel like you should always want to be there and you should always want to be operating, want to be learning. But sometimes you really need down time. You want to keep your marriage together and keep your kids happy and healthy. And when residents are happier, they learn more and make more of the time they do have in the hospital.”

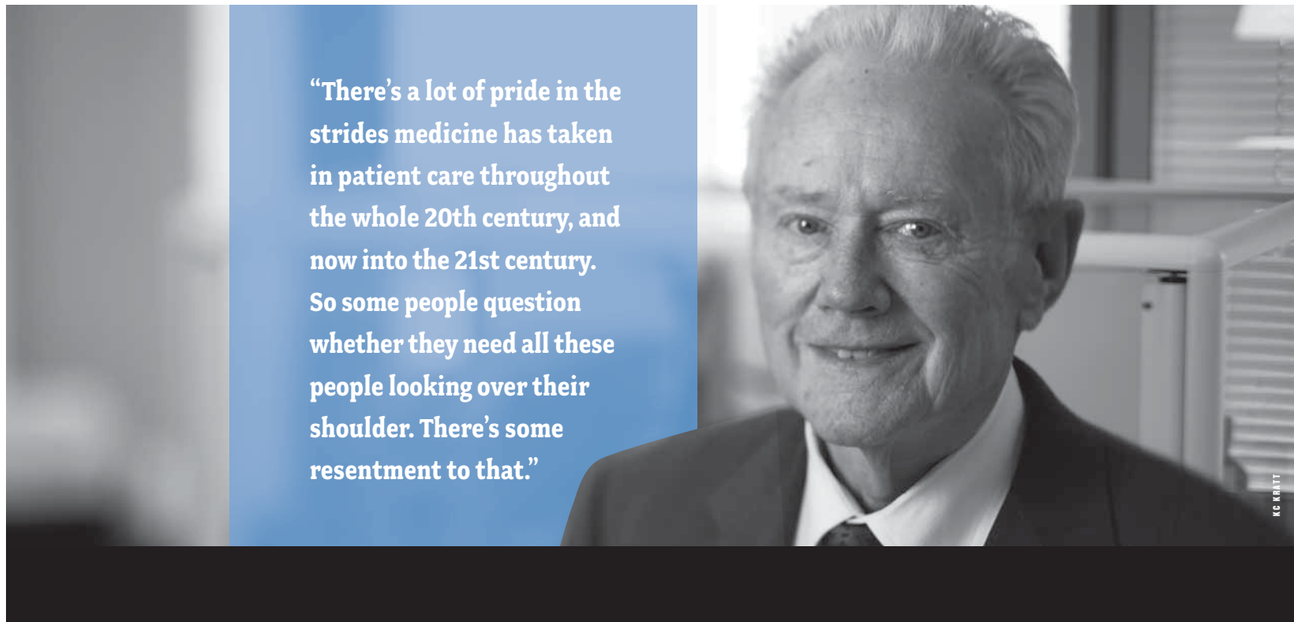
And in that environment, Bell maintains, everyone benefits—students, teachers and patients.

“If you are a teacher, like I am, you want to give a message to your students,” he says. “And you don’t want to give them the message that the only way you’re going to be like me is if you’re beaten into the ground. How can you make people into healers if you abuse them? It’s sort of like introducing people into marriage with domestic violence. But that’s what the system used to be all about.”

Looking back on his career as both doctor and rabble-rouser, Bell concludes, “What I’ve been all these years is a voice. But I’m frequently unaware of the fact that people may dislike me, so it doesn’t play a role in the way I act. I’ve always been that way, so I haven’t worried that much about shooting off my mouth. I’m just a person who stands up and speaks his mind.”

And he’s clearly not through yet: Chances are, the next time Bertrand Bell perceives an injustice in the world of medicine, he’ll sit down and fire off a letter to the *New York Times.* BP

John Naughton, MD



* Service Employees International Union