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Second-victimhood Among Anesthesia Providers & the Effects on Patient Outcomes

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Introduction

At a tertiary care center in eastern Illinois, the anesthesia providers can become second victims after adverse perioperative events. A second victim refers to a healthcare professional involved in an unexpected adverse event, medical error, or patient-related injury. The healthcare provider is considered a victim due to being traumatized by the event (Finney et al., 2021). These tragedies can result in future disruptions in patient care and patient safety. Providing education and implementing an interventional protocol can support the staff after such events. In addition, a supportive culture and peer support have been shown to promote safe patient outcomes.

Literature Review

Research suggests 1:20 patients suffer from an avoidable mistake, with rates being 2 and 4 times higher when looking at surgical and critical patients, respectively (Arnal-Velasco & Barach, 2021). Furthermore, when a medical error harms a patient, secondary harm can occur to the person responsible for the mistake (Mccay & Wu, 2012). Dr. Albert Wu first described the term “second victim” after witnessing the distress experienced by a young resident who made a medical error and was then subjected to ridicule by his peers (Jones & Treiber, 2018).

In 1956, the first Certified Nurse Anesthetist (CRNA) became credentialed as an advanced practice registered nurse providing anesthesia (“Certified registered nurse anesthetists fact sheet,” 2021). CRNAs qualify to make independent judgments regarding all aspects of anesthesia care and practice with a high degree of autonomy and professionalism (“Certified registered nurse anesthetists fact sheet,” 2021). The degree of independence among CRNAs varies by state regulations but ranges from physician supervision to full autonomy (Callan et al.,

2021). CRNAs in any state potentially struggle with a lack of recognition, a high number of hours, inadequate work-life balance, and limited professional advancement, which all contribute to high levels of stress within the field (Andrade & Dantas, 2015).

Gautam and Shrestha (2020) analyzed a myriad of perioperative adverse events that include difficult intubation, airway trauma during intubation, esophageal intubation, airway obstruction, bronchospasm, laryngospasm, aspiration, bradycardia, tachycardia, hypotension, hypertension, failed spinal anesthesia, high spinal block, post-dural puncture headache, hypothermia, wrong drug, drug overdose, inadequate reversal of paralytic, seizure, and failure to turn on oxygen. Second victims of perioperative events subconsciously choose to survive, thrive, or drop out of the profession (Daniels & McCorkle, 2016). Sachs & Wheaton (2021) found that approximately 79% of healthcare providers experienced second victimhood symptoms; these individuals were twice as likely to quit their jobs, miss work, and even commit suicide.

Mccay & Wu (2012) recommend filing an incident report, seeking peer support, and finding professional support until symptoms resolve after experiencing second victimhood. Sachs and Wheaton (2021) recommend automatic referrals to trained professionals for any provider involved in any case under quality review. In addition, Bohnen et al. (2019) found that 82% of people who spoke with a supportive peer reported a sense of rejuvenation and personal resiliency instead of failure and vulnerability. Finally, peer support programs allow providers a confidential option to reach out without fear of litigation and be reassured they are not alone in their experience (Bohnen et al., 2019).

The risk for anesthesia providers amasses due to a work environment that focuses on productivity; tremendous pressure is placed on the provider to get the next case going, regardless of any adverse event that may have occurred to the provider (Wands, 2021). While peer support

remains the most effective coping mechanism, Ozeke et al. (2019) state that culture change could ultimately have a more significant impact than any single intervention; blaming or punishing individuals for errors does not address the cause of the adverse event, nor does it prevent the error from occurring again (Ozeke et al., 2019). Having leadership support staff via a *just culture* attitude surrounding patient safety event investigations could help minimize the shame associated with being involved in a medical error (Burlison et al., 2021).

Methodology

Thirty anesthesia providers from a central Illinois hospital viewed the presentation, completed the survey, and ranked the scenarios on the Likert scale. The participants were evenly divided by age and gender, with 47% female and 53% male. The sample size was primarily composed of master's degree nurse anesthetists, with only 27% having a doctorate in nursing anesthesia. A large portion of the participants (40%) had more than 10 years of experience, and only 6% had less than 2 years of experience as anesthesia providers.

Institutional Review Board approval was submitted and deemed Not Human Research. Consent for participating in the project was obtained before the presentation of the PowerPoint. Risks included the time to listen to the presentation and complete the surveys.

A PowerPoint educational tool was utilized to increase knowledge regarding second victimhood for anesthesia providers, followed by a questionnaire and the Second Victim Experience and Support Tool (SVEST). The survey collected demographic information, willingness to implement change and preferred type of support consisting of eight multiple-choice questions. Two of these questions had an open-ended option if participants did not feel any of the options best suited them individually. The Likert scale consisted of ten subcategories: Psychological distress, physical distress, colleague support, supervisor support, institutional

support, non-work-related support, professional self-efficacy, turn-over intentions, absenteeism, and desired forms of support. Each of these subgroups contained 2-7 scenarios to be ranked on a scale of 1-5.

Stakeholders for this project included anesthesia providers, patients, family and friends of patients, risk management, pastoral care, and mental health providers. This project affected the main hospital facility and potentially its satellite organizations. American Association of Nurse Anesthesiology provided valuable information regarding mental health and second victimhood amongst anesthesia providers. Threats for this project include resistance to change and a lack of actively engaged staff members.

Evaluation

All participants (100%, n=30) surveyed found the presentation helpful in increasing knowledge regarding second victimhood, and the majority (60%, n=18) admitted to having experienced second victimhood. Regarding support methods that offer the most benefit, 96.7% of respondents chose talking to a trusted peer. Second Victim Experience and Support Tool (SVEST) results detailed the degree to which anesthesia providers feel they have experienced second victimhood. An average score was calculated from each participant's ranking of each scenario offered.

Psychological distress was admitted more than physical distress; however, participants still reported physical distress, including sleep disruption. Outside of the workplace, all participants reported utilizing the love of close friends and family members to offer emotional support after their second victimhood experience. Other key takeaways include participants reporting that the stress of situations involving second victimhood made them want to quit their job. The ability to immediately take time away from the unit was unanimously reported as a

desired form of support. A mentor program should be considered so that staff knows they have a trusted colleague to discuss instances of second victimhood.

Impact on Practice

The immediate impact is increased awareness and knowledge about second victimhood in anesthesia providers. Bringing awareness to this statistic can encourage staff to seek help, leading to greater staff retention in the long term. To further impact the long-term benefits, awareness and treatment resources about the subject matter should be continued yearly. Doing so will allow the information to reach new staff while reinforcing knowledge to repeat staff. The project is easily replicated without great expense or significant time commitment. Supporting anesthesia providers improves patient outcomes since this support results in less burnout and mental health disorders.

Conclusions

Nurse anesthetists frequently experience stress related to the workplace. Inadequately dealing with chronic stressors can have negative implications, such as leaving the career or even suicide. However, studies show that having supportive management and a trustworthy network of peers improve the outcomes for healthcare providers experiencing second victimhood symptoms. Further research should focus on preventing second victimhood symptoms and how to mitigate the adverse effects associated with second victimhood. In addition, more research is needed regarding how these adverse effects on healthcare workers impact patient care outcomes.

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