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higher than the WISE-MD group, and there were no significant differences between groups at pretest or post-test 2 time points.

CONCLUSION: Students exposed to the microlearning module first performed significantly better than students that used a commercially available product in our standard curriculum. The use of shorter microlearning modules can be beneficial to students given study time constraints and can lead to improved knowledge retention.

Well-Being among Resident Physicians in Multiple Specialties During the COVID-19 Pandemic



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INTRODUCTION: In this study, we compared well-being and burnout among resident physicians from several specialties during the COVID-19 pandemic at Baylor College of Medicine.

METHODS: An internal survey was distributed to residents at a single institution in internal medicine, internal medicine-pediatrics combined program, emergency medicine, general surgery, OB/GYN, urology, and otolaryngology. The survey included the Mayo Physician Well-Being Index. The survey responses were received between 5/28/2020 and 8/16/2020.

RESULTS: There were 110 responses from residents, 55% of whom were in a surgical specialty. A Well-Being Index score > 5 was considered “at risk” for burnout (35% of respondents). The major risk factors for being “at risk” for burnout were more demands from work (odds ratio 3.79) and fear/anxiety of the unknown (odds ratio 2.36). Reduced overall clinical experience decreased the chances that COVID-19 would be beneficial to a resident’s educational experience (odds ratio 0.09). Having more time to study and more time to sleep significantly lowered odds of reporting increased stress and increased the likelihood that COVID-19 was beneficial to educational experience. Interestingly, male residents who reported fear/anxiety of the unknown had 21-fold higher odds of being stressed due to the risk of becoming infected than those who did not, but this risk factor did not exist for female residents.

CONCLUSION: Risk factors for increased resident physician burnout and stress during the COVID-19 pandemic included more demands from work and fear/anxiety of the unknown. Burnout did not differ between specialties.

A Liver Surgery Assessment Tool Identified Predictors of Meaningful Autonomy During Hepatectomy in a Complex General Surgery Oncology Fellowship



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INTRODUCTION: Liver surgery presents a steep learning curve for Complex General Surgical Oncology (CGSO) fellows. The purpose of this study was to characterize the CGSO hepatectomy experience and identify factors associated with meaningful autonomy.

METHODS: A novel Liver Surgery Assessment Tool (LSAT) was created, which includes classification of patient-related complexity, case difficulty (IWATE criteria), autonomy (Zwisch scale), and operative performance. The LSAT was completed by the attending hepatobiliary surgeon immediately after the procedure. Meaningful autonomy was defined as passive help or supervision only. Multivariate analysis was performed to identify factors associated with meaningful autonomy.

RESULTS: During the 2019-2020 academic year, a LSAT was completed for 93 of 109 hepatectomies. 91% of cases were performed via an open approach and the most common diagnosis was colorectal liver metastases (54%). Sixty-five percent of the fellows were in their first year. The IWATE case difficulty level was low (37%), intermediate (32%), advanced (23%), and expert (9%). Operative autonomy was classified as show and tell (20%), active help (54%), passive help (22%), and supervision only (4%). Figure 1 depicts the autonomy classification stratified by IWATE difficulty level.

On multivariable analysis, patient age (odds ratio 1.053) and CGSO fellow year (odds ratio 3.791) were associated with meaningful autonomy, and an increasing IWATE difficulty index was associated with decreased odds of meaningful autonomy (odds ratio 0.259).

CONCLUSION: LSAT data demonstrated that CGSO fellowship year and case difficulty are strongly associated with meaningful autonomy. Future educational efforts should focus on identifying performance metrics that predict success in a meaningful autonomy setting.

