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Comparison of Third Year Medical Student Wellness Before and During the SARS-CoV2 Pandemic

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Introduction

Depression and suicidal ideation have a higher prevalence in medical students when compared to other age-matched populations.^{1,2} The SARS-CoV2 pandemic has further threatened medical trainee well-being with increased stress and risk of mental illness.^{3,4}

Our research objective was to compare medical student well-being during the pediatric clerkship at a single institution before and during the SARS-CoV2 pandemic.

Methods

- Third year medical students at UNMC completed a survey during pediatric clerkship orientation which included basic demographic information, the validated World Health Organization (WHO) (FIVE) Well-Being Index (WHO-5) (Figure 1), and questions about physical activity
- Data from mid-academic year students rotating on the pediatric clerkship in 2019-2020 (2 cohorts, pre-pandemic) and 2020-21 (3 cohorts, during pandemic) were compared across composite survey scores and sub-question scores

Discussion

- From our small sample of third year medical students at a single institution, we find that well-being is stable when comparing matched groups across academic years before and during the SARS-CoV2 pandemic
- Our data demonstrates improved subjective feelings of being rested in the pandemic group and suggests lower rates of depression based on screening cutoffs
- We suspect this decrease in depressive symptoms may be related to changes in the educational environment such as transitioning from the clinical environment to virtual rotations, or time away from rotations entirely which may have allowed for increased personal wellness time
- Our data is limited. Focus groups and further investigation are necessary to identify which factors are altering levels of student well-being

Results

- Study participation was 81% pre-pandemic (n=34) and 59% during the pandemic (n=39) with no statistically significant differences in age or gender
- Mean WHO-5 well-being scores trended up from pre-pandemic to pandemic groups without reaching statistical significance (16.3 vs 17.5, p=0.13)
- Mean individual survey question on feeling fresh and rested significantly improved from pre-pandemic to pandemic groups (2.74 vs 3.23, p<0.05)
- Remaining question mean scores were similar or trended toward improved well-being from pre-pandemic to pandemic groups; cheerful/good spirits (3.62 vs 3.82, p=0.15), calm/relaxed (3.32 vs 3.33, p=0.48), active/vigorous (3.18 vs 3.31, p=0.28), and interest in daily life (3.41 vs 3.79, p=0.08)
- **Based on using the composite WHO-5 survey as a validated tool to screen for depression, there was a trend towards less students screening positive for depression in the pandemic group (26.5% pre-pandemic vs 10.5% pandemic, p=0.07)**

Figure 1

WHO (Five) Well-Being Index

	Over the last two weeks	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1	I have felt cheerful and in good spirits	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
2	I have felt calm and relaxed	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
3	I have felt active and vigorous	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
4	I woke up feeling fresh and rested	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
5	My daily life has been filled with things that interest me	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0

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