

I. Specific educational aims:

1. To develop a longitudinal curriculum aimed at introducing important concepts surrounding peer support as a psychological first aid tool.
2. To investigate how the incorporation of a peer support curriculum impacts resident ability to emotionally process adverse events and feel equipped to support their peers by the end of their training.
3. To utilize an educational framework to evaluate and improve the Resident Peer Support Curriculum

II. Project rationale:

Nearly every practicing anesthesiologist will experience at least one serious adverse event or perioperative death over the course of their career, which can result in emotional sequelae that can persist for weeks to months after the event¹⁻³. It is not uncommon to experience guilt, shame, anxiety, fear of judgement by colleagues, reliving of the event, self-doubt, and/or hypervigilance. The emotional distress that follows a serious perioperative event, if unaddressed, leads to increased burnout, decreased workplace satisfaction, or leaving the workplace altogether. Understanding positive coping strategies and being able to share one's feelings with a trusted colleague in the days to weeks following an event may mitigate the impact of these events on anesthesiologists^{2,4}.

A critical, much utilized intervention is the role of a colleague peer supporter. Peer support programs have been shown to be effective, highly desired resource at all career stages⁵⁻⁷. Survey data, including one that we administered within our own department here at Stanford in 2021 (internal, unpublished), have found that after adverse events, the resource most desired by a second victim is to discuss with a respected peer^{6,8}. A study of interest in wellness topics amongst academic anesthesiology department chairs, found that, "support after adverse events" ranked second and "peer support" ranked sixth in interest⁷. In addition to a formal peer support program, we are often asked informally by our colleagues to provide peer support. However, in our survey, we found that many respondents did not feel comfortable acting as a peer supporter or talking about difficult cases with colleagues and trainees.

While Anesthesiology is a specialty where the training is focused on "the avoidance of disasters", the typical residency curriculum does not include the essential skills needed on how to develop effective coping mechanisms in the aftermath of an adverse event¹, and only limited literature on leading a post-event debrief⁹. As we train future anesthesiologists and leaders, it is essential that our trainees graduate with a basic understanding of skills needed to support colleagues and trainees after an adverse perioperative event, regardless of their future practice environment.

A successful pilot project was done 2022-2023 within the anesthesia department to create a one-time "Introduction to Peer Support" workshop for the senior residents. A single, 90-minute workshop comprised of lecture, interactive discussion and practice scenarios was developed and presented to 21 anesthesiology residents. Prior to this workshop, approximately two-thirds of attendees had not had prior exposure to the basics of peer support skills. Survey results were promising, as evidenced by the positive feedback and a consistent increase in both the post-survey knowledge and training effectiveness assessments. We will use the results and feedback as a foundation to expand and develop a longitudinal curriculum that will cover several topics throughout the training period.

III. Approach:

Lecture series

A survey will be sent out to trainees and recent graduates in the fall of 2023 to assess the current attitudes and baseline knowledge and familiarity regarding post-event peer support skills. Using this data as a baseline as well as feedback from the pilot workshop, we will develop a series of 3-4 lectures to be given to each year, covering topics important to peer support including grief, conflict management, active listening, partnering, and focusing on strengths. There will also be additional supplemental video material and scenarios. The lectures will be given in the spring of 2024.

Curriculum evaluation

Once the curriculum has been completed, to evaluate its effectiveness and identify areas for improvement, we will select an established framework to evaluate the longitudinal lecture series. Brief online surveys will be administered via Qualtrics after each lecture which will include questions to assess training effectiveness, knowledge assessment, and well-being measures. Additionally, graduating residents will be invited via email to participate in 30-minute semi-structured qualitative interviews to further detailed information about their experience and evaluation of the curriculum. Interview questions will be developed in conjunction with the survey questions to address the program, and participants will be given \$10 gift cards for their time. The qualitative surveys will be conducted and transcribed with the assistance of a paid research assistance using TMA grant funding.

IV. Timeline and plan for implementation:

July- Aug 2023 Apply for IRB approval.

Sept 2023 Baseline survey Distribution

Aug- Dec 2023 Development of curriculum materials (3 days)

Feb 2024 Train research assistant (0.5 days)

Mar-Apr 2024 Lecture dates for Anesthesia Residents, collect surveys (0.25 days x3) *May-*

June 2024 Conduct structured interviews by Research Assistant

July 2024 Qualitative & Quantitative Data Analysis, Submit to National Conference *Post-Grant*

Period Manuscript/ Conference Preparation

V. Anticipated work product:

This anticipated work product includes a structured toolkit for a longitudinal resident curriculum on peer support and managing after adverse events. For our specific case, we will be integrating this curriculum into the larger anesthesiology resident well-being curriculum but can easily be adapted for other specialties or even institutions outside of Stanford. There will be an additional component which will be a qualitative and quantitative evaluation of the developed curriculum. To our knowledge, this is will be the first curriculum of its kind for an anesthesia residency program.

VI. Evaluation plan:

Project success will be defined as completion of curriculum and adoption into the Stanford Anesthesia resident curriculum. Additionally, we will evaluate the effectiveness and acceptability of the curriculum using an established framework to perform curriculum evaluation. We will be collecting pre- and post surveys, as well as conduct in-person or zoom interviews to obtain more focused and specific qualitative data. The surveys will collect demographic information, test improvement in knowledge pre- and post lecture, and ask about curriculum effectiveness. Data will be analyzed with statistical assistance from the Dept of Anesthesiology, Pain and Perioperative Medicine.

VII. Dissemination of results:

I aim to publish the novel curriculum materials in a repository such as *MedEdPortal* so that other institutions can access the resources and adapt it to their educational needs or specialty. The results of the curriculum evaluation will be disseminated through Stanford and national academic medical communities through conferences such as the annual Stanford Medical and Bioscience Education Day, the Society for Education in Anesthesia, or AAMC/ACGME conferences.

References

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