Resident stress and its association with program leadership response during the COVID-19 pandemic
Elizabeth McGinn M.D.¹, Grace Chandler M.D.¹, Lynne Rosenberg M.D.¹,², Rajiv Patel M.D.², Barry Seltz M.D.¹
1. Department of Pediatrics, University of Colorado, Denver, CO, United States. 2. Department of Internal Medicine, University of Colorado, Denver, CO, United States.

BACKGROUND
- The COVID-19 pandemic has likely exacerbated resident stress.
- Residency program leadership has a crucial role in supporting resident wellness.
- The degree of resident stress and the effectiveness of program leadership response in supporting resident wellness during a crisis remains unclear.

OBJECTIVE
To describe the prevalence of resident stress, potential contributing factors, and effectiveness of program leadership in alleviating resident stress during the COVID-19 pandemic.

METHODS
- We conducted a cross-sectional online survey (May-June 2020) of pediatric, medicine-pediatric (MP), and internal medicine (IM) residents at a single institution.
- Survey items included demographic data, the Perceived Stress Scale (PSS), and COVID-specific factors including effectiveness of program leadership response.
- Bivariate data analysis by unpaired t-test or ANOVA was used to compare mean PSS scores to the other variables.

RESULTS
Of eligible pediatric, MP, and IM residents, 142 total residents completed the survey. Survey response rates were 59%, 75%, and 44% respectively. As shown in Table 2, increased PSS scores were associated with prior mental health diagnoses, self-quarantine, and concern for resident families’ safety. Mean PSS scores were not significantly associated with number of patients with COVID, personal safety concerns, undergoing testing for COVID, or family members diagnosed with COVID. Among all programs studied, 35% of residents felt program leadership response was not at all/mildly effective in alleviating stress; 65% felt the response was moderately/very effective. Mean PSS scores independently and inversely correlated with perceived response effectiveness.

CONCLUSIONS
- Prevalence of at least moderate stress was high among residents during the COVID-19 pandemic, as indicated by PSS scores.
- Program leadership response varied in its effectiveness in mitigating resident stress.
- Perceived effectiveness of leadership response was inversely associated with resident stress levels.

FUTURE DIRECTIONS
Our team is conducting and analyzing qualitative interviews with residents to better understand aspects of effective residency leadership communication and the relationship to resident well-being during times of crisis.

DISCLOSURES
Each of the authors has no financial relationships to disclose.