**Executive Summary**

**Leadership and Peer Support of Surgeons Post-Adverse Event**.

**Problem Statement:** This dissertation addresses the general problem of a nationwide surgeon shortage (Mahoney et al., 2020; Oslock et al., 2022) and the specific problem of a lack of scholarly consensus on best practices for supportive peer, leadership, and institutional actions after adverse events (Busch et al., 2020; Chan et al., 2017; Finney et al., 2021; Harrison et al., 2014; Muethel et al., 2023; Neft et al., 2022; Rivera-Chiauzzi et al., 2022; Sexton et al., 2021; Seys et al., 2023; Wade et al., 2022)..

**Literature Review:**

* Surgeons are prone to burnout due to the overwhelming need and other inherent occupational stressors (Shanafelt et al. 2009).
* Surgeons experience a negative response to interoperative adverse events and tend to minimize their distress and overcompensate in future cases (Luu et al. 2012).
* Pinto et al., 2014 report that 36.2% of surgeons experience degrees of acute traumatic stress after poor patient outcomes.
* Estimates as high as 14.4% of all inpatient procedures have adverse events, significant difficulties, or errors, and 3.6% end in disability or death (Anderson, 2013).
* Pre- and post-surgical care are chronic stressors, while adverse events are acute stressors (Orri et al. 2015).
* Peer Support is preferential to professional help for surgeons (Harrison et al., 2015).
* Covid negatively impacted surgical training (Aziz et al. 2020).
* One in five general surgery residents will leave training to pursue alternative careers (Hewitt et al., 2021).
* Comparing surgeons to the general population, a history of mental disorders, alcohol abuse, and civil or legal issues increased the likelihood of death by suicide (Jennings et al., 2022).
* Surgeons are 289% more likely to be sued than the average citizen (Kinslow & Elkbuli, 2021).
* Medical error (in the past three months) is associated with higher rates of depression, anxiety, PTSD, and hazardous alcohol consumption in med students, surgical trainees, and practicing surgeons (Collins et al., 2021).
* Professional fulfillment is found both through the practice of surgery and by having a supportive, well-functioning environment and dedicated team to practice with (Walker et al., 2022).
* Bohnen et al. (2019) explored surgeons' second victim experience and made a call to action for organizational response to the emotional suffering of surgeons.
* Two articles regarding surgeon-specific peer support programs reported support by surgeons; however, neither reported best practices for surgeon support response (El Hechi et al., 2020; Fall et al., 2024).
* Surgeons with burnout are more likely to experience errors, have less job satisfaction, and are more likely to consider early retirement as a solution, contributing to the surgeon shortage (Walker et al., 2022).
* Senior surgical leadership engagement and the provision of resources improve patient outcomes and surgical safety (Hu et al., 2020).

This surgeon shortage is exacerbated by the high number of surgeons leaving the practice of surgery and a stagnant number of surgical trainees (Mahoney et al., 2020; Oslock et al., 2022). In addition, surgeons leave the surgery practice due to burnout as a result of factors such as a lack of professional fulfillment (Balch & Shanafelt, 2010; Etheridge et al., 2023; Shanafelt et al., 2009; Sauder et al., 2022) and the combined effects of experiencing occupational hazards (Burns et al., 2021; Vitous et al., 2021; Walker et al., 2022). Adverse events and patient complications are two occupational hazards that negatively impact surgeons (Berman et al., 2020; Kaur et al., 2019; Lin et al., 2023; Patel et al., 2010; Pinto, 2014; Seys et al., 2012; Srinivasa et al., 2019).

This is important because when adverse events occur, surgeons experience an acute stress reaction called a *second victim* *response*, which is proven to impact them negatively (Berman et al., Bohnen et al., 2019; Busch et al., 2021; Chrouse et al., 2018; Georgiou et al., 2017; Gupta et al., 2022; Han et al., 2017; Luu et al., 2012).

In addition to the challenges practicing surgeons face, residents in the surgical specialty are also uniquely vulnerable due to the inherent invasiveness of surgery, which creates a sense of personal responsibility when patient complications, adverse events, or errors happen (Bongiovanni et al., 2015; Elmore et al., 2016; Felton et al., 2021; Jackson et al., 2019; Srinivasa et al., 2019; Sullivan et al., 2013). As a result, healthcare organizations and teaching hospitals have institutional second-victim programs (Marr et al., 2021; Wade et al., 2022). However, additional evidence on best practices for addressing the second victim phenomenon among surgeons is needed (Busch et al., 2020; Chan et al., 2017; Finney et al., 2021; Harrison et al., 2014; Muethel et al., 2023; Neft et al., 2022; Rivera-Chiauzzi et al., 2022; Sexton et al., 2021; Seys et al., 2023; Wade et al., 2022).

**Methodology:** This qualitative phenomenological study will interview surgeons from across the US for 15-30 minutes to address the following research questions.

**Research Questions:**

RQ1: What are the best practices for helpful conversations/actions amongst surgeons and surgical trainees following an interoperative adverse event or medical error?

 Four secondary questions will be used to answer this question:

RQ2: What peer words/actions do surgeons describe as most helpful after experiencing an adverse event or medical error?

RQ3: What peer words/actions do surgical trainees describe as most helpful after experiencing an adverse event or medical error?

RQ4: What leadership and institutional support do surgeons consider most helpful after an adverse event or medical error?

RQ5: What leadership and institutional support do surgical trainees consider most helpful after an adverse event or medical error?

The study will run from 10/1/24 to 11/29/24 and seek 20-30 participants. The PI will audio record, code demographic information, and transcribe qualitative data. The analysis will utilize Atlas TI qualitative software and be saved on a password-protected secure platform and backed up on a secure flash drive. Abilene Christian University Internal Review Board Approval # 2024-168

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