Helping Residents Cope with Bad Outcomes

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Educational Objectives

- Reflect on experiences with medical mistakes and patient death, both personally and in role of clinical teacher
- Identify the impacts of medical mistakes and patient death on resident physicians as reported in the medical literature
- Recognize the importance of identifying ways to help residents (and students) cope with bad outcomes
- Compare workshop done at one institution (OHSU) to what you currently do at your program
- Identify opportunities/barriers to starting/modifying an educational program at your institution

Show video clip

"I did everything"

Small Group Discussion

- Assign one person as group reporter
- Identify themes in video clip
- Reflect on how you cope with bad patient outcomes personally
- What have you observed about how residents cope with bad outcomes?
- What are your responsibilities as a clinical teacher in helping residents to cope with bad outcomes?

Medical Error and Residency Education

- Highlights of Medical Literature

bmj.com

Medical error: the second victim

Albert W Wu

BMJ 2000;320;726-727

"When I was a house officer another resident failed to identify the electrocardiographic signs of the pericardial tamponade that would rush the patient to the operating room late that night. The news spread rapidly, the case tried repeatedly before an incredulous jury of peers, who returned a summary judgment of incompetence. I was dismayed by the lack of sympathy and wondered secretly if I could have made the same mistake—and, like the hapless resident, become the second victim of the error"

Resident Self-Report of Errors

- 34% made at least 1 error during 3 year study period (West et al)
- 41% reported adverse event or near miss in preceding week (Jagsi et al)
- 45% made 1 mistake during training (Wu)
- 47% made serious error(s) during course of training (Mizrahi)

Jagsi R et al. Residents report on adverse events and their causes. Arch Intern Med. 2005;165:2607-2613

Mizrahi T. Managing medical mistakes: ideology, insularity, and accountability among internists-in-training. Soc Sci Med. 1984;19:135-146

West CP et al. Association of perceived medical errors with resident distress and empathy. JAMA 2006;296(9):1071-1078

Wu AW, McPHee SJ, Lo B. How house officers cope with their mistakes. West J Med 1993; 159:565-569

Medical Errors- Resident Emotions

	Internal Med	Emergency Med
Remorse	81%	68%
Anger	79%	
Guilt	72%	53%
Inadequate	60%	58%
Frustration		55%

Wu AW et al. Do house officers learn from their mistakes? JAMA 1991;265(16):2089-2094

Hobgood, C et al. The influence of the causes and contexts of medical errors on emergency medicine residents' responses to their errors: An Exploration. Acad Med. 2005; 80:758-764

Physician Emotional Response to Medical Errors

- Guilt
- Fear
- Anger
- Loss of self-confidence
- Responsibility
- Shame/Embarrassment
- Reliving the experience

Christensen, JF, Levinson W, Dunn PM. The heart of darkness: The impact of perceived mistakes on physicians. J Gen Intern Med 1992;7:424-431.

Penson RT et al. Medical Mistakes: A Workshop on Personal Perspectives. The Oncologist 2001; 6: 92-99

Medical Errors- Resident Discussion/Disclosure

	IM-(Wu)	IM-(West)	EM
Supervising attending	54%	54%	71%
Other physician	88%	83% (other resident)	70%
Non-medical	58%	65%	53%
Told no one	5%	3% (of errors)	

Hobgood, C et al. Acad Med. 2005; 80:758-764

West et al. JAMA 2006;296:1071-1078

Wu AW et al. JAMA 1991;265(16):2089-2094

Resident Coping with Medical Errors

- Types of Coping
  - Problem-focused
    - Coping directed at problem that is causing distress
    - Outcome is changes in practice
  - Emotion-focused
    - Coping is directed at managing emotional distress
    - Outcome is psychological well-being

Wu AW, Folkman S, McPHee SJ, Lo B. How house officers cope with their mistakes. West J Med 1993; 159:565-569

Resident Coping Strategies

- Strategies (of 6) most commonly used:
  - Accepting Responsibility
    - “made promise things would be different next time, criticized or lectured self, apologized or did something to make up”
  - Planful problem solving
    - “concentrated on what to do next, knew what had to be done, doubled efforts to make up, made a plan of action and followed it

Wu AW et al How House Officers Cope with Their Mistakes WJM 159(5):565-569

Consequences of Coping Strategies

- Coping by accepting responsibility for mistake
  - More likely to make constructive changes in practice
  - More likely to experience emotional distress
- Coping by escape-avoidance
  - "wished situation would go away or be over, had fantasies how things might have turned out, tried to make self feel better by eating, drinking, drugs, meds"
  - More likely to report defensive changes in practice

Association of Perceived Medical Errors With Resident Distress and Empathy

A Prospective Longitudinal Study

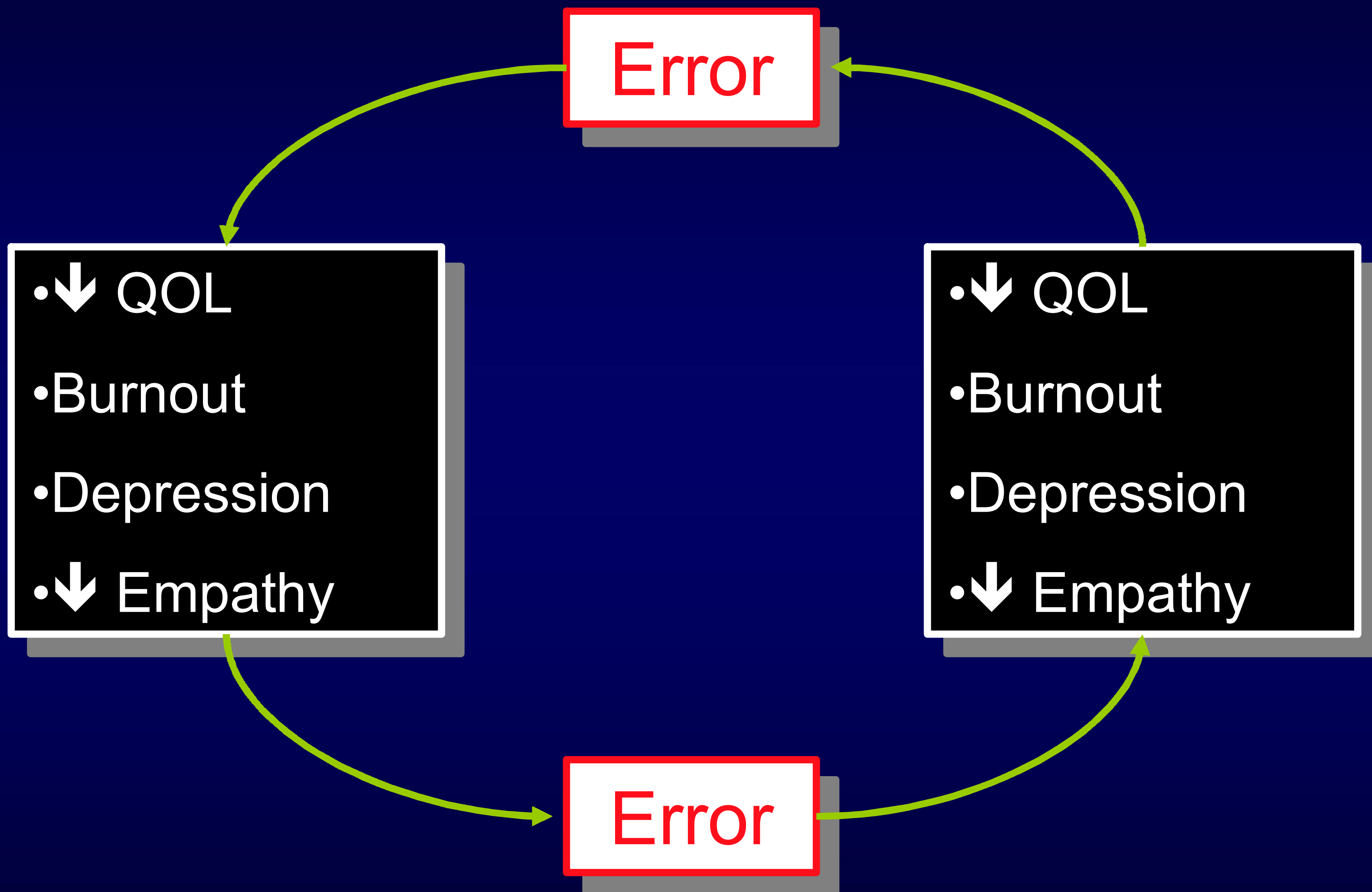
West et al. JAMA. 2006;296:1071-1078

- Prospective longitudinal cohort study of IM residents at Mayo Clinic
- Resident survey included:
  - Self-assessment of medical errors
  - Assessment of QOL q 3 months
  - Assessment of burnout and depression q 6 months

Table 2. Quality of Life, Burnout, Symptoms of Depression, and Empathy Measures for Residents Reporting No Perceived Errors vs Reporting Perceived Errors*

Variable	Metric (Scale)	Group Baseline, Mean (SD) (N = 184)	No Reported Errors (n = 122)	Reported Errors (n = 62)	Difference (95% Confidence Interval)	*P* Value
QOL	LASA overall QOL (0-10), mean	6.60 (1.88) (n = 160)	6.54	6.01	−0.52 (−1.00 to −0.05)	.03†
Burnout‡						
Depersonalization	MBI-DP (0-30), mean	7.10 (5.94) (n = 145)	6.62	9.85	3.23 (1.35 to 5.12)	<.001†
Emotional exhaustion	MBI-EE (0-54), mean	21.51 (9.91) (n = 142)	19.21	26.06	6.85 (3.88 to 9.82)	<.001†
Personal accomplishment	MBI-PA (0-48), mean	39.01 (5.25) (n = 142)	39.26	36.27	−2.99 (−4.77 to −1.22)	.001†
Depression	Any positive 2-item depression screen, %	32.21 (46.99) (n = 149)	33.02	63.33	3.50 (1.71 to 7.20)§	<.001‖
Empathy						
Emotive	IRI-EC (0-28), mean	22.47 (4.26) (n = 159)	22.25	21.36	−0.89 (−2.11 to 0.32)	.15†
Cognitive	IRI-PT (0-28), mean	20.25 (4.48) (n = 158)	20.60	19.95	−0.65 (−1.91 to 0.60)	.31†

West et al. JAMA. 2006;296:1071-1078


Error
•↓ QOL
•Burnout
•Depression
•↓ Empathy
•↓ QOL
•Burnout
•Depression
•↓ Empathy
Error

Conclusions

- Self-perceived medical errors are:
  - Common among IM residents
  - Associated with substantial personal distress
  - Personal distress associated with increased odds of future errors

West et al. JAMA. 2006;296:1071-1078

Show video clip

“Tiny dance”

Debrief Clip

- Clip demonstrates one approach…
- How do you debrief medical mistakes with trainees?
- What barriers do you encounter that might prevent teaching from errors?

"What should we do when a colleague makes a mistake? How would we like others to react to our mistakes? How can we make it feel safe to talk about mistakes?

In the case of an individual colleague it is important to encourage a description of what happened, and to begin by accepting this assessment and not minimising the importance of the mistake. Disclosing one's own experience of mistakes can reduce the colleague's sense of isolation. It is helpful to ask about and acknowledge the emotional impact of the mistake and ask how the colleague is coping."

Wu AW. Medical error: the second victim. BMJ 2000;320;726-727

Barriers to Teaching from Errors

- ***Lack of training***
- Desire to avoid:
  - Causing shame to learner
  - Causing anger
  - An uncomfortable future relationship
- Lack of time or privacy
- Lack of institutional support
- Cultural norm not to admit errors; to expect perfection
- Concern over learner's response

Mazor KM et al. Teaching and medical errors: primary care preceptors' views. Medical Education 2005; 39:982-990

Suggestions for Medical Educators:

- Anticipate negative emotions (anger, guilt, remorse, distress, frustration and inadequacy)
  - Provide emotional support and reassurance
  - Help residents interpret their distress
  - Professional therapeutic referrals when needed
- Make discussions about mistakes a routine part of training
  - Disclose one's own mistakes
  - Part of "team" orientation- inevitability of mistakes, importance of discussing them
  - Provide specific advice to prevent recurrence of the mistake

Christensen 1992, Hobgood 2005, Mazor 2005, West 2006, Wu 1993, 2000

Suggestions for Medical Educators

- Discuss coping strategies and consequences of strategies with residents
- Identify institutional, training program and educational factors that may contribute to negative emotional response and/or counterproductive coping strategies

Christensen 1992, Hobgood 2005, Mazor 2005, West 2006, Wu 1993, 2000

Show video clip

"Field Trip"

Debrief Clip

- What emotional reactions do trainees have to patient death?
- What coping strategies do they use?
- Do the emotional reactions/coping strategies vary by training level?
- How do you help residents cope with patient death as a clinical teacher?

Patient Death and Residency Education

- Highlights of Medical Literature

Trainee Comments after Patient Death

- “One patient I saw in the ER the day before he died. I wondered if I should have done more. Did I miss something?
- “I felt I should have done more, or been smarter, or been luckier.”
- “That day I considered increasing the amphotericin dose on my patient with leukemia and after the discussion with the fellow, we didn’t. That night she coded. Autopsy revealed disseminated fungemia.”
- “One night, she stopped breathing. I was not there. As I was still coming to terms with the thought that this event was unavoidable, the pain of her loss was even greater that I was not present.”

Serwint JR. One method of coping: Resident debriefing after the death of a patient. J Pediatr 2004; 145:229-234

Wolpin BM et al. Learning to cope: How far is too close? The Oncologist 2005;10:449-456.

Physician Response to Patient Death

BMJ

Doctors' emotional reactions to recent death of a patient: cross sectional study of hospital doctors

Ellen M Redinbaugh, Amy M Sullivan, Susan D Block, Nina M Gadmer, Matthew Lakoma, Ann M Mitchell, Deborah Seltzer, Jennifer Wolford and Robert M Arnold

BMJ 2003;327;185-
doi:10.1136/bmj.327.7408.185

Outcomes

- Experience in providing care
- Emotional reaction to the patient’s death
- Use of coping and social resources to manage their emotions

Results: Coping Resources

- Significant Results
  - Female physicians used more coping behaviors than male physicians
  - Female physicians reported needing more emotional support than male physicians
  - Residents use resources more than either intern or attending physician
  - Interns reported needing more emotional support than attending physicians
  - Longer duration of care associated with stronger emotional reactions

SOCIAL RESOURCES ACCESSED

	REDINBAUGH			SERWINT
	Attending	Resident	Interns	Residents
Attending	53%	74%	68%	40%
Entire team	-	-	-	22%
Res/housestaff	70%	84%	89%	20%
Spouse/SO	33%	44%	48%	-
No one	46%	18%	10%	-

Importance of Attending Role Modeling

"Doctors are moved by the deaths of the strangers for whom they care, and they are often powerfully affected by the deaths of patients with whom they have forged close relationships. The attending physicians in charge of the learning of their interns and residents do not often discuss these strong emotional responses. This conveys a message about how death is to be handled and potentially isolates learners who could benefit from having an opportunity to receive a seasoned perspective on what it is like to care for a patient who dies. A conspiracy of silence toward emotions can potentially cause trainees to develop maladaptive coping patterns that lead to burnout and other forms of emotional distress."

Redinbaugh EM et al Doctors' emotional reactions to recent death of a patient: cross sectional study of hospital doctors. BMJ 2003; 327:185-191

Thoughts

- Attendings underestimate emotional distress
- Attendings don’t debrief with other colleagues
- Conspiracy of silence toward emotion → maladaptive patterns
- Situations requiring extra attention:
  - Presence of a long term relationship with a patient
  - Female physicians
  - Interns

One Educational Intervention

Death Rounds: end-of-life discussions among medical residents in the intensive care unit

Catherine Lee Hough MD, MSc[a,*], Leonard D. Hudson MD[a], Antonio Salud II MD[b], Timothy Lahey MD[c], J. Randall Curtis MD, MPH[a]

Journal of Critical Care 2005;20:20-25

- 75% residents thought Death Rounds worthwhile and should be included in all ICU rotations
- 42% believed Death Rounds helped them care for or cope with dying patients

Suggestions for Educators

- Need to debrief patient death with all learners
  - Share your own personal reaction
  - Ensure emotional and not just clinical debriefing
- Encourage residents to support each other and their students
- Teach learners that death does NOT equal failure
- Find institutional/programmatic commitment to schedule debriefing activities and faculty/resident development

Show Video Clip

"ER Alley"

Medical Students

- 57% rated impact of death as highly emotionally powerful
  - 25% of these students rated support from supervisors inadequate
- Coping/Debriefing
  - 44% talked to other students, 26% talked to SO's
  - Lack of support from medical team
    - 63% had no team discussion of the death
    - Of deaths discussed, 40% of the time only focused on **medical** aspects of the case, not **emotional** aspects
- Student take-home messages
  - Doctors shouldn't have emotional reaction to death
  - Death is a failure

Rhodes-Kropf J et al. Medical students' reactions to their "most memorable" patient death. Acad Med 2005; 80(7):634-640

Institutional Reflection

- What is your program currently doing to help residents cope with bad outcomes?
- What would you like to do at your program to address the issues raised today?
- What barriers will you face?

Thank you for participating!

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