Patient Safety in the OR and the *Normalization of Deviance*

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Background

- Anesthetic related mortality has improved significantly over the past 3 decades
  - Increase in older patients with more concurrent disease having more complex procedures
  - Only specialty where malpractice premiums have *decreased* since the 1980s
- Further progress may be undermined by organizational culture that fails to make patient safety the first priority

Lessons from Space

- 40th anniversary of the Apollo 13 mission
- NASA's finest hour in crisis management
  - See the movie if you are too young to remember the event!
- NASA helped create CRM with the airline industry in 1979
  - Avoidance, trapping, and mitigation of risk
    - Landing of flight 1549 on Hudson River 1/09

First Class:Life Raft Included
US AIRWAYS
Coach: No Raft, No Preservers

Lessons from Space

- Why did NASA continue to operate the space shuttle Challenger in 1986 when O-ring erosion problems were well known and documented prior to the launch?
- Why was the shuttle Columbia launched when it was known that foam insulation was breaking off and hitting vulnerable parts of the vehicle during ascent?

THE OPEN MIND

The Normalization of Deviance: Do We (Un)Knowingly Accept Doing the Wrong Thing?

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Vaughan D. The Challenger Launch Decision. Risky Technology, Culture and Deviance at NASA. Chicago, Il: University of Chicago Press, 1996

Normalization of Deviance

- "A gradual erosion of normal procedures that would never be tolerated if proposed in one single, abrupt leap."
- Incremental deviations are observed, tolerated (if no accident) → become "normalized"
- Safety violations are seen as technical violations that can be tolerated and managed, undermining the "culture" of safety

Human Factors and Anesthesia Mishaps

- Poor communication, stress and fatigue, inadequate provider experience and/or supervision, afferent overload/situational awareness, normalcy bias (assuming alarms are false positives)
- Production pressure
- Normalization of Deviance

Production Pressure

- Ever increasing health care costs
- Doing "more with less"
- Improving OR efficiency, fine tuning the economic engine of the hospital
  - Improving first case starts
  - Improving turnover time between cases
  - Doing more cases during prime time

Practices that should not be "normalized"

- Removing monitors at the end of general anesthesia before the patient is responsive, extubated, and hemodynamically stable
- Handoffs of care at vital times (induction, emergence, critical points in the case)
- Failure to follow recognized isolation policies and procedures

Practices that should not be "normalized"

- Failure to wash hands before and after patient contact
- Failure to examine preop testing data before surgery
- Excessive noise in the OR during induction and at other critical points in the case

Practices that should not be "normalized"

- Failure to place standard monitors before performing a peripheral nerve block
- Titration of narcotics in the PACU by rigid adherence to pain score, without modulation based on clinical judgment
- **Failure to monitor the effect of neuromuscular blocking drugs in every patient receiving them**
    - **Inadequate knowledge, inadequate technology, false sense of security with newer agents**

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EDITORIAL III

Risk management, NASA, and the National Health Service: lessons we should learn

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What to do?

- Create a culture where safety is always the primary objective: "*Primum non nocere*"
  - Beware of the temptation to cut corners to improve throughput – the gains will be marginal at best
  - Confront and correct "normalization of deviance" when you see it in your environment
  - Beware of "faster, cheaper, better"

What to do?

- Don't be fooled into thinking "I got away with it, so it must be OK"
  - Rule of 3
- Don't demand evidence that accepting more risk will harm the patient, demand evidence that more risk will ***not harm*** the patient

From the patient's/family's perspective

1. Don't Hurt Me
2. Heal me
3. Be nice to me

...in this order

SAFETY *+ Quality + Satisfaction = Exceptional Care*