Medical Errors and Poor Communication

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bilateral obstruction, and (c) methemoglobinemia. Invasive monitoring is necessary. Although the introduction of gastric acidity monitoring can help monitor gastric acid secretion, it is important to note that the presence of acid does not necessarily indicate the presence of inflammation or infection. Furthermore, the presence of acid does not necessarily indicate the presence of inflammation or infection.


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Look wise, say nothing, and grunt. Speech was given to conceal thought.

Sir William Osler, 1849-1919

Sir William Osler is correctly regarded as the foremost medical educator of the late 19th and early 20th centuries, but like all of us, he too was subject to human foibles and the “thinking of the era in which he lived.” In this well-known quotation on medical communication, he is almost certainly wrong, as viewed from our current perspective on the importance of carefully choreographed clinical teamwork in the management of critically ill patients. In this issue of CHEST (see page 1475) Hess et al report the added benefit of verbal orders in addition to written discharge orders in the management of patients with respiratory failure. The unique aspect of this study is that it identified a simple but effective strategy to reduce intensive care readmissions in a high-risk patient subgroup, namely those with prolonged respiratory failure. The answer was a phone call to the receiving health-care providers that on average reduced readmissions by one-half and saved >$1,000 per patient in readmission costs. In these days of advanced technology in medical care, it is refreshing to see a simple but elegant answer to a perennial problem, namely the issue of readmission of patients following initial successful weaning of mechanical ventilator support.

Lovers and intensive care physicians share a strange common bond, namely that of “invading and knowing” the personal space of another human being. For physicians, this is a sacred trust. Medicine, at its most basic level, is a personal business, maybe the most personal business of all. In intensive care medicine, a group of individuals, working as a team, take care of another human being. Yes, medicines, imaging technology, and medical devices are critically important elements in the practice of modern medicine, but it is group scientific knowledge, teamwork, communication, integrity, and devotion to duty that are now the real key elements to optimal patient care in the ICU, rather than in Osler’s day when the scientific knowledge, intellectual prowess, and wisdom of a single individual often ruled the day. Fundamental to the eradication of poor-quality medical care is our innate propensity to human failures promulgated by false assumptions, misperception, and failed communication. How then does one share this sacred trust of caring for another human being with medical personnel in a way that is accurate, concise, and caring? Clearly great communication among health-care personnel is the key to excellent patient care. The best medical systems create a team communication infrastructure that is about creating a systems approach rather than promoting an individual-centric system, as we often follow, focusing primarily on personal intellect and knowledge. The sad irony is that communication errors are probably the number one current cause of patient harm. The Joint Commission on Accreditation of Healthcare Organizations describes communication error as the cause of 60% to 70% of preventable hospital deaths. We must do much better!

Medical errors arise in many situations, but can be broadly categorized into errors of proficiency, communication, execution, and judgment. Errors of proficiency arise when a physician does not have the required knowledge or current skill to perform a specific procedure or examination in a competent manner (eg, a physician elects to perform a bronchoscopy although he/she is many years out of training and has not done the procedure in years). Communication errors arise when crucial patient information is wrong, missing, misinterpreted, or not appreciated (eg, a pulmonary angiogram is performed in a patient with an elevated creatinine level, but the radiologist is unaware that the patient has renal failure).

Execution errors occur when a physician is knowledgeable and skilled but makes a technical error even while following the correct procedures (eg, a physician orders a wrong antibiotic dose for a patient with pneumococcal pneumonia). Judgment errors occur when a physician unnecessarily increases patient risk or willfully violates standards of care without a compelling reason. Specific examples might include the following:

- A physician elects not to prescribe Pneumocystis carinii pneumonia prophylaxis for a patient on long-term steroids who has sarcoid lung disease.
A physician’s choice to perform or not to perform a specific procedure or investigation is impacted by a personal financial or promotional bias not related to the needs of the patient.

A junior-level resident chooses not to wake the attending physician at 3:00 AM for a patient in impending crisis, placing the patient at inordinate risk.

A nurse fails to challenge a resident’s decision not to call for needed help.

Note that medical errors are frequently divorced from patient injury and should not be seen as the same as patient harm. A medical error may result in no adverse outcome, and the fortunate patient may “dodge the bullet” of poor medical care. Equally, patient harm can occur even when a physician is knowledgeable, skilled, and follows the best practices with excellent execution. Error and harm, although clearly linked, are not synonymous. (In aviation safety, airline crashes are considered a poor leading indicator of passenger safety; near misses and breaches of safety procedures are often more instructive for safety improvement.)

Communication errors are considered the most common cause of medical errors and should be largely preventable by well-designed procedural policies and good execution. Professional communication among health-care providers is a complex topic that is analogous to critical communications, as practiced by other high-risk professions. In addition, there are unique aspects to medical communication, including compassion, privacy, and the rich cultural heritage of medicine. Physicians can learn a lot from other high-risk professions with regard to good communication and avoidance of common communication pitfalls.

An important concept to understand in the prevention of error in high-risk industries is that of latent human error, which, in simple terms, is an error “waiting to happen.” (Latent human error is a term common in aviation for procedures or routines that are constructed in such a way that humans are disposed to making these errors.)

The science of medicine is in its infancy with regard to gathering data about medical errors. This is a problem, as many latent errors will only be detected through a process of systematic identification and statistical analysis. However, this process allows the detection of anomalies when a disproportionate number of similar errors are being made. Thus, this strategy may identify systems factors that “set up” the possibility of error. The procedures can then be analyzed, potential problems identified, and changes made to prevent future medical errors.

In the modern world of teamwork medicine, the often sage advice of Sir William Osler to “look wise, say nothing, and grunt” is certainly the wrong thing to do. Poor communication and disjointed teamwork are the Achilles heel of modern care in the ICU. We can and must do better!

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