Burnout among Anesthesiology Department Staff before and after Wellness Initiative Intervention

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Introduction:
Utilizing the MBI to assess an individual's risk for burnout can potentially lead to early intervention, thus decreasing the aforementioned risks to the patient and the physician. We have utilized the MBI in our academic Anesthesiology department in an attempt to quantify the incidence of individuals at risk for burnout, in addition to the associated trends of burnout, depersonalization, and personal achievement.

Methods:
The subjects were Anesthesiology staff and included Attending Physicians, Resident Physicians, and Certified Registered Nurse Anesthetists. The study specifically excluded resident physicians (CA-1) in their first three months of Anesthesiology training and student nurse anesthetists. We enrolled eighty participants. The study was designed as a snapshot, evaluating the level of burnout among staff in three different phases. In phase one the level of burnout was assessed as a baseline. In Phase 2, after initial burnout assessment, we introduced measures to reduce burnout as outlined in the table below.

In Phase 3, approximately 8-9 months after the implementation of the aforementioned burnout reduction measures, we assessed burnout levels once again to see if there was any reduction in burnout among our staff. Burnout Scores in phase 1 were compared to burnout scores in phase 3. Scores were analyzed by the Wilcoxon rank sum test for not normally distributed data. Correlation between each section was assessed by the pair wise correlation method; P value < 0.05 was considered significant. Total scores for each section of the MBI were calculated for each participant. Results were then grouped by provider group and averages were calculated for each respective group.

Results:
Phase 1: Of the eighty enrolled participants, fifty-two sets of responses were used for analysis. The data of the remaining twenty-eight participants were excluded as the participant either backed out of the study or did not complete the MBI in full.

Phase 2: Several measures were introduced to alleviate or reduce burnout.
Phase 3: We did not see significant changes in scores from either category after the interventions. Participants with high personal achievement score once again scored low on burnout and depersonalization score.

Discussion:

Our department demonstrated a low level of burnout, a moderate level of depersonalization, and a moderate level of personal achievement. Scores did not differ between different provider groups. Those with lower levels of burnout suggested by a low score in Section A scored highly in the personal achievement Section. There was no correlation between burnout and years in practice. A strong positive correlation was noted between burnout and depersonalization scores ($r = 0.70$). A weak negative correlation was noted between burnout and personal achievement ($r = -0.26$). Similarly, a weak negative correlation was also noted between depersonalization and personal achievement ($r = -0.39$). It can be inferred that a higher level of personal achievement can be protective against burnout. Those at risk for burnout would likely show signs of depersonalization during encounters with patients and colleagues. Despite the introduction and implementation of measures to alleviate burnout and enhance personal achievement, we did not see a significant difference in any of the 3 categories after the intervention. It is noteworthy, however, that participants with high personal achievement scores once again had low burnout and depersonalization scores. The significance of these interventions should not be ignored. It is possible that other interventions to combat burnout and depersonalization need to be researched and utilized. It is also possible that more time is needed utilizing the interventions before a significant change can be seen. Given that our department showed low levels of burnout even prior to the interventions, it is possible that other departments with higher levels of burnout at baseline could benefit even more from the interventions described. At the very least, these interventions helped to raise awareness of burnout and promote overall wellness within our department.