Foundations of Emergency Medicine
Foundations III: Guided Small Group Experience

Wellness
Session 15: "Physician Error and Second Victim Syndrome"

- **Agenda and Learning Objectives**
  - Case Part I – Physician Error (15 min)
    - Identify Risks factors for making an error
    - Identify barriers toward disclosing an error
    - Discuss benefits of error and disclosure
    - Discuss best practices for how to disclose an error
  - Case Part II – Second Victim Syndrome (25 min)
    - Define the second victim syndrome and discuss its signs, symptoms and risk factors
    - Discuss the short and long-term consequences of being a second victim
    - Describe the recovery process from being a second victim
    - Describe how the second victim can be helped by others, including the healthcare system
  - Case Concludes (10 min)
    - Review Session Teaching Points

- **Note to Facilitators**
  - *These two cases cover physician error and second victim syndrome. As part of the wellness block, these cases are constructed in a question and answer format that is different from typical Foundations cases. The first case uses the scenario of a medication ordering error as a springboard for discussing contributors to error and the benefits, barriers to and techniques for disclosing a medical error. The second case discusses a procedural error (lost central line wire) that causes patient harm, resulting in risk for second victim syndrome. Participants will discuss second victim syndrome definition and course, as well as ways to support colleagues who may be at risk for this phenomenon. The first case is allotted 15 minutes and the second case is allotted 25 minutes as it covers more content and we anticipate more potential discussion. If time allows, participants should be encouraged to share their experiences with these topics, and we recommend that you remind participants of the need for confidentiality in order to facilitate an open discussion.*

- **Case Part I –** Physician Error (15 min)
  - *It is 5am during your 6th single-cover night shift in a row. You are tired, and you have a flight to catch at 9am, so you are worried about wrapping up your patient care in time to get to the airport. Your next patient, JM, is a 52-year-old with diabetes mellitus who presented with lightheadedness after running out of his insulin last week. He is mildly*

tachycardic to 110, but his other vital signs are normal. After you complete your history and physical examination, you order two liters of lactated ringers. JM's laboratory tests demonstrate a glucose of 680 with a normal anion gap, no ketonuria, and a normal pH. You then order 10 units of insulin and plan to reassess his blood sugar in one hour.

About 30 minutes later, while you are picking up your final patient of the shift, a nurse rushes over to inform you that another one of your patients, DK, has become confused and somnolent. His point of care glucose is 12. You give him an ampule of D50 and his mental status returns to baseline. When you investigate the cause of his hypoglycemia, you realize that you had inadvertently placed the insulin order for DK rather than JM in the electronic medical record.

- **Discussion Questions with Teaching Points**
  - **What are risk factors for making an error? What ED specific factors are there? What effects does a medical error have on the clinician?**
    - Medical error remains the third leading cause of death in the US[2]
    - All of us make mistakes at some point but there are some factors that make errors more likely
    - Individual factors include fatigue, distress, burnout and clinical depression[2,3]
      - A study found depressed residents were more likely to make medication errors than those who were not[2]
    - Systems-related processes are commonly associated with medical errors. These include problems with policies/procedures, inefficient processes, lack of teamwork and poor communication
      - Studies have found errors are increased when there is a lack of cooperation between teams and poor continuity of care (ie handoffs)[4]
      - Another study showed system processes were highly associated with diagnostic errors by internists[5]
    - There are also ED specific systems related barriers that contribute to errors
      - High patient volumes
      - High acuity
      - Episodic nature of care
      - Decision fatigue
      - Acting with incomplete information
      - Frequent sign outs with often poor signout structure[7]
    - Self-perceived errors have been associated with reduced quality of life, increased burnout and depression[3]
    - It also appears to affect future care likely due to negative emotions and distraction from the error. This can lead to further errors and a vicious cycle of errors and burnout.[4]

❖ **Case Part I Continues**

- *You realize you made a serious error that caused temporary harm to your patient, DK. Although he is now at baseline and medically ready for discharge (his presenting complaint also resolved), you wonder what you should say to him regarding this mistake, or if you should say anything.*

- **What are some barriers toward admitting error? What barriers are there to learning from error?**
  - Barriers to admitting error include:
    - Traditional societal expectations of physicians as being perfect[8]
    - Physicians themselves may believe only "bad" doctors make mistakes and thus avoid admitting their own[9,10]
    - Concerns over litigation, getting into trouble and possible disciplinary actions
    - A lack of training in communicating errors[11]
  - A barrier to learning from errors include providers lack of awareness of how reported incidents will be analyzed and whether these reports will ultimately lead to positive changes toward patient safety[9]
  - Active engagement of the physician surrounding the outcomes of medical mistakes can enable physicians to learn from errors
    - Feedback should include what actions have been taken in response to the reported incidents[9]
    - It is imperative this feedback be non-punitive and non-intimidating

- **What are benefits to disclosing errors?**
  - It is the ethical thing to do
  - May avoid future further harm to both that individual patient as well as future patients if systems issues can be fixed
    - You must disclose the error to appropriately consent a patient for treatment for an injury caused by the error; the patient must have full information as to what transpired[12]
  - May decrease litigation rates
    - Study in a large hospital showed a decline in malpractice claims after employing a policy of active disclosure of error to patients[13]
  - May help patients and their families heal from the error[14,15]
  - Honestly demonstrates compassion to the patient and their family
  - For many patients, knowing what steps were taken to mitigate future errors and knowing that some good may come of their cases can help mitigate personal suffering[14]
  - Disclosing may also help physicians heal emotionally from the error
    - A study found that internal medicine residents who shared their errors tended to report more positive changes in their practices[16]

- In an anonymous survey of 212 United States otolaryngologists, nearly half (44%) reported that an error helped guide them toward personal practice changes, improvements in their departments, or improvements in hospital-wide or broader corrective actions[17]
- Similarly, 10 of 11 interviewed physicians by Christenson et al. reported they had learned from their mistakes and improved their practice of medicine in some way because of the mistake[18]
- In a survey by Quill et al, physicians reported that sharing errors with friends, family and colleagues helped prevent isolation and helped them being to heal from the mistake[19] (19)

▪ Sharing errors with one another may help physicians realize that they are not alone and that making errors is only human

- **How can errors be appropriately disclosed? Are there any tips to help assist physicians in disclosing errors?**
  - ▪ A supportive environment and good communication skills help make disclosure and apology a positive experience for both patients *and* physicians[14]
  - ▪ Physicians should avoid acting defensively and should explain events in objective and narrative ways avoiding medical jargon
  - ▪ After explaining the circumstances, an appropriate statement may simply be "I am sorry" patients often appreciate this form of acknowledgment and empathy, and an apology may help to strengthen the physician-patient relationship.[15]
  - ▪ Many states have specific protections for error disclosure often termed "I'm Sorry" laws which protect statements of apology, sympathy or condolences from being used against them if the case goes to litigation
  - ▪ Here are several other helpful tips[15]:
    - Disclosing promptly what you know about the event
    - Taking the lead in disclosure and not waiting for patient to ask
    - Outlining a plan of care to rectify the harm and prevent recurrence
    - Offering to get prompt second opinions where appropriate
    - Offering the option of a family meeting
    - Documenting important discussions
    - Offering the option of follow-up meetings
    - Accepting responsibility for outcomes, but avoiding attributions of blame
    - Expressing apologies and sorrow

- **How can hospitals (and residency programs) best support physicians? How can we support each other?**
  - Physicians may still feel uncomfortable acknowledging error and may feel significant shame
  - Encourage physicians to view error disclosure as a positive action due to the potential for changes to be made to reduce the risk for a similar error, which benefits future patients.
  - Hospital administrators as well as senior colleagues and peers can also help make the experience less painful by providing constructive feedback and personal support[4,17]
    - A study of 38 residents reported that learning from error was maximized when constructive feedback was offered[4]
    - An anonymous survey of anesthesiologists found the most supported reporting strategies included deidentified feedback, role models such as senior colleagues who openly encourage reporting, and legislated protection of reports from legal discoverability
  - The goal of feedback is to learn from mistakes and ensure that systems are improved for better patient safety in the future
  - It is important that everyone can see something positive coming out of the incident reporting[9]

- **Before we move on, does anyone have any experience with medical errors and/or disclosure? How did it go? What did you learn? Has anyone seen a medical error not disclosed? How did that make you feel?**

❖ **Case Part I Concludes**

- *You decide to disclose the error to DK. Sitting down next to him at the bedside, you explain that his confusion was caused by a low blood sugar, which happened because you mistakenly ordered insulin for him. You apologize and promise to report this to your hospital's process improvement committee to investigate how to prevent this from happening in the future. DK is understandably surprised and upset but expresses gratitude for your honesty and willingness to investigate this further.*

❖ **Case Part II –** Second Victim Syndrome (25 min)

- *60-year-old female with altered mental status is brought to the emergency department (ED) via ambulance. She is hypotensive, tachycardic and tachypneic. A colleague of yours immediately evaluates the patient, diagnoses her with septic shock, and places a central line into the patient's internal jugular vein due to an anticipated need for vasopressors. While feeding the wire into the vein, your colleague is interrupted by a nurse who has an urgent update on another patient. Your*

colleague turns away from the central line site momentarily to speak with the nurse, and when he returns to his work, he realizes that the wire is no longer present. He immediately realizes that he must have lost the wire in the patient. His concern is confirmed by chest xray, which demonstrates that the wire is in the vena cava and right atrium.

He consults the interventional radiologist on call, who, when told the story, responds "Really? You did that?". The patient is taken to the interventional radiology (IR) suite where wire is removed. She is then taken to the medical intensive care unit (MICU) where she gradually recovers from septic shock. After two weeks of being hospitalized, the patient is discharged to a nursing home. Meanwhile, you notice that your colleague has become withdrawn, sullen, and hesitates to pick up critically-ill patients when you are working together.

- **Discussion Questions with Teaching Points**
  - **What is the second victim syndrome?**
    - The second victim syndrome is defined as "the burden that healthcare providers feel after a patient is harmed, manifesting as anxiety, depression and shame"[1,2]
    - The condition is more common than we may think
      - A study done at the University of Missouri found that 1 in 7 clinical staff members reported anxiety, depression or a concern about their professional ability following a patient safety event in the past year[1]
      - Another study noted that over half of all healthcare providers have been a second victim[3]
  - **What are the "stages" of second victim syndrome?**
    - Scott, et al. identified 6 stages to second victim syndrome. Knowing the order of the stages is less important than understanding the possible challenges one may face
    - This syndrome exists on a spectrum like other syndromes such as grief
    - Many second victims will only experience some of these stages, while others may experience all[1]
    - The stages include:

      1. <u>Chaos and accident response</u> - the initial moment when the provider recognizes a mistake, often in the context of the patient acutely experiencing a bad outcome. The provider must act to stabilize the patient while also contending with the realization that their mistake (real or perceived) led to this.

      2. <u>Intrusive reflections</u> - this occurs after the patient is stabilized and often continues for days, weeks or even months. The provider may experience worries, ruminations, and mental "replays" of the incident that interfere with both their personal and professional lives.

      3. <u>Fear of rejection *versus* seeking confirmation</u> - the provider may worry about their peers' perceptions of what happened and of the providers' competence. The provider may also turn to and confide in trusted peers, seeking confirmation affirmation that the poor outcome was not entirely their fault.

They may try to identify other circumstances that contributed to the outcome, in an attempt to displace blame.

4. Enduring the inquisition - the provider may need to endure an investigation into the incident. These investigations may include peer review, quality improvement committees, licensing boards, or lawsuits.

5. Emotional first aid - the provider may seek a trusted mentor or colleague, or a mental health professional, for assistance processing the event

6. Final disposition - briefly, a second victim can "dropout", "survive" or "thrive" after the event. These will be discussed further below.

❖ **Case Part II Continues**

- *You continue to notice your colleague to be withdrawn. He also has become more irritated with his patients, has been hypervigilant about working up every patient with imaging and labs, and continues to refuse to do any invasive procedures, including central lines. He has also called in sick for work several times and has been showing up late nearly every shift.*

❖ **Discussion Questions with Teaching Points**

- **Does anyone in the group have experience with this that they would like to share? Do these stages seem familiar to you, or did you have a different experience?**

- **What are the potential consequences of being a second victim?**
  - Second victims can experience a range of symptoms, including anxiety about future errors, decreased job confidence and satisfaction, harm to their professional reputation, frustration, anger, and depression
  - Many report physical symptoms including fatigue, sleep disturbance, and muscle tension[4,5]
  - One study of nurse second victims found increased absenteeism and increased intention to leave their current job in this population, but these risks were decreased if the victims perceived that their organizations supported them through the response[6]

- **What are the possible outcomes after a provider becomes a second victim?**
  - The literature describes 3 primary outcomes for severe second victim syndrome
    - The victim can "drop out" and leave their current job, specialty, or clinical care altogether
    - The victim can "survive", persisting in their job but haunted by the events that occurred
    - The victim can "thrive" by choosing to turn the event into one that improves outcomes for future patients or providers via quality improvement initiatives or support systems for future second victims

- **How can we help others if we see them becoming a second victim?**
  - The most important thing you can do for another provider at risk for second victim syndrome is ensure that they obtain follow up[7,8]
  - Here is one suggested model for a "hot debrief" response after an incident involving a medical error
    - Get the second victim away from the clinical area to a private place as soon as safely possible
    - Use open-ended questions, such as "How do you feel about what happened?" "Do you want to talk about it?"
    - Listen and allow them to control the conversation - some may wish to keep the conversation brief, others may want to dissect the events
    - Give them follow-up: tell them you'll call them tomorrow to ensure they are doing well or refer them to talk to a trusted colleague or faculty mentor
    - Give them time alone to collect their thoughts before re-entering the clinical environment: offer to watch their patients for a few minutes
    - Some clinicians may need to go home, make this possible for them if you can
  - Again, ensure that a second victim obtains the psychological and professional help they need: this may come from a designated colleague or faculty within the department, or from a mental health provider

❖ **Case Part II Continues**

- *You notice your colleague having difficulties and you mention your concerns to him in a private setting. He does mention he has been struggling with his confidence since making the error and feels as though this one mistake has made him a "bad" doctor. You also tell him you have had made a similar error in the past, and that this is most certainly does not make him a "bad" doctor. He seems to respond well to your support and agrees to find help.*

- **How can the health care system address treating the second victim?**
  - Some hospitals, and residency programs, have developed a rapid response team of psychological caregivers to help do initial debriefs and to ensure that second victims are setup to receive ongoing care and follow up as needed[9]
  - At minimum, hospitals and residency programs should identify a support system for second victims
  - The literature proposed the following 3-tiered support system:

    1. <u>Emotional first aid</u> - to allow the second victim to debrief in the immediate time following the incident

    2. <u>Support by peers</u> - specific peers within each department who are either experienced or specifically trained in mentoring and supporting second victims. They can follow up in the days and weeks following the incident to ensure the victim is improving

3. Support by mental health professionals - may be required if the second victim's symptoms interfere with their professional or personal lives, or if symptoms fail to improve or worsen over time. Approximately 10% of second victims require this level of support[8]

- **As we conclude, please take a minute and write down what you would do if you noticed a colleague at risk for second victim syndrome. What would you do if you feel that you are becoming a second victim to a medical error?**

❖ **Case Concludes (10 min)**

- *After a few months, you notice a significant improvement in your colleague's mood and work effort. He seems more confident and is picking up more critical patients. You mention your thoughts to him, and he confides that he has been getting help and that your support was extremely helpful. He thanks you for your encouragement and kindness.*

❖ **Case Teaching Points Summary**

Physician Errors

- Medical errors are common, we are all fallible but personal and systems-related factors can make errors more likely to occur
- Personal factors including fatigue, burnout and depression can increase the likelihood for errors
- Systems with poor continuity of care or coordination between teams create a higher risk for errors
- Physicians may wish to avoid admitting errors due to incorrect beliefs that it will make them a "bad doctor" or that it could have a negative impact on their career
- However, disclosing errors can help patients obtain closure from the incident, may reduce the risk for lawsuits, can lead to changes that improve safety for other patients, and can help the physician heal from emotional trauma
- To disclose an error, find a quiet environment, honestly disclose what occurred, outline the plan to rectify harm and prevent recurrence of the error, accept responsibility and express apology
- Many states protect such statements of apology from litigation under "I'm sorry" laws

Second Victim Syndrome

- Second victim syndrome is the burden that healthcare providers feel after a patient is harmed, manifesting as anxiety, depression and shame
- There are many stages to second victim syndrome, including intrusive reflections, enduring professional and possibly medicolegal implications, and obtaining appropriate mental healthcare
- This syndrome exists on a spectrum and not every second victim will experience every stage
- Second victims can "drop out", "survive" or "thrive" from their experience

- You can help a potential second victim by taking them to a quiet area, allowing them to process the event as needed, and ensuring they have follow up with a trusted colleague, mentor or mental health professional. You should follow up with them the next day to see how they are doing
- Healthcare systems can support second victims by offering response teams to provide emotional “first aid”, building a peer support network, and offering support by trained mental health professionals.

❖ Facilitator Background Information

These two cases discuss common sources of unwellness for physicians: medical errors and second victim syndrome. The first case discusses the challenge for a physician who needs to admit a medication error to a patient and uses this as a springboard for discussing the risk factors for error, barriers and benefits to admitting error and tips for disclosing error.

The second case describes a colleague who made a mistake that caused potential patient harm, then displays signs of possible depression and lack of confidence. The questions discuss the definition and stages of second victim syndrome, another potential negative outcome stemming from medical error, and how to help colleagues who may be at risk for second victim syndrome.

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- **Authors:** Dr. Jennifer Robertson, Dr. Michael Zdradzinski, Dr. Michelle Lall
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Second Victim Syndrome

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