

The Defibrillator Misadventure: Facilitator's Guide

All physicians experience adverse events throughout their career. This vignette is a true account of a clinical situation encountered by a pediatrician during training. These experiences are valuable learning tools, and highlight many key concepts of patient safety.

Using an interactive format, have the group analyze the event using a “systems” approach:

- Setting: Busy night in ICU and ward, weekend, resident alone, middle of night (shift started 8am – 19 hours into shift, no sleep)

ISSUES: Workload, fatigue, lack of support (Human Factors, Environment)

- Defibrillator used successfully

ISSUES: inappropriate “comfort” with procedure (Human Factor)

- Resident called to ward

ISSUES: workload, distraction, fatigue, additional tasks (Human and Environment)

- Defibrillator shut off by bedside RN

ISSUE: process change – should stay on in situations such as this? (Use of protocols)

- Resident called STAT back to PICU for arrhythmia and deteriorating patient
- Bedside RN turned on defibrillator

ISSUES: defibrillator resets to adult values when used only in pediatric setting (Reset to zero would be safer) (Environment, knowledge)

- Charge nurse passed paddles to resident
- No confirmation of joule setting

ISSUES: communication/team work; fatigue; hurried (Team, human and environmental factors)

- “All clear” done
- Joules delivered – unusual patient response noted; arrhythmia resolved

- Large joules noted on machine
- Patient evaluated – ABC okay, no burn
- Discussion of need for incident report/informing attending; “refused” by nursing staff

ISSUES: lack of reporting of adverse event formally/informally

Lack of disclosure of event to family

Lack of just culture – culture of blame

Lack of patient safety culture – lost opportunity for system improvement

(Organization and team factors)

- Patient remained stable throughout the night without recurrence of arrhythmia

OTHER ISSUES: Emotional impact of this event on nurses and residents

This vignette highlights the negative impact of a culture of blame/person approach to adverse events. This results in lost opportunities to learn from adverse events, to discuss and then institute positive change to prevent future occurrence. The emotional toll on those involved is significant.

How would the series of events differed if this had occurred in an environment where the concepts of just culture and patient safety are embraced?

Create a list of ways that the outcome of this event would have varied in this different setting. This will demonstrate the impact that culture has on patient safety and other outcomes. You may use small group work to facilitate the discussion.

Safety Competencies from Domain 1 addressed with this vignette:

1.3 Personal limitations

- Ask attending for help as very busy night (but against cultural norm)
- Fatigue
- Loss of focus – distracted by other event on ward

1.4 – Disclosure to family and reporting of adverse events

- Reporting didn’t occur – fear of reprisal, lack of just culture, “blame” – the Person approach vs. System Approach
- Disclosure – non-existent in the environment

1.5 – report unsafe processes

- Opportunity lost to address

1.6 – participate actively in event and close call reporting, event analysis and process improvement

- Just culture/system approach would have allowed this to occur

1.7 – exchange feedback with colleagues on safety issues on an ongoing basis in an open manner

- Prevented by lack of just culture and patient safety culture

1.9 – Recognize clinical situations that may be unsafe and support the empowerment of all staff to resolve unsafe situations

1.10 – just culture

1.11 – advocate for improvement in system processes to support professional practice standards and the best patient care

- Prevent event by changing defibrillator

2.4 – risks posed by personal and professional limitations

- Very busy

2.6 – the nature of systems and latent failures in the trajectory of adverse events

- Defibrillator sets to adult levels

2.7 – The emotional impact of adverse events on patients, families and health care professionals

- Resident – fear, embarrassment, guilt, shame

- Nurses – culture of blame, fear

2.8 – Methods by which health care professionals can advocate for patient and health care system safety

- Defibrillator – pediatric friendly – factory setting of ZERO

- Educating others

2.9 – Just culture – non-existent in this setting

2.10 – complex adaptive system with vulnerabilities

- Senior resident busy

3.3 – Analyze an event/how can be avoided

3.5 – share information on adaptations to practices and procedures that increase safety for specific individuals or situations