A pilot Study on Resilience, Stress, and Burnout in Trainee Physicians after Faculty Delivered Coaching Sessions- Mixed-Method Longitudinal Survey Study

Jennifer Irick MD, Parampreet Kaur MD, Michael Robert Irick MD, Jill Stoltzfus, Ph.D., Kushee-Nidhi Kumar, MD MS, James Orlando Ed.D

INTRODUCTION: Background

- Physicians experience high levels of burnout and stress, and trainee physicians are a particularly high-risk group.
- 65.8% residents reported burnout especially during COVID. By the end of 2021(21 months of the pandemic), the physician burnout rate spiked to a new height that was greater than previously monitored.
- 3,588 second-year resident physicians were surveyed and found burnout occurred in 45.2% . Nearly 15% regretted their career choice.
- Frank suicidal ideations are reported in 5-10% of physicians.
- Overall doctor burnout costs the US $17 BILLION ANNUALLY.
- Burnout has been linked to a reduction in the quality of care, prescription errors, and diminished professionalism. Burned out doctors twice as likely to be involved in a patient safety incident

ACGME recommends, medical educators should take an active role in supporting interns with respect to self-care, communication, and leadership.

To achieve this, a team of SLUHN colleagues from GME, Organizational Development, and Behavioral Health planned a pilot program to assist PGY 1s in their transition from UME to residency in GME.

Aim/Purpose/Objectives

- To improve the resilience of residents during the first year of the transition from UME to GME
- To decrease stress and burnout during this time of significant transition

METHODS: Interventions/Changes

IRB approved two-arm study to compare resilience and burnout among first year residents participating in intern transition program.

Interventional group who participated in both online sessions and faculty coaching (16 EM and Psych from Anderson) was compared with Control group(16 ED Bethlehem and FM Anderson) who participated only in workshop sessions but no formal coaching sessions by faculty.

Transition program- A two-pronged program consisting of formal coaching by residency faculty members and online workshop sessions for first-year residents.

Participants included faculty members as coaches and residents from the Emergency Medicine and Psychiatry residencies at the Anderson campus, and Emergency Medicine Bethlehem and Family Medicine Anderson.

Coaches were assigned by their respective program directors to mentor first-year residents from the other program (i.e., ED faculty coaches met with Psychiatry residents, and vice versa), with the understanding that an inter-program coaching format might lessen the discomfort amongst residents in sharing concerns and other personal information.

METHODS: Measures/Metrics

Coaches received formal training from an external consultant with practical hands-on tools. Coaches also participated in debriefing sessions to discuss their perceptions of the experience.

Online following six workshops' topics were determined by previous first-year residents via REDCap surveys given to all residents.

1) Helping Patients Manage Chronic Health Conditions: A Collaborative Approach **2)** Introduction to Crucial Conversations **3)** Engaging Patients in Shared Decision Making **4)** Crucial Conversations, “Part I” **5)** Crucial Conversations, “Part II” **6)** Effective Time Management

Validated survey instruments were compared between two groups both pre and post intervention

1. **Professional Quality of Life(ProQOL)**-Compassion Satisfaction, Burnout, Secondary Traumatic Stress;
2. **Resilience Scale**; **Intolerance to Uncertainty Scale**-Prospective Anxiety, Inhibitory Anxiety;
3. **Single Item Measure of Burnout**

RESULTS

➢60% of our residents were between 26-30 years followed by 34% between 31-35 years and only 6% were more than 40 years old. 69% were males

➢97% of the residents had graduated from medical school within one year with only 3% who had graduated from medical school for more than 4 years

➢50%(n=16) went through coaching sessions with a faculty mentor while other 50%(n=16) with no formal coaching sessions.

➢Compared to the interventional group, the control group residents had higher scores on measures of burnout, secondary traumatic stress, and inhibitory anxiety, as well as lower scores for measures of resilience. (Table) at the end of transition program

➢**Feedback from coaches and residents**

1. The first 1-2 coaching sessions were most meaningful, given the perception that ***“there was more to talk about.”***

2. It was difficult for ED first-year residents to be available for their coaching sessions because they had to use their days off from work given the nature of their residency scheduling. They preferred to use their time off to relax with family rather than participating in “mandatory” coaching sessions ***“I didn’t want to waste her time because she already has a lot of help.”***

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RESULTS: Continued

Survey Instruments (Range of Possible Scores)	Interventional Coaching Sessions Provided Median (Range)	Control: No Additional Coaching Sessions Median (Range)
Professional Quality of Life (ProQOL)		
Compassion Satisfaction (CS) (10-50)	38(28-44)	41(25-44)
Burnout (BO) (10-50)	**20.5(11-25)**	27(18-32)
Secondary Traumatic Stress (STS) (10-50)	**14((12-23)**	24(18-24)
Resilience Scale-14 (14-98)	**62(51-70)**	56(45-67)
Intolerance to Uncertainty Scale-12		
Prospective Anxiety (7-35)	18(13-21)	17(15-19)
Inhibitory Anxiety (5-25)	**9(5-14)**	14.5(10-19)
Single Item Measure of Burnout 1-2=Low risk 3-5=High risk	**12(86%) Low risk 2(14%) High risk**	4(66%) Low risk 2(33%) High risk

Discussion: Barriers & Strategies

Key Findings

Compared to the interventional group, the control group residents had higher scores on measures of burnout, secondary traumatic stress, and inhibitory anxiety, as well as lower scores for measures of resilience

Limitations 1. Small sample size 2. Resident’s engagement dropped in coaching sessions as the year progressed.

Next Steps and Sustainability

- ✓ Based on the faculty coaches’ feedback, as well as feedback from the residents, it did not appear feasible to expand the coaching component to other programs for two main reasons: 1) time constraints due to general residency requirements, and 2) completing wellness initiatives at SLUHN.
- ✓ To address coaching element, **a GME fellowship faculty member is now providing faculty development and coaching is being provided as and when needed rather than mandatory sessions.** .
- ✓ First-year residents would continue to benefit from targeted workshops that are aligned with ACGME focus areas, which include implicit bias, available resources for well-being and mental health, professional development, and patient safety.
- ✓ The instructional format would enable residents to view the modules at their own pace, thereby decreasing concerns about time constraints..