Introduction to Patient Safety

Bruce L. Lambert, Ph.D.
Associate Professor
Department of Pharmacy Administration
UIC College of Pharmacy
lambertb@uic.edu

Overview

- The IOM Report: *To Err is Human*
- Types of errors
- Culture of Safety vs. Culture of Blame
- What's happening in Chicago?
- How to learn more?

The IOM Report: *To Err is Human*

- Book published in 2000
- Dramatically increased focus on patient safety
- Estimated 44,000-98,000 deaths per year caused by errors in hospital care
- Advocated “systems approach” to patient safety

Main IOM Recommendations

- Create leadership, research, tools, and protocols
- Use mandatory and voluntary reporting to identify and learn from errors
- Raise standards and expectations for patient safety
- Create safety systems inside health care via implementation of safe practices

What Types of Errors Occur?

- Medication errors
  - Wrong drug, wrong dose, wrong route, wrong schedule, wrong combination
- Diagnostic errors
  - Delay, misdiagnosis, missed diagnosis
- Surgical errors
  - Wrong site, surgical fires, instruments left inside patients, anesthesia errors
- Procedural errors
  - MRI accidents with metals, intubation errors, contrast-induced nephropathy, infusion pump programming errors
- And so on...

Examples of Medical Errors

- Intrathecal vincristine
- Atracurium/hep B confusion in seven Taiwanese infants
- Ectopic pregnancy misdiagnosis
- MRI oxygen canister accident
- Surgical fire

House Staff Errors
(from Wu, et al., JAMA, 265(16), p. 2089)

- 114 house officers in internal medicine
- 38 diagnostic errors, 24 treatment errors, 33 prescribing errors, 13 procedural errors
- 6 communication breakdowns
- Outcomes:
  - 32% physical discomfort, 27% emotional distress, 25% additional procedure, 24% prolonged hospital stay, 31% death

House Staff Errors: Examples

- Diagnosis
  - Failed to diagnose GI bleed (death)
  - Failed to diagnose eclampsia (death)
- Treatment
  - Failed to give nitroprusside in aortic dissection (death)
  - Failed to treat hypoglycemia in AIDS patient (death)

House Staff Errors: Examples

- Prescribing
  - Gave lorazepam to patient with respiratory muscle weakness (death)
  - Failed to adjust verapamil dose in patient with renal insufficiency (death)
- Procedures
  - Lacerated liver during biopsy (death)
  - Perforated subclavian vein during central line placement (death)
- Communication
  - Accepted information that patient was DNR (death)
  - Did not assert authority in resuscitation with questionable intubation

House Staff Errors (cont'd.)

- Causes of errors (according to house officers)
  - Knowledge deficits (54%)
  - Too busy (51%)
  - Fatigue (41%)
- Reporting?
  - 54% told attending, 88% told MD other than attending, 24% told patient, 8% told no one
- Responsibility
- Emotional distress

House Staff Errors (cont'd.)

- Administration was judgmental (20%)
- Administration inhibited discussion of mistakes (20%)
- Behavior changed in 98% of cases
  - Ask for help
  - Be more vigilant

House Staff Errors: Summary

- Mistakes are inevitable
  - You will make some
  - You may harm or kill one of your patients
- If not reported, same mistakes will be repeated
- Taking responsibility leads to more constructive changes in practice but also more emotional distress
- Senior staff should support you in learning from mistakes
- Must all work together to make system safer

Culture of Blame or Safety

- Culture of Blame (still dominant)
  - Error is fault of individual
  - Error should be punished
  - Training, vigilance seen as solutions
- Culture of Safety (ascending?)
  - Errors due to system problems
  - Focus on learning and CQI
  - Non-punitive reactions to error
  - Tangible commitment to safety by leadership

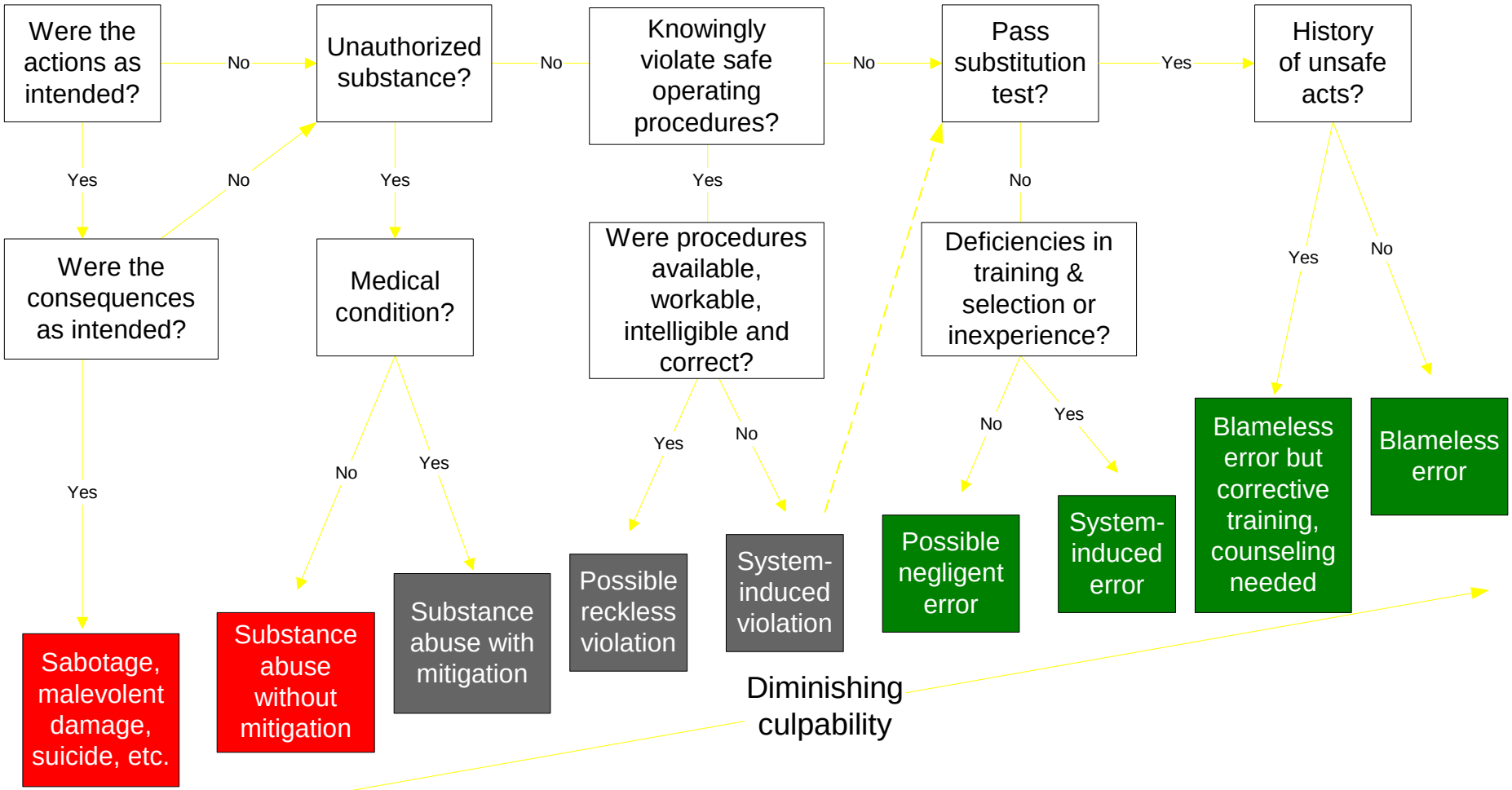
Culture of Safety

- Safety Climate Survey available (free!) from QualityHealthCare.org:

  “In a culture of safety, people are not merely encouraged to work toward change; they take action when it is needed. Inaction in the face of safety problems is taboo, and eventually the pressure comes from all directions — from peers as well as leaders. There is no room in a culture of safety for those who uselessly point fingers or say, "Safety is not my responsibility, so I’ll file a report and wash my hands of it."

Establish A Culture of Safety (from QualityHealthCare.Org)

1. Designate a Patient Safety Officer
2. Provide Feedback to Front-Line Staff
3. Conduct Safety Briefings
4. Conduct Patient Safety Leadership WalkRounds™
5. Appoint a Safety Champion for Every Unit
6. Involve Patients in Safety Initiatives
7. Create a Reporting System
8. Simulate Possible Adverse Events
9. Create an Adverse Event Response Team
10. Relay Safety Reports at Shift Changes
11. Reenact Real Adverse Events from Your Hospital



Decision Tree for Determining Culpability of Unsafe Acts

From Reason, J. Managing the risk of organizational accidents. 1997.

Obstacles to Adoption of Non-Punitive Culture/Systems

- Need for “accountability,” tension between accountability and learning
- Fear of litigation, reprisal
- Lack of trusted and time-tested state and federal statutory protection from discovery
- Lack of knowledge about structure, function, and purpose of non-punitive systems
- Generalized resistance to change

What Can You Do to Avoid Errors

- Safety is about systems not individuals
- Learn about patient safety
- Report errors and read other people's error reports
- Learn and use proven safe practices
- Wash your hands
- Ask for help

Conservative Drug Therapy

- Use non-drug therapy first
- Discontinue as many drugs as possible
- Prescribe as few drugs as possible
- Use old drugs before new ones
- Don’t use any new drug until it has been on the market 7 years (unless there’s clear and convincing new benefit over older drug)
- Use lowest possible dose
- (see www.worstpills.org for more)

What is Happening Locally?

- Chicago Patient Safety Forum
  - Chicagopatientsafety.org
- Illinois Hospital Association's medication reconciliation collaborative
- Dr. Bill Galanter's work using Cerner
- My work on drug name confusions
- Diagnosis error project at Cook County
- Other projects at Northwestern and U of C

How to Learn More

- PubMed and/or Google query on “patient safety” or “medical errors”
- www.ihi.org
- www.npsf.org
- www.webmm.ahrq.gov
- www.ismp.org
- www.ahrq.gov/clinic/ptsafety/
- www.chicagopatientsafety.org