THE DOCTOR'S WORLD

Socratic Dialogue Gives Way to PowerPoint

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A doctor, a patient and hospital staff in grand rounds in the 1920s.

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Grand rounds are not so grand anymore.

Medicine Then and Now

This is the fourth article in a series of columns looking back at developments in medicine.

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For at least a century at many teaching and community hospitals, properly dressed doctors in ties and white coats have assembled each week, usually in an auditorium, for a master class in the art and science of medicine from the best clinicians. Before us was often a patient who sat in a chair or rested on a gurney and two doctors, one in training and the other a professor or senior doctor at the hospital. In a Socratic dialogue, they often led the audience in a step-

Poul Hans-Lange

by-step deciphering of the ailment.

But in recent years, grand rounds have become didactic lectures focusing on technical aspects of the newest biomedical research. Patients have disappeared. If a case history is presented, it is usually as a brief synopsis and the discussant rarely makes even a passing reference to it.

Now grand rounds are often led by visiting professors from distant hospitals and medical schools. Sometimes, manufacturers of drugs and devices pay the visitor an honorarium and expenses, a practice that has drawn criticism. And the Socratic dialogue has given way to PowerPoint. These rounds are often useful, but certainly not grand.

Precisely when and where grand rounds began is not known. There are many types of rounds where doctors learn from patients. For example, there are the daily working rounds as doctors walk through a hospital to visit and examine patients. In teaching rounds, more senior doctors supervise the work of residents, or house officers, at a patient's bedside or in a clinic.

Grand rounds were showcases featuring the best clinicians, and the practice thrived in an era when doctors knew little more than what they observed at the bedside. Professors often demonstrated characteristics of physical findings like an enlarged thyroid, a belly swollen with fluid or another grotesque disfigurement that the audience could see. Those with a flair for showmanship were often the best teachers, adapting the predictable structure to their needs and talents.

Grand rounds usually began with a younger doctor's reciting the medical history of a patient with an unusual disease, physical finding or symptom. Sometimes the professor knew about the case, other times he did not. The professor would then ask the patient what was wrong. The more compassionate professors gave reassurance by placing their hands on the patients.

The professor would conduct the interview much like a journalist. When did the fever begin? How high was it? Did you notice a rash? Did you have pain? Where did you feel it? What relieved it?

Each major specialty, like internal medicine and surgery, held separate grand rounds. Pediatrics had a different style. A child unable to relate the events involved in his or her medical history often sat on a parent's lap. The format promoted direct dialogue and emotional reaction between the pediatrician and the family in a way that would not come

across if a doctor coldly presented the child's case.

After arriving at a diagnosis, the professor related the current state of medical knowledge to the patient's case. The emphasis was on diagnosis, treatment and the management of a patient, not on research.

In those earlier days, the patient stayed for part or all of the session, which usually lasted an hour. Sometimes doctors in the audience asked questions of the patient and professor. Humor trickled into some sessions. So did personal attacks among faculty members.

As a student at the Tufts Medical School in Boston beginning in 1958, I joined the throngs of doctors on grand rounds when Dr. Louis Weinstein spoke about infectious diseases.

Usually, the patient's pertinent information was on a blackboard. Dr. Weinstein would study the fever chart, seeking clues in the pattern to help identify a particular infection. Then he would regale the crowd with anecdotes from his vast experience in caring for patients with typhoid fever, diphtheria, polio and many other infectious diseases.

Before the Medicare and Medicaid plans were enacted in 1965, many patients treated in teaching hospitals received charity care. In those days, when costs were less of an obstacle, professors sometimes hospitalized patients a few extra days so they could be presented at grand rounds. In other cases, many patients returned after discharge in gratitude for their free care.

Even the smartest experts had to be on their toes, because younger doctors often selected a case intended to tax their brains. Another intention was to have the experts explain their thinking as they matched wits against colleagues and the illness itself.

In San Francisco in 1987, I heard a visiting expert discuss the possible reasons that a woman in her 80s, who complained of weakness and muscle spasms in her back, had a severe loss of potassium.

After the resident gave a detailed account of her illness, the discussant, Dr. Donald W. Seldin, then the chief physician at the University of Texas Southwest Medical Center in Dallas, went to a blackboard to highlight the crucial elements and list possible causes.

As he narrowed the list, Dr. Seldin suggested licorice. But he was told that the patient did not eat it. Next, Dr. Seldin asked whether the patient chewed tobacco. Yes, the resident said. Did she swallow the juice? Again, yes. Dr. Seldin then identified the culprit. The tobacco brand that she chewed contained enough licorice to account for her problem.

Over the years, I have attended grand rounds at a number of hospitals and have even led

some. I have also discussed grand rounds with a number of doctors across the country and abroad who recalled some unusual ones.

Dr. Joseph E. Murray, a Nobel Prize-winning transplant surgeon in Boston, recalled a grand rounds session at what is now Brigham and Women's Hospital. Dr. Francis D. Moore, the renowned chief of surgery at Harvard, talked to a woman who had had recent gall bladder surgery. She sat in a wheelchair with her back to the audience, presumably so she could see the X-rays. Only at the end of the discussion, when Dr. Moore turned her wheelchair around, did he disclose that the patient was his wife.

An occasional grand rounds session became a lesson on decorum.

Dr. Samuel L. Katz, emeritus chairman of pediatrics at Duke, recalled his first grand rounds as a medical student, at Harvard in 1951. The expert was Dr. Oliver Cope, a leading surgeon. As Dr. Cope began talking with a patient on a gurney, he spotted one of Dr. Katz's fellow students in the audience with an open shirt and no tie.

Dr. Cope ordered the patient wheeled out of the room. He spent the rest of the hour describing the proper attire for young doctors in the presence of patients. "That made an indelible impression," said Dr. Katz, who has since kept ties handy for students who were not properly dressed.

Other grand rounds have set the stage for ruckuses.

Dr. A. Stone Freedberg, an emeritus professor at Harvard who is 98, recalled a conflict that developed over a patient who died after a lengthy illness and an unexplained fever. The discussant's list of possible causes did not include histoplasmosis, a fungal infection that occurs in many regions but that is more common in the Midwest.

Dr. Henry A. Christian, chief physician at a Harvard teaching hospital, was in the audience and asked why histoplasmosis was excluded. Because no such case had been seen at their hospital, the discussant replied. Dr. Christian pointed out that theirs was not the only hospital in the area and that the patient might have acquired histoplasmosis elsewhere.

The discussant retorted by asking whether Dr. Christian had ever seen a patient with histoplasmosis. No, Dr. Christian replied, adding that there were many ailments he had never seen but had to think about in examining patients. The discussion grew increasingly heated before another participant told them to continue their argument outside.

Grand rounds remain important in continuing medical education. But in interviews and conversation, many physicians expressed an uneasiness about the lecture format and were disturbed by the lack of a focus on patient-related problems. Many younger doctors did

not know that grand rounds were once conducted with patients on stage.

The critics say the switch to lectures is a sign of the time pressures that have contributed to erosions in the patient-doctor relationship and to the dehumanization of medicine. The absence of a patient case history and the impersonality of the lecture format also draw attention from the primary objective of focusing on the patient, they say.

But the classic grand rounds format may no longer be enough to teach doctors what they need to know about proper care. Exercises in solving clinical problems like the licorice case occur in many other conferences in medical schools and hospitals. Since World War II, medicine has become increasingly subspecialized. The size of hospital staffs has soared. Some department staffs list hundreds of faculty members, including some without medical degrees.

Medicine has advanced far beyond learning from bedside observations, though those remain important. Now doctors need to know about the physiological mechanisms and reasons for prescribing a drug or performing a procedure. Understanding a disease depends far more on information from scientifically rigorous trials involving a large number of patients than a professor's cumulative anecdotal experience.

Nevertheless, experiences with single cases can be important because doctors have to mold treatments for the many patients who do not match the criteria used in studies.

The lecture format may be a more efficient way to learn science, but it is hard to know for sure, because published data documenting the effectiveness of grand rounds as a teaching forum is sparse.

In an era of proliferating subspecialties, a chief aim of grand rounds is to emphasize a core body of knowledge that all physicians need to share and to keep abreast of. And the meetings serve a social function. With coffee cups and bagels or pizza in hand, doctors mingle with colleagues before and after grand rounds. For some, it is the only time they see one another during the week.

Yet attendance at grand rounds has reportedly declined in recent years. Many subspecialists prefer to attend rounds in their narrower field, and doctors who go to national and international meetings can hear much of the same information that may be later presented in lectures at grand rounds.

State licensing boards require doctors to earn a specified number of continuing medical education credits each year. While attending grand rounds qualifies, other accredited conferences often win out in the competition. So some hospitals now require doctors to

attend a specified number of grand rounds each year to maintain their staff positions.

As medical educators seek ways to increase the appeal of grand rounds, they might look at being more imaginative and restoring a sense of humor.

In 1961, Dr. Roy Y. Calne, a British surgeon who was working with Dr. Moore at Harvard, achieved a milestone in his search for a drug to prevent the rejection of transplanted organs. He successfully used azathioprine to keep a dog, Lollipop, alive and healthy with normal kidney function for six months after a kidney transplant.

So Dr. Moore asked Dr. Calne, now Sir Roy, to present his findings at a grand rounds session. In his college days, Dr. Moore had been president of The Harvard Lampoon humor magazine. (For full disclosure, years later I was an officer of The Lampoon.) So after Dr. Calne summarized the case, and with Dr. Moore's approval, he invited the patient to join grand rounds.

As the door opened, Lollipop "pranced into the crowded auditorium, making friends with the distinguished professors in the front row," Dr. Calne said. After a brief pause, the surprised audience broke out in laughter.

Azathioprine later was licensed as one of a standard antirejection drug for kidney transplants and for severe rheumatoid arthritis that does not respond to standard therapy.

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