

Saint Francis Hospital and Medical Center

Overall Goal/Abstract

Objective: To evaluate the feasibility and impact of an organized mindfulness-based intervention on the mental well-being of residents-in-training at St. Francis Hospital and Medical Center (SFHMC)

Physician burnout has long been recognized as a problem within the medical community, often leading to career dissatisfaction and physician suicide. While many acknowledge its impact, few solutions have been born as a result. It is time to actively address this problem with tangible methods that can be implemented at the resident level and transitioned into post-residency practice.

Background

This is a crossover study that will take interested residents and randomize them group that will undergo a yoga-based mindfulness activity or to a control group that will discuss mindfulness and burnout in residents and physicians in a journal club-type setting. There will be a post-intervention survey demonstrating the impact that the intervention has had. The initial control group will undergo the same intervention while the intervention group will discuss mindfulness and burnout in a journal club-type setting. A post-test will be given to all participants to determine the effect of the intervention on residents-intraining at SFHMC.

Vision Statement

We would like to see a wellness curriculum implemented at residency programs across the country that will provide residents with the tools to sustain their self-care in residency and successfully transition to graduated physicians who have the means to cope with the daily stressors of the medical field.

We aim to change the dynamics of residency and medicine such that it becomes an experience to enjoy rather than a burden to bear.

Materials/Methods

Baseline data were collected using the biannual resident wellness questionnaire conducted by the hospital. The survey is designed to give a snapshot of resident wellness within the context of the GME program. Respondents are anonymous, and the questionnaire does not capture individually identifiable data. Data included demographics (age category, gender, minority status, PGY), and select questions focused on the following: Burnout (brief Maslach Burnout Inventory) and a self-reported measure; resilience (scale), mindfulness (scale), self-compassion (scale), social support, and self-reported health behaviors (eating, sleep and physical activity). Descriptive statistics included frequencies, as well as means, and standard deviations for continuous variables. Other statistics included Chi-square, Mann Whitney U test, Kruskal-Wallis test, and pearson correlation.

Barriers Encountered/Limitations-

Survey content is always a reasonable area for improvement. There are many components of burnout and postgraduate training and demographics that tailor an individuals' experiences, but were omitted in the interest of keeping residents engaged in the survey. We could have allowed more time for survey completion in order to improve total numbers and data strength.

Creating a New Mindfulness-Based Wellness Curriculum: The Beginning

Kendra R. Mahoney, MD; Brian J. Riley, DO; Rebecca Crowell, PhD; Kendra Williams, BS

St. Francis Hospital and Medical Center

Hartford, Connecticut

Results

| to a | |
|------|--|

Participant data is shown in Table 1 (below). Maslach achievement and depersonalization; mindfulness; resilience; self-compassion, anxiety, depression, or distress did not differ significantly by gender, age, PGY, minority status, caregiver status (p < 0.050). Maslach emotional burnout differed significantly by PGY, with seniors having significantly lower emotional burnout scores (p= 0.043). Mindfulness was positively associated with resilience, and negatively associated with anxiety, depression, distress raw scores; emotional burnout; and depersonalization. No significant association was shown between mindfulness, Maslach achievement.

| Table 1. Participant Characteristics | |
|---|--|
| Demographic Characteristics (n=61) | Percent (%) |
| Female (%) | 58.3 |
| Ethnic Minority | 46.6 |
| Primary Caretaker for children or others in the home | 21.7 |
| PGY 1 or 2 | 70.5 |
| Age 25 to 30 | 51.4 |
| Specialty (OB-GYN or Internal Medicine) | 52.5 |
| Health Behaviors and Wellness (n=60, unless noted) | Percent (%) |
| Skip meals at least several times per week (n=54) | 53.7 |
| Consider nutritional value of food choices infrequently | 43.1 |
| physical at least 3 times per week | 25.0 |
| Sleep for at least 6 hours per day | 70 |
| Positive for anxiety on the PHQ-4 | 30 |
| Positive for depression on the PHQ-4 | 16.7 |
| PHQ-4 moderate to severe distress | 20 |
| Burnout, Self-compassion, and Resilience (n=53) | Median or Mean (+/ 1 to 6. Higher score : |
| *Maslach Achievement Score (median) | 5.70 |
| *Maslach Depersonalization Score (median) | 2.70 |
| *Maslach Emotional Burnout Score (median) | 4.38 |
| Self-compassion score | 3.47 (+/- 0.74) |
| Resilience score | 3.80 (+/- 0.72) |
| *Median is used because scores are not normally distributed | |

Bibliography

Epstein, Ronald M., and Michael S. Krasner. "Physician Resilience." Academic *Medicine*, vol. 88, no. 3, 2013, pp. 301–303., doi:10.1097/acm.0b013e318280cff0.

Rosdahl, Jullia, et al. "Stress and Burnout in Residents: Impact of Mindfulness-Based Resilience Training." Advances in Medical Education and Practice, 2015, p. 525., doi:10.2147/amep.s88580.



Alliance of Independent Academic Medical Centers

| Table 2. Pearson Correlations | | | | | | | | | | | |
|---------------------------------|------------------------|---------------------|--------------------|--------------------|-------------------------|-----------------|------------------------|--------------------------|---------------------------------|---------------------|--|
| | | Resilience | Anxiety | Depression | Distres s | Mindfulnes s | Maslach achievement | Maslach depersonalize | Maslach Emotional Burnout | Self- compassion | |
| Resilience | Pearson Correlation | 1 | 439** | 507** | - .506 ^{**} | .405** | .056 | 292* | 423** | .532** | |
| | Sig. (2- tailed) | | .001 | .000 | .000 | .003 | .692 | .035 | .002 | .000 | |
| Anxiety raw score | Pearson | 439** | 1 | .716** | .938** | 295* | 072 | .306* | .620** | 256 | |
| | Sig. (2- tailed) | .001 | | .000 | .000 | .036 | .604 | .026 | .000 | .065 | |
| Depression raw score | Pearson Correlation | 507** | .716** | 1 | .914** | 294* | 076 | .363** | .612** | 326* | |
| | Sig. (2- tailed) | .000 | .000 | | .000 | .036 | .587 | .008 | .000 | .017 | |
| Distress raw score | Pearson Correlation | 506** | .938** | .914** | 1 | 320* | 079 | .356** | .663** | 310* | |
| | Sig. (2- tailed) | .000 | .000 | .000 | | .022 | .569 | .009 | .000 | .024 | |
| Mindfulness | Pearson Correlation | <mark>.405**</mark> | <mark>295</mark> * | <mark>294</mark> * | <mark>320</mark> * | 1 | .161 | <mark>295*</mark> | <mark>397**</mark> | .264 | |
| | Sig. (2- tailed) | <mark>.003</mark> | <mark>.036</mark> | <mark>.036</mark> | <mark>.022</mark> | | .260 | <mark>.037</mark> | <mark>.004</mark> | .061 | |
| Maslach achievement | Pearson Correlation | .056 | 072 | 076 | 079 | .161 | 1 | 246 | 081 | 071 | |
| | Sig. (2- tailed) | .692 | .604 | .587 | .569 | .260 | | .076 | .561 | .611 | |
| Maslach depersonalize | Pearson Correlation | 292* | .306* | .363** | .356** | 295* | 246 | 1 | .646** | 179 | |
| | Sig. (2- tailed) | .035 | .026 | .008 | .009 | .037 | .076 | | .000 | .204 | |
| Maslach Emotional Burnout | Pearson Correlation | 423** | .620** | .612** | .663** | 397** | 081 | .646** | 1 | 353** | |
| | Sig. (2- tailed) | .002 | .000 | .000 | .000 | .004 | .561 | .000 | | .010 | |
| Self- compassion | Pearson Correlation | .532** | 256 | 326* | 310* | .264 | 071 | 179 | 353** | 1 | |
| | Sig. (2- tailed) | .000 | .065 | .017 | .024 | .061 | .611 | .204 | .010 | | |
| | | | | - | - | - | | | | | |

 Correlation is significant at the 0.01 level (2-tailed prrelation is significant at the 0.05 level (2-tailed

Success Factors and Lessons Learned (Discussion)

The cooperation and collaboration of residency program directors in distributing the preliminary survey was key to the success of this project.

The data that we have gathered thus far confirms that we are moving in the right direction and that if we develop this mindfulness-based wellness curriculum, we will have addressed a serious adverse outcome of postgraduate medical training

Conclusions

Final thoughts: We are excited to have acquired preliminary data that confirms the need for a mindfulness-based wellness curriculum. With this information we hope to tailor a program that will assist residents with recognizing and addressing burnout in a proactive manner.

Overall experience: This has been a positive and affirming experience. We are excited to begin working with residents to address their needs and goals as they relate to residency and self-care. This has been a positive collaborative experience amongst the different residency programs, and we look forward to strengthening relationships between residents, attending physicians, staff, and patients at SFHMC.

- SD) scores range from = more of the parameter