Mistakes and Disclosure

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To err is human, to forgive, divine.
Alexander Pope

The Institute of Medicine (IOM) 2000 report, “To Err is Human: Building a Safer Health System,” focused national attention on medical errors in hospitals. Utilizing previously published data, they estimated that “at least 44,000 and perhaps as many as 98,000, Americans die in hospitals each year as a result of medical errors.” The IOM published a follow-up report in 2001 titled “Crossing the Quality Chasm: A New Health System for the 21st Century” that stated, “Between the health care we have and the health care we could have lies not just a gap, but a chasm.” In this report, they defined a quality health care system as one that is safe, effective, patient centered, timely, efficient, and equitable. In 2004, the IOM issued a third report, “Patient Safety: Achieving a New Standard of Care,” that specifically addressed safety in the ambulatory care setting stating that “Patient safety is indistinguishable from the delivery of quality care.”

The Accreditation Council for Graduate Medical Education (ACGME) has incorporated a similar emphasis on patient safety and quality of care into their core competencies for residency education under the competency of “Systems-based Practice.” According to the ACGME, residents are expected to be able to “advocate for quality patient care and optimal patient care systems, work in interprofessional teams to enhance safety and improve patient care quality, and participate in identifying systems errors and implementing potential systems solutions.” Their emphasis on teaching a systems approach to problem solving instead of focusing on individual responsibility and blame for medical mistakes is part of a movement within medicine to create a patient safety culture. The Institute for Healthcare Improvement defines a culture of safety as “an atmosphere of mutual trust in which all staff members can talk freely about safety problems and how to solve them, without fear of blame or punishment.” We have found that creating this culture can be facilitated by training residents to analyze medical mistakes in a nonthreatening way through the use of film, news media, and examples from other industries.

After initially presenting the safety culture concepts, we then apply them to an analysis of the 1971 movie “The Hospital,” which won an Academy Award for best screenplay.

“The Hospital” is a satirical comedy starring George C. Scott as Dr Bock, the cynical chief of medicine.
at a major teaching hospital. His wife has left him, his children have disowned him, and people are dying mysteriously in his hospital. Amidst this chaos, Bock becomes enchanted with Barbara Drummond, played by Diana Rigg, who has come to take her supposedly comatose father, Edmund, back to the Sioux reservation where the Drummonds operate a clinic.

We show several scenes from the movie that portray people dying due to the extreme carelessness and incompetence of the hospital staff. The first two scenes involve Guernsey, a nursing home patient with chronic obstructive lung disease, who is misdiagnosed with angina and given morphine, which ultimately suppresses his breathing and kills him. Next, a male intern uses Guernsey's now empty bed for a romantic tryst with a female hematology technician. Afterward, the technician leaves, and a night float nurse, mistaking the sleeping intern for Guernsey, administers Guernsey's medications to the intern and kills him. Dr Bock labels this whole sequence of events a “Roman farce,” and sarcastically asks if any of the nurses thought to check on the person in the bed “merely on the impression he was a patient.” He then yells at the head nurse, asking her to explain why she uses so many float nurses. She responds to the incident by saying, “These things happen.” A hospital administrator looking into the deaths cautions Dr Bock to not do anything that would jeopardize the hospital’s liability. After showing these clips, we discuss with the residents how these deaths were due to the failure of multiple systems, as well as to the culture of blame and cover-up that is exhibited in the movie.

In the next scene of “The Hospital” that we use, the chief resident describes to Dr Bock how a patient with protein in his urine had an unnecessary kidney biopsy for research purposes that ultimately resulted in kidney failure and coma. After hearing this story, Dr Bock questions how he can “sustain a feeling of meaningfulness” in the face of such incompetence. In another clip, the wrong patient is brought to the operating room for a hysterectomy and subsequently dies from an anesthesia reaction. All of these seemingly unrelated events are eventually explained in the last scene we show where we learn that the supposedly comatose Edmund Drummond was really psychotic, and had set up the victims to become patients so that the hospital’s systems would kill them. Residents related to the movie’s black humor and the flawed hospital systems that it satirizes.

Following the movie, we examine the tragic series of real-life events causing the death of a 2-month-old child as described in the New York Times Magazine article, “How Can We Save the Next Victim?” by Lisa Belkin that the residents had read in preparation for this seminar. Jose Martinez was brought to the hospital clinic for a routine checkup when he was found to be in early congestive heart failure due to a ventricular septal defect. The doctors recommended starting Digoxin to control his symptoms. The resident and attending physicians calculated the Digoxin dose to be 0.09 milligrams based on the baby’s weight; however, the resident wrote the order for 0.9 milligrams. The attending counter-signed the order without catching the mistake. The pharmacist, a second resident, and the nurses who administered the medication all failed to correct the mistake before Martinez received a lethal dose of Digoxin. This article clearly describes how no single person caused the death of this child but how he was the victim of multiple imperfect hospital systems. Our residents found this to be a sobering story because of the prominent role resident mistakes played in the incident.

In the context of discussing Jose’s case, we present the Swiss Cheese Model of Error developed by James Reason, a British error researcher. In this model, a slice of Swiss cheese represents a potential barrier to errors such as policies and procedures, equipment, and team/individual responsibilities. Each of these barriers has potential holes that could align with the holes in other barriers in such a way as to allow an error to slip through. To further illustrate this concept, we show the residents a video depicting two well known NASA tragedies caused by the failure of multiple systems.

This video by Chris Valentine is a retrospective look at the Challenger and Columbia space shuttle disasters. Haunting and without narration, it juxtaposes real scenes from each of the disasters with background music by Lisa Gerrard and Beethoven. Interspersed throughout the video is artistically displayed information about the O-ring failure that led to the Challenger explosion soon after take-off and the loose external tank foam that damaged Columbia and caused its breakup upon reentry into the earth’s atmosphere. This video graphically displays Reason’s Swiss Cheese Model of Error and the horrible outcomes that can occur when there is a lapse in the culture of safety.

In the final portion of the seminar, we discuss how to disclose errors to patients and the self-care needs physicians often have after they have been involved in medical mistakes. As part of this discussion, we ask residents to share their personal experiences with medical errors, including their reactions. Feelings of guilt, embarrassment, and incompetence were common along with the understandable reaction of being hypervigilant after the mistake. We then explore the pros and cons of disclosing errors to patients highlighting the ethical imperatives to disclose and
the recommended steps to follow when discussing an error.\textsuperscript{10,11} We also emphasize the importance of support groups such as Balint groups to help physicians cope with the array of feelings the residents expressed when they were involved in mistakes.\textsuperscript{12} We conclude with the words of Alexander Pope quoted at the beginning of this paper, reminding the residents of the importance of forgiveness, given our human propensity to make mistakes.

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\textbf{References}

1. Pope A. An essay on criticism. Part ii, line 325;1711.