Disclosure and the Ethical Surgeon
Challenges of disclosure and truth-telling in different settings

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To Err is Human

- 44,000 to 98,000 die in hospitals each year as a result of medical errors that could have been prevented,

- Preventable medical errors in hospitals exceed attributable deaths to
  - Motor-vehicle wrecks
  - breast cancer
  - AIDS.
To Err Is Human...

Types of Errors

Diagnostic
  Error or delay in diagnosis
  Failure to employ indicated tests
  Use of outmoded tests or therapy
  Failure to act on results of monitoring or testing

Treatment
  Error in the performance of an operation, procedure, or test
  Error in administering the treatment
  Error in the dose or method of using a drug
  Avoidable delay in treatment or in responding to an abnormal test
  Inappropriate (not indicated) care

Preventive
  Failure to provide prophylactic treatment
  Inadequate monitoring or follow-up of treatment

Other
  Failure of communication
  Equipment failure
  Other system failure

Disclosure

- 44% of adverse events are preventable
- Healthcare system continues to be rife with error underreporting and lack of error disclosure

How early does it all start?
Medical Education

- Undergraduate medical students’ moral reasoning skills in their first and third years of medical school.
  - Significant decline in moral development by the end of year three


- Majority of medical students reported feeling pressured to act unethically at some point in their developmental training

  Hicks LK, et al. Understanding the clinical dilemmas that shape medical students’ ethical development: questionnaire survey and focus group study. BMJ. 2001;322:709-710
Medical Education: Formative Years

- Erosion of empathy occurs among physician-students, particularly after their third year in medical school.


Only 13% of first-year physician-students would consider reporting a senior colleague’s mistake; and by the end of their medical training, less than 5% are inclined to do so.

Medical Education: Formative Years

- Medical students are often afraid of their clinical teachers and thus are reluctant to question the morality of the clinical situations they encounter.

- Hidden curriculum that inhibits medical students from developing professional virtues that are critical to ethical decision making in health care.
Post Graduate Education

- 53% of residents experience public humiliation or belittlement by senior residents during their internship
  
  Daugherty SR, Baldwin DC, Rowley BD. Learning, satisfaction, and mistreatment during medical internship: a national survey of working conditions. JAMA. 1998;279:1194Y1199

- Morbidity and Mortality Conference is an example of an educational initiative that often uses shame to discourage medical errors.

Medical Education

- Unhealthy socio-academic experiences
- Defensive coping strategies
- Inhibit physicians from engaging in transparent communication
How do we Establish a Culture of Transparency?

- Acknowledge the pervasiveness of the problem
- Identify the barriers to transparency
  - Intrapersonal barriers
  - Interpersonal barriers
  - Institutional barriers
  - Societal barriers
Disclosing Medical Errors

- Agonizing and psychologically painful experience for physicians
  - Implicates their sense of professional competence.

- Medical mistakes in general are a great source of distress and generate feelings of remorse, guilt, inadequacy, and frustration

- Although some errors occur out of negligence and lackadaisical behavior
  - Most physicians have pursued medicine with the intention of beneficence: to relieve others’ pain and suffering.
Disclosing Medical Errors

- Recriminations from:
  - Patients
  - Lawyers
  - Hospital-employers
  - Insurance companies
  - Their own conscience

- Threats of incurring legal and financial penalties
Personal Barriers to Transparency

- Perpetuating perfectionism
- Fearing the possibility of looking foolish in front of junior colleagues trainees
- Fearing a sense of personal failure
- Loss of self-esteem
- Threat to one’s identity as a healer
Institutional Barriers

- An atmosphere of shame and blame
- A fear of punishment
- Policies and procedures that are complex and arcane
- Resistance to organizational change
- A lack of formal support to learn from errors
- A lack of informal support to deal with the pain of making mistakes
Institutional Barriers

- Health-care professionals have been reluctant to express sympathy, remorse, or responsibility for adverse outcomes on the advice of attorneys, insurance companies, and hospital administrators.

- Admissions of fault and expressions of regret would invite litigation:
  - Statements could be used in court as evidence of medical malpractice.
Why The Lawsuit?

A significant portion of malpractice litigation is caused by a relational breakdown between the patient and the provider.

Lawsuit
- Injury
- Perception that the physician communicated poorly and was insensitive in handling the incident.
- Belief that physician concealed details re incident.
- 37% of those who sued their physician felt that an apology would have eliminated their need to seek legal retribution.

Patient Attitudes Regarding Disclosure of Errors

- Want full information about error: What happened? How? Consequences and management?

- Prevention of future errors

- Apology

- Fear professionals hiding information
Development of Standards

- 2001: Joint Commission standard on disclosure of “unanticipated outcomes”
- 2006: Harvard Hospitals publish “When Things Go Wrong”
- 2006: NQF Safe Practice
Key Elements of the Safe Practice
Content to be disclosed to patient

- Empathic communication of the facts regarding the outcome and its preventability
- Expression of regret (all unanticipated outcomes)
- Commitment to investigate and prevent future occurrences
“The Facts”

- Explicit statement about what happened
- Explanation of why event occurred and its preventability, to the extent known
- Explanation of the consequences of the unanticipated outcome for the patient’s future health
Apology

- Expression of regret appropriate for all unanticipated outcomes
- Apology when unanticipated outcome clearly caused by unambiguous error or system failure
Key Elements of the Safe Practice

Institutional requirements

- Integrate disclosure, patient-safety, and risk management activities

- Establish disclosure support system
  - Disclosure education
  - Ensure disclosure coaching is available
  - Provide emotional support for health care workers, administrators, patients, and families
Institutional Challenges

- Frame disclosure as a safety and improvement issue
- Recognize challenging conversation and provides support
- Include expression of apology
- Encourage performance improvement and tracking
- Change in culture over time from blame and shame to transparency and quality improvement
Moral Imperative

- First do no harm
  - Error is altogether forbidden
  - Making physicians weary of errors to a point where they are afraid to discuss them

- Second, once you have harmed, report, disclose, and learn
  - Laying the foundation for a professional culture of transparency
Challenges of disclosure and truth-telling in different settings

Resident participation in Surgical procedures

Disclosure of surgeon performance data

Disclosing fatigue illness or impairment
Resident Involvement in Surgery

- A surgeon is running 2 rooms and is present for the key/critical part of each case.
- How often do you think patients really understand the role a resident / trainee will play in their surgery / procedure?
  a) Rarely
  b) Sometimes
  c) Often
  d) Never
‘Ghost surgery’: When your surgeon isn’t the one you expected

How to keep that doctor-in-training from being your ghost doctor in surgery

By Diane Suchetka. The Plain Dealer
Email the author | Follow on Twitter
on June 22, 2010 at 8:15 AM

Now and again, the subject of ghost surgery makes it into the news.

The term is used to describe the substitution of one surgeon for another without the patient’s knowledge. Often it’s a resident stepping in for a more experienced surgeon.
Disclosure

- Patients are autonomous agents
- Empower patient with information
- Enrich the doctor patient relationship
Why is Disclosure Difficult?

- Attending surgeon concerns
- Trainee surgeon concerns
- Patient concerns
Is there an Increased Risk of Complications in Trainee Cases?
## Peer Reviewed Evidence

### Table 2. Effect of Resident Involvement in Surgical Procedures on Mortality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Attending alone (n = 597,630)</th>
<th>Attending and resident in operating room (n = 747,350)</th>
<th>Attending in operating suite and resident in operating room (n = 3,886)</th>
<th>Resident alone in operating room but attending available (n = 818)</th>
<th>Any level of resident involvement (n = 752,054)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality, n (%)</td>
<td>7,049 (1.18)</td>
<td>12,236 (1.64)</td>
<td>60 (1.54)</td>
<td>17 (2.08)</td>
<td>12,313 (1.64)</td>
</tr>
<tr>
<td>OR\textsubscript{unadjusted}</td>
<td>Reference</td>
<td>1.39 (1.35–1.44)</td>
<td>1.31 (1.02–1.70)</td>
<td>1.78 (1.10–2.88)</td>
<td>1.39 (1.35–1.44)</td>
</tr>
<tr>
<td>OR\textsubscript{adjusted}</td>
<td>Reference</td>
<td>0.93 (0.90–0.97)</td>
<td>0.90 (0.67–1.20)</td>
<td>0.84 (0.49–1.46)</td>
<td>0.93 (0.90–0.97)</td>
</tr>
</tbody>
</table>

### Table 3. Effect of Resident Involvement in Surgical Procedures on Composite Morbidity at 30 Days

<table>
<thead>
<tr>
<th>Variable</th>
<th>Attending alone (n = 597,630)</th>
<th>Attending and resident in operating room (n = 747,350)</th>
<th>Attending in operating suite and resident in operating room (n = 3,886)</th>
<th>Resident alone in operating room but attending available (n = 818)</th>
<th>Any level of resident involvement (n = 752,054)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite morbidity, n (%)</td>
<td>31,318 (5.24)</td>
<td>61,091 (8.17)</td>
<td>266 (6.85)</td>
<td>67 (8.19)</td>
<td>61,424 (8.17)</td>
</tr>
<tr>
<td>OR\textsubscript{unadjusted}</td>
<td>Reference</td>
<td>1.61 (1.59–1.63)</td>
<td>1.33 (1.17–1.51)</td>
<td>1.61 (1.26–2.07)</td>
<td>1.61 (1.59–1.63)</td>
</tr>
<tr>
<td>OR\textsubscript{adjusted}</td>
<td>Reference</td>
<td>1.02 (1.01–1.04)</td>
<td>0.84 (0.73–0.97)</td>
<td>0.89 (0.67–1.18)</td>
<td>1.02 (1.00–1.04)</td>
</tr>
</tbody>
</table>
Framing the Disclosure

- Surgery is a team sport

- The resident is an essential part of the team
  - Quality and safety checkpoint

- Resident essential component of post operative care
How can we increase transparency regarding trainee participation?

- Competency based surgical curricula
  - Simulators
  - Wet lab
- Entrustable professional activities
  - Core set of activities that any residency program director can trust a student to do upon entering residency
- Formalized tracking of surgical trainees outcomes
To Disclose or Not?
Surgeon’s Performance Data

- Disclosure of surgeon-specific outcomes and experience
- Disclosure of institution specific outcomes and experience
- Disclosure of alternative or other procedures by other surgeons or at other institutions

- Ethical questions
  - Autonomy: yes
  - Beneficence: Will disclosure benefit patient?
  - Nonmaleficence: will disclosure harm patient?
Individual Surgeon Performance and Volume

- Evidence that surgeon volume or experience is relevant to outcomes
- High risk procedures
  - Pancreatectomy
  - Esopagectomy
  - CABG
  - Carotid endarterectomy

Birkmeyer JD, NEJM 2003, JAMA 1995
Disclosure of Surgeon/Institution Performance
Do Patients Have a Choice?

- Benefit only if the patient has a choice
  - Change surgeon, hospital…
  - Managed Care, HIP…

- Nonmaleficence
  - If no choice then is Harm >>>>> Benefit
  - Anxiety
  - Impede physician patient relationship
  - May prompt a poor decision…
Harms of Disclosure: Unintended Consequences and Distributive Justice

- Public reporting and disclosure of surgeon performance
  - Disincentive for surgeons to take on high risk patients
- Unequal access for populations
  - MOH
- Risk to young surgeons >>>> senior surgeons

Justice
Disclosure of Surgeon or Institutional Specific Performance

- Information is valuable and meaningful to patient decision making
- Information is known and accurate
  - NSQIP at AUBMC
- Information can be communicated and interpreted in a manner that is of benefit to the patient
You have just been up all night operating and have a full schedule of elective cases. When you see your patients in perop holding, what do you tell them about the previous night?

1. You do not mention that you were up all night
2. You inform them that you are cancelling your elective cases
3. You disclose that you were up all night and proceed with the cases
4. You disclose that you were up all night and give the patient the option whether to proceed or reschedule
5. You transfer the care of the patient to a partner or offer to reschedule
Impact of Fatigue

- Libby Zion Case
- ACGME 80 hour rules
  - Concerns re fatigue and medical errors
Impact of fatigue on attending physicians

Well powered 6 year prospective study

Prospective Evaluation of Consultant Surgeon Sleep Deprivation and Outcomes in More Than 4000 Consecutive Cardiac Surgical Procedures

Michael W. A. Chu, MD, FRCSC; Larry W. Stitt, MSc; Stephanie A. Fox, BSc, RRCP; Bob Kiaii, MD, FRCSC; Mackenzie Quantz, MD, FRCSC; Linrui Guo, MD; M. Lee Myers, MD, FRCSC; Janice Hewitt, RDH; Richard J. Novick, MD, FRCSC

Table 1. Surgical Procedures and Predicted Risks of Mortality and/or 10 Major Complications Related to Surgeon Sleep Hours

<table>
<thead>
<tr>
<th>Procedure</th>
<th>0-3 (n=83)</th>
<th>3-6 (n=1595)</th>
<th>&gt;6 (n=2369)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated CABG</td>
<td>59 (71.1%)</td>
<td>1272 (79.7%)</td>
<td>1719 (72.6%)</td>
</tr>
<tr>
<td>Isolated valve</td>
<td>14 (16.9%)</td>
<td>149 (9.3%)</td>
<td>309 (13.0%)</td>
</tr>
<tr>
<td>CABG and valve</td>
<td>3 (3.6%)</td>
<td>106 (6.6%)</td>
<td>243 (10.3%)</td>
</tr>
<tr>
<td>Aortic</td>
<td>7 (8.4%)</td>
<td>68 (4.3%)</td>
<td>98 (4.1%)</td>
</tr>
<tr>
<td>Mean CPB time, min</td>
<td>114</td>
<td>110</td>
<td>114</td>
</tr>
<tr>
<td>Mean X-C time, min</td>
<td>78</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Predicted risk (SD)</td>
<td>16.0% (12.1%)</td>
<td>16.1% (10.1%)</td>
<td>16.0% (11.0%)</td>
</tr>
</tbody>
</table>
Impact of operating the night before

Original Investigation

Complications of Daytime Elective Laparoscopic Cholecystectomies Performed by Surgeons Who Operated the Night Before

Christopher Vinden, MD; Danielle M. Nash, MSc; Jagadish Rangrej, MSc; Salimah Z. Shariff, PhD; Stephanie N. Dixon, PhD; Arsh K. Jain, MD; Amit X. Garg, MD

Matched study of 331 community surgeons in 102 hospitals in Canada

Table 2. Complications of Daytime Laparoscopic Elective Cholecystectomies Performed by Surgeons Who Did and Did Not Operate the Night Before

<table>
<thead>
<tr>
<th></th>
<th>Yes (n = 2031)</th>
<th>No (n = 8124)</th>
<th>Unadjusted OR (95% CI)</th>
<th>P Value^b</th>
<th>Adjusted OR (95% CI)^c</th>
<th>P Value^b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversion to open procedure</td>
<td>46 (2.2) [1.6-2.9]</td>
<td>157 (1.9) [1.6-2.2]</td>
<td>1.18 (0.84-1.64)</td>
<td>.34</td>
<td>1.18 (0.85-1.64)</td>
<td>.33</td>
</tr>
<tr>
<td>Iatrogenic injuries</td>
<td>14 (0.7) [0.3-1.0]</td>
<td>72 (0.9) [0.7-1.1]</td>
<td>0.78 (0.44-1.38)</td>
<td>.39</td>
<td>0.77 (0.43-1.37)</td>
<td>.37</td>
</tr>
<tr>
<td>Death</td>
<td>≤5^d (≤0.2)</td>
<td>7 (0.1) [0.0-0.2]</td>
<td>NR^d</td>
<td>.60</td>
<td>NR^d</td>
<td>.57</td>
</tr>
</tbody>
</table>
Risks of complications after performing night time procedures

Risks of Complications by Attending Physicians After Performing Nighttime Procedures

Table 4. Complications in Postnighttime vs Control Procedures

<table>
<thead>
<tr>
<th></th>
<th>Operating room</th>
<th>Labor and delivery</th>
<th>All procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Postnighttime</td>
<td>Control</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(n=919)</td>
<td>(n=3552)</td>
<td></td>
</tr>
<tr>
<td>Procedures with</td>
<td>68 (7.4)</td>
<td>253 (7.1)</td>
<td>101 (5.4)</td>
</tr>
<tr>
<td>complications</td>
<td>(n=919)</td>
<td>(n=3552)</td>
<td></td>
</tr>
<tr>
<td>Total complications</td>
<td>69 (7.5)</td>
<td>279 (7.8)</td>
<td>104 (5.5)</td>
</tr>
<tr>
<td>Preventable complications</td>
<td>55 (6)</td>
<td>251 (7)</td>
<td>87 (4.6)</td>
</tr>
</tbody>
</table>

Context: Few data exist on the relationships between experienced physicians’ work hours and sleep, and patient safety.
Which statements best fit your personal attitude to working while sick and taking sick leave

1. I would never come to work while I am sick
2. I routinely come to work while I am sick (cough, cold, flu, GI complaint) but I do not expect others to do so
3. I routinely work while I am sick and expect the same from my colleagues
4. There is no excuse for staying home when I am sick, unless I am sick enough to be hospitalized
83% reported working sick at least once a year

9.1% reported working sick at least 5 times per year
### Reasons for working sick

<table>
<thead>
<tr>
<th>Reason</th>
<th>No. Responding to the Question</th>
<th>No. (%) Responding Yes</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not want to let my patients down</td>
<td>534</td>
<td>494 (92.5)</td>
<td>.06</td>
</tr>
<tr>
<td>I do not want to let my colleagues down</td>
<td>528</td>
<td>521 (98.7)</td>
<td>.80</td>
</tr>
<tr>
<td>I fear ostracism from my colleagues</td>
<td>534</td>
<td>342 (64.0)</td>
<td>.001</td>
</tr>
<tr>
<td>The leadership in the area where I work is not supportive of the sick leave policy</td>
<td>527</td>
<td>296 (56.2)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>I worry about whether there will be enough staff to take care of patients</td>
<td>532</td>
<td>505 (94.9)</td>
<td>&gt;.99</td>
</tr>
<tr>
<td>I have run out of sick leave, sick relief days, and/or coverage</td>
<td>527</td>
<td>113 (21.4)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>I am the only person who can carry out a particular task</td>
<td>529</td>
<td>278 (52.6)</td>
<td>.26</td>
</tr>
<tr>
<td>I am worried about handing off my patients and continuity of care</td>
<td>528</td>
<td>337 (63.8)</td>
<td>.007</td>
</tr>
<tr>
<td>I come to work because my colleagues work while sick</td>
<td>525</td>
<td>341 (65.0)</td>
<td>.17</td>
</tr>
</tbody>
</table>
Conclusions

- Fatigued surgeons:
  - Ok to continue clinical work as an attending
  - Specific disclosure may not be relevant

- Sick Surgeon
  - Common to work while unwell
  - Utilize strategies to minimize risk