

General Concepts of Patient Safety for the Oral and Maxillofacial Surgeon



David W. Todd, DMD, MD, FACD

KEYWORDS

- Patient safety • High-reliability organization • Crew resource management • Simulation training
- Root cause analysis • Medical error • Adverse event • Just culture

KEY POINTS

- Patient safety is an important concept for the oral and maxillofacial surgeon in all clinical settings and is the basis for good patient care.
- Medical error is pervasive in health care and preventing medical error is a complex process involving many disciplines.
- Understanding various types of medical errors allows for identification of training, processes, and checklists to help reduce the likelihood of medical error.
- Following principles of high-reliability organizations and simulation training should allow for a reduction in medical error.

An aircraft carrier deck is among the most dangerous work environments imaginable (**Fig. 1**). Jet aircraft are launched and retrieved, often simultaneously; live ordnance is loaded onto and off of aircraft; jet fuel is loaded into aircraft; jet blast and propellers are threats; and catapults are continuously in action on a moving surface in all weather conditions, both during the day and night. The multiple aircraft have different munitions, load requirements, restrictions, and different catapult settings.

The men and women who work on the aircraft carrier deck are highly trained, work in teams with color-coded vests, know their roles extremely well, and most often have only a high school education and technical training for the tasks that they perform. Communication is scripted, precise, and limited to roles that are well-described and rehearsed. There is a hierarchy of command that oversees the functions on the deck of the aircraft carrier. The safety record of aircraft carriers is very good and the US Navy has developed

systems, teams, procedures, and checklists to make its ability to carry out its mission highly reliable. Similar systems are in place in other branches of the military, in the aviation industry, and the nuclear industry in which high-risk operations are carried out with similar excellent safety records. These organizations and their approaches to operations are called high-reliability organizations (HROs). See later discussion of the characteristics of HROs. Unfortunately, most health care organizations, from private offices to large hospitals, do not exhibit the characteristics of an HRO, quality of care and safety of care provided is variable, and many errors occur routinely.

Primum non nocere, first do no harm, has been a guiding principle in medicine since Hippocrates time. Those who decide to go into health care have a desire to help patients using their chosen specialty. This article is dedicated to an overview of patient safety. Why is it important to explore this topic as a health care provider? First, patient safety is the basis for good patient care. When

The author has no financial interests in any company or product and has no disclosures.
Private Practice, Oral and Maxillofacial Surgery, 120 Southwestern Drive, Lakewood, NY 14750, USA
E-mail address: david@dwtodd.com

Oral Maxillofacial Surg Clin N Am 29 (2017) 121–129
<http://dx.doi.org/10.1016/j.coms.2016.12.001>
1042-3699/17/© 2017 Elsevier Inc. All rights reserved.



Fig. 1. Flight deck of a US aircraft carrier. (From Department of the Navy. Available at: <http://www.navy.mil/management/photodb/photos/160719-N-YB023-018.JPG>. Accessed July 20, 2016.)

patients seek medical or dental care, it is most important that patients are not harmed in the process of receiving care. Second, this topic is important because most health care professionals do not have formal training and practice in patient safety. Third, it is a complex topic that involves multiple disciplines outside of health care that are explored in this brief introduction (see discussion of details, in this issue). Finally, patient safety is an evolving topic and clinicians are currently in the second phase of development, whereby the low-hanging fruit has been harvested and real gains in measurable patient safety require more research, measurement, and practice to realize the goal of reducing patient harm in the United States and across the globe.

Health care is a complex task requiring history taking, examination, laboratory data and imaging interpretation, diagnosis, communication among different providers and care givers, patient education, medical or surgical treatment, and follow-up. A signature realization in the 1990s was that, despite all the advances in modern medicine, medical care was fraught with error and adverse events. Through thousands of chart reviews in 3 different states, the US Institute of Medicine (IOM) was able to calculate that 44,000 to 98,000 Americans die each year from medical errors. The IOM Report in 1999, *To Err is Human*,¹ was noted by the media, the public, and political leaders for its startling conclusions, and it initiated the modern patient safety movement.

It has been 16 years since the IOM publication and a patient safety effort has been put into place, particularly for hospitals, in such places as the emergency department, labor and delivery, the intensive care unit (ICU), the operating room

(OR), and anesthesia services. The rate of error remains alarmingly high, however, and some reports using the Institute for Healthcare Improvement (IHI) Global Trigger Tool^{2,3} suggest a 10-times higher rate of adverse events than previously estimated. For complex care with seriously ill patients, the risk of error and patient harm is very high (Box 1). It is estimated that at least 1 in 10, and as high as 1 in 3, hospital admissions is marred by an adverse event. In the ICU setting, it is expected that there are 1.7 adverse events per day.⁴ Unfortunately, unlike the military and the nuclear and aviation industries, medical care has not achieved the status of operation of an HRO in most realms and most communities.

What is patient safety? There can be confusion when discussing patient safety and it is important to distinguish between adverse outcomes as a result of medical care from those that arise from the patient's underlying medical conditions causing morbidity and mortality.⁵ As a result of this important difference, an adverse event (or harm) is defined by those outcomes that result from medical care. The IHI defines an adverse surgical event as "any noxious or unintended event occurring in association with medical care to surgical patients."³ A simpler definition is an injury or harm related to or from the delivery of care. Patients can experience harm as a result of their

Box 1 Categories of severity of error

Category A: Circumstances or events that have the capacity to cause error

Category B: An error that did not reach the patient

Category C: An error that reached the patient but did not cause harm

Category D: An error that reached the patient and required monitoring or intervention to confirm that it resulted in no harm to the patient

Category E: Temporary harm to the patient and required intervention

Category F: Temporary harm to the patient and required initial or prolonged hospitalization

Category G: Permanent patient harm

Category H: Intervention required to sustain life

Category I: Patient death

Reprinted with the permission of the National Coordinating Council for Medication Error Reporting and Prevention, ©2001.

Download English Version:

<https://daneshyari.com/en/article/5642415>

Download Persian Version:

<https://daneshyari.com/article/5642415>

[Daneshyari.com](https://daneshyari.com)