

BACKGROUND

In March 2020, the NY metropolitan area became the epicenter of the COVID-19 pandemic in the US. As the pandemic spread across the region, healthcare workers (HCWs) were put on the frontlines. Historically, up to half of HCWs reported being affected by acute psychological distress, burnout, and post-traumatic stress disorder after epidemics.^{1,2} Given the severity of the COVID-19 pandemic, we anticipate similar, if not worse, outcomes on the mental health of HCWs.

Prior to the COVID-19 pandemic, over half of OB/GYN residents reported burnout.³ In April 2020, our OB/GYN residency program implemented a wellness curriculum based on CREOG's model curriculum. Several studies have shown that wellness programs increase resident resiliency and decrease burnout, including a nationwide study of nearly 600 residents conducted utilizing the CREOG curriculum.⁴⁻⁶

OBJECTIVES

- Our study aimed to evaluate the impact of a wellness curriculum on the burnout of OB/GYN residents in the NY metropolitan area during the height of the COVID-19 pandemic.

METHODS

This is a prospective, cross-sectional study evaluating OB/GYN resident burnout during the COVID-19 pandemic from May 20 to June 30, 2020. A new wellness curriculum was created based on the CREOG curriculum and was implemented in the NYMC OB/GYN residency program. The curriculum included four lectures followed by small-group discussions focused on promoting empathy and gratitude, increasing resilience, and managing difficult events with the goal of improving burnout and enhancing professional fulfillment.⁷

Table 1: Resident Characteristics

Residents	N (%)
Male	2 (13%)
Female	13 (87%)
PGY1	3 (20%)
PGY2	4 (26.67%)
PGY3	4 (26.67%)
PGY4	4 (26.67%)
Total	15

METHODS (CONT.)

The overall effect of our curriculum was assessed using the 22-item Maslach Burnout Inventory-Human Services Survey for Medical Personnel (MBI-HSS (MP)).

The MBI-HSS (MP) is a well-validated instrument used to evaluate burnout and was designed specifically for individuals in the medical field. It addresses three realms of burnout:

- Emotional exhaustion (EE)
- Depersonalization (DP)
- Personal accomplishment (PA)

A wilcoxon signed rank test and two sample test were used to compare pre- and post-intervention scores.

RESULTS

Fifteen residents completed the MBI-HSS (MP) prior to and following the wellness curriculum. All responses were anonymous. The average age was 30.2 years and two (13%) were male and the remainder female. Six residents (35.3%) were infected with COVID-19.

The mean number of lectures attended was 3.6 (SD 0.6). When comparing scores prior to and following the intervention, no statistically significant changes were found (Table 2). Following the intervention, those who attended all four presentations had a lower DP score (2.7 vs 4.2, p=0.05) (Table 3).

Table 2: Pre vs. Post: EE, DP, PA Scores

	EE Pre	EE Post	p-value*
Mean (SD)	3.9 (1.0)	4.3 (1.0)	
Median (IQR)	4.2 (2.9, 4.8)	4.4 (3.9, 5.1)	0.081
	DP Pre	DP Post	p-value*
Mean (SD)	2.9 (1.1)	3.1 (1.2)	
Median (IQR)	2.6 (2.0, 4.0)	3.0 (2.4, 4.2)	0.316
	PA Pre	PA Post	p-value*
Mean (SD)	4.5 (0.9)	4.5 (0.9)	
Median (IQR)	4.6 (3.6, 5.1)	4.6 (3.6, 5.1)	0.846

*Wilcoxon signed rank test was used to compare pre and post scores

Table 3: Comparison of Groups: Attended all 4 lectures? (Yes vs. No)

	Yes (N=10)	No (N=5)	p-value*
EE Pre	3.7 (2.9, 4.4)	4.8 (4.2, 5.0)	0.262
EE Post	4.2 (3.7, 4.6)	5.1 (4.3, 5.2)	0.148
DP Pre	2.5 (2.0, 3.8)	3.4 (2.4, 4.4)	0.437
DP Post	2.7 (2.2, 3.4)	4.2 (4.0, 4.4)	0.05
PA Pre	4.9 (3.6, 5.3)	4.0 (3.6, 4.5)	0.315
PA Post	4.8 (3.9, 5.5)	4.6 (3.6, 4.8)	0.438

*Wilcoxon two sample test was used to compare two groups

CONCLUSIONS

To our knowledge, this is the first study evaluating resident wellness interventions implemented during a pandemic. While previous studies have shown that symptoms of burnout may worsen over time during a pandemic, our study did not show any significant differences in worsening measures of burnout. **Therefore, wellness interventions may prevent deteriorating wellness of OB/GYN residents during the COVID-19 pandemic.**

However, there are several limitations to this study. Our group included a small sample size with unequal gender distribution. Additionally, only four of the six suggested CREOG workshops were utilized. Nevertheless, the NY metropolitan area was severely affected by the COVID-19 pandemic, making it a strong location to evaluate physician burnout. Additional research is necessary to determine ways to best support the wellness of our frontline workers.

REFERENCES

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