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Patient Safety vs Patient Treatment

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Despite the simple, logical philosophy underpinning the patient safety movement, seemingly inexplicably, the results have fallen well short of expectations.[1,2] An unresolved or unidentified factor contributing to this shortfall is the lack of importance placed on the symbiotic relationship between staff safety and patient safety,[3] resulting in staff operating in a self-blame culture. Further, a lack of understanding of the distinction between *patient treatment* and *patient safety* has resulted in opposing groups of experts talking incessantly at each other, with both sides hearing different information.

Consider this example: the Canadian Patient Safety Institute has, as one of its laudable goals, the vision that one day all clinical staff will be educated in patient safety.[4] On the surface, this goal seems axiomatic, akin to stating, "One day, we would like all Australian teachers to be trained to be cognizant of their children's safety as well as their learning." However, on further reflection, it occurred to me that there is a distinction between patient treatment and patient safety. The two terms are not synonymous, but there is considerable overlap between them. In patient treatment, the focus is on medical training, but that is not the focus in patient safety. I suggest that defining and examining the differences—in my opinion, the terms are incorrectly conflated (Tables 1 and 2)—will be important both as a research concept and as a communication tool. Focusing on the communication aspect will help ensure better translation of key patient safety concepts into clinical practice (Table 3).

The distinction between patient treatment and patient safety should not be considered to be mere semantics. In the late 1980s when the concepts of quality assurance and continuous quality improvement first came to healthcare, the message suggested that "*we* [external consultants] are going to teach *you* [medical and nursing staff] how to practice good quality medicine," with the inference being that "the health profession knows nothing about good quality medical practice and clinical audit." Not surprisingly, the new zealots were not enthusiastically welcomed with open arms.

Similarly, if I were to tell a group of orthopedic colleagues that I thought they needed to be educated about patient safety, I would assume my colleagues could (mis)interpret my statement as meaning, "You don't practice good patient treatment." They might hear that I was going to teach them how to better perform joint replacement surgery, a subject about which I know nothing. Their enthusiasm to embrace whatever I said next would be at best muted.

ILLUSTRATING THE TENSION BETWEEN PATIENT TREATMENT AND PATIENT SAFETY

Statistics Analogy

I posit that the relationship between patient treatment and patient safety is akin to the relationship between the sensitivity and specificity of a diagnostic test. At a certain point, increasing sensitivity (making sure you don't miss anybody with the disease) leads to decreasing specificity (including more people who don't actually have the disease). The second similarity is that no test is perfect: none has 100% sensitivity and none has 100% specificity.

Table 1. Defining the Terms

Patient Care	
Overarching concept: A function of the results of the balance between individualized treatment and system-designed safety	
Patient Treatment	**Patient Safety**
What we learned in medical school	A *new* concept
Knowledge/fact based	Common sense and experience based
Individual/person focused	System/process focused
An active *doing* task	Often an inactive *avoiding* task
A *towards* goal (ie, to achieve a good outcome)	An *away* goal (ie, to avoid a bad outcome)
Doing most good	Doing least harm
Diagnostic ± Therapeutic	Preventive
One-on-one doctor-patient relationship	Team-system relationship
Historically more medical	Historically more nursing

Table 2. Sample Clinical Scenarios

Patient Treatment	Patient Safety	Patient Care
Taking a history	Marking a limb before surgery	Successful surgery is performed on the correct limb.
Performing a clinical examination	Double-checking a drug before it is injected into the patient	Heart failure is improved with correct medications prescribed and given.
Making a provisional diagnosis	Putting rails up on the side of the bed	Delirious patient leaves the hospital with clear sensorium and no femur fracture.
Ordering investigations	Putting an arm band on the patient	The correct procedure is provided to the correct patient.
Making a definitive diagnosis	Recording patient allergies in the medication chart	The correct antibiotic is given to the patient.
Starting treatment	Determining a Waterlow score for all patients to assess the risk of pressure injury	A pressure injury is not missed.
Reviewing progress	Checking resuscitation drugs and equipment	A complication is correctly managed.

Case Study

A patient presents to the emergency department (ED) complaining of abdominal pain. Examination reveals the patient is in septic shock, and initial investigations reveal that the patient has severe acute on chronic renal failure.

The junior doctor (a patient treatment proponent) decides to do a 3-phase computed tomography (CT) with contrast scan of the abdomen to determine if the patient has an abscess or other surgical condition that can only be treated with a formal drainage procedure.

However, the patient safety advocates have convinced the radiology team that they should not give intravenous (IV) contrast to patients with a low estimated glomerular filtration rate (poor renal function) because such patients are much more likely to go into renal failure, requiring short- or long-term dialysis. Consequently, the radiologist (who is patient safety focused at this time) refuses to give IV contrast because the patient's renal function is not in the safe range for IV contrast.

Neither the ED doctor nor the radiologist is 100% right or 100% wrong in his or her desired actions.

The patient treatment team needs to understand and acknowledge that if contrast CT scans are done in this population, a number of patients—maybe even this one—will develop renal failure requiring short- or long-term dialysis (or even transplantation) and will suffer the associated morbidity and mortality. The patient may not have an abscess and thus will survive but will need to be dialyzed for the rest of his or her life.

The patient safety team needs to understand and acknowledge that if the contrast is not given, some patients will die because the curative surgical drainage is either delayed or not done at all as a consequence of the diagnostic test not being performed. In other words, the patient may die with preserved renal function.

The important message from Figures 1, 2, and 3 is that patient treatment and patient safety can be optimized, but neither can ever be 100% perfect. The correct answer may only be known in hindsight.

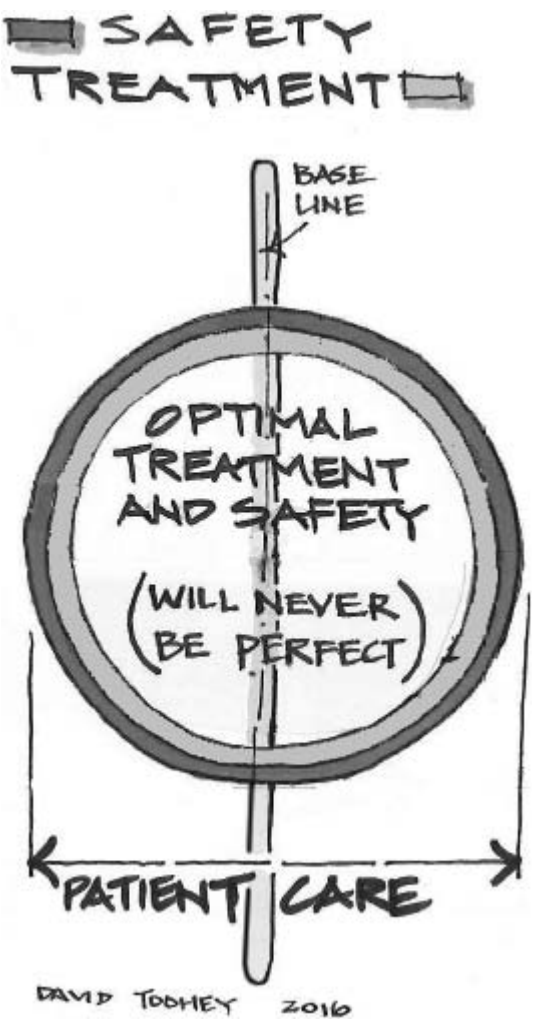

Figure 1. Even under ideal circumstances, patient care is not always perfect.

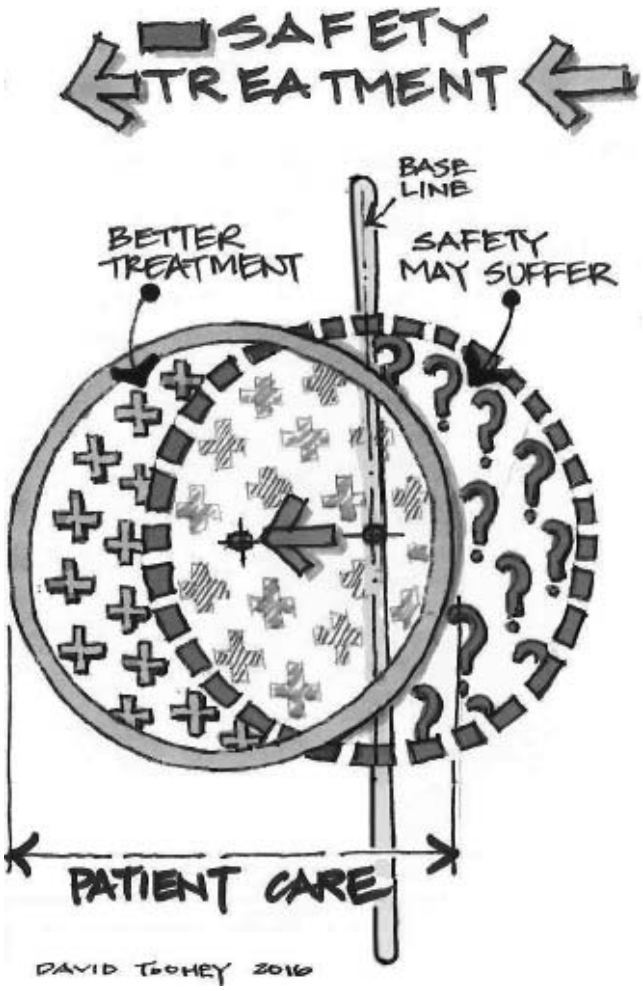

Figure 2. In this scenario, attempts to improve patient treatment increase the risk of a patient safety event occurring.

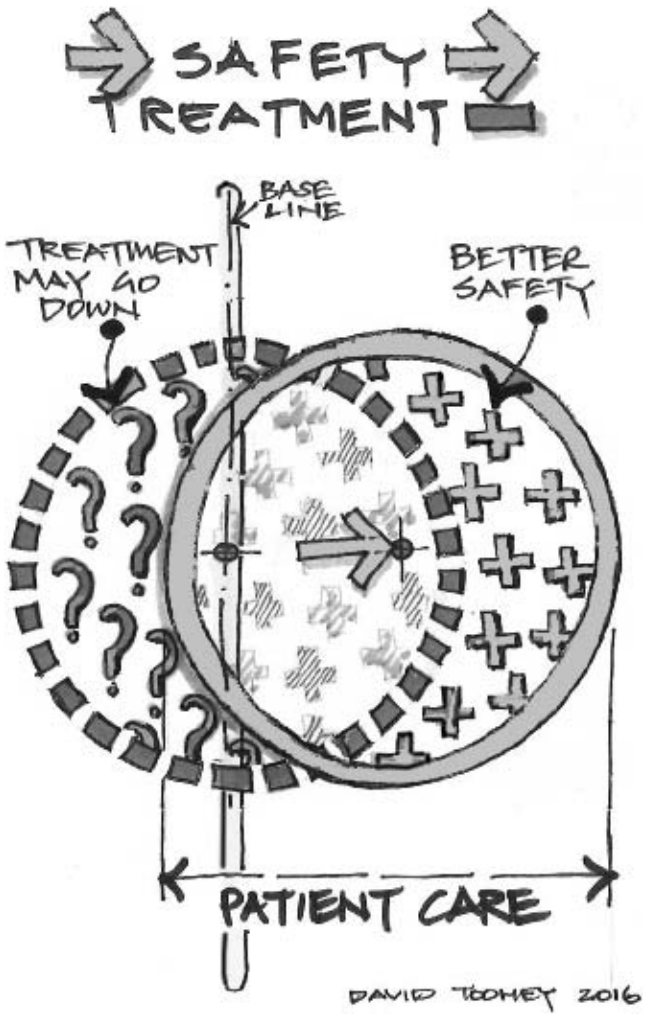

Figure 3. In this event, concentrating actions on patient safety protocols increases the risk of a good patient treatment being overlooked.

Business Analogy

Stephen Covey, author of *The 7 Habits of Highly Effective People*, lists habit 5 as "First seek to understand, then to be understood."[5] Patient safety advocates have to better understand the primary aim of the clinician: Sometimes, taking a risk is justified. Just as important, the clinician has to better understand and acknowledge that the efforts of patient safety experts are directed at improving the outcome of all patients, including theirs.

The poor patient has to understand both concepts.

Mathematical Analogy

Patient care $= \int_1$ (patient treatment) $+ \int_2$ (patient safety), with the wisdom of Solomon required to determine the value of each of the 2 functions, which will change on a case-by-case basis (Figure 4). For those of us without this special wisdom, despite our best efforts, we will get it wrong from time to time.

CONCLUSION

A better appreciation of the subtle but important differences between patient treatment and patient safety pre-

Table 3. Potential Outcomes

Patient Treatment	Patient Safety	Patient Outcome
Amputate gangrenous limb	Mark the limb	
	Yes	Correct limb amputated
	No	Incorrect limb amputated
Infection but not septic	Routine observations – low blood pressure	
	Yes	Diagnosis corrected
	No	Diagnosis remains wrong

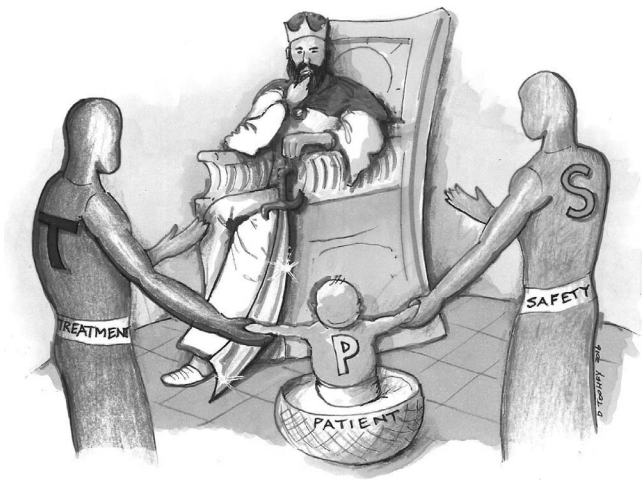

Figure 4. The wisdom of Solomon is needed for case-by-case decisions. Determining the correct emphasis to be placed on patient treatment and patient safety principles in the care of an individual patient is an inexact science.

sented in this concept paper may help bridge the gap between current and desired practice and outcome. Understanding that the 2 concepts have dichotomous features but overall are symbiotic principles of patient care will highlight that safety is required to maximize patient treatment. Likewise, comprehension of patient treatment principles is necessary to optimize patient safety. If better communication between doctor and patient and doctor and doctor is a good idea, surely it is a good idea to improve communication between patient treatment and patient safety proponents. Both patients and the general public need to be better informed that healthcare is an imperfect system.

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