

Medical Student Wellness During the COVID-19 Pandemic

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Introduction

- The coronavirus (COVID-19) pandemic has posed several unique challenges for medical students.
- Studies prior to COVID-19 indicate that US medical students suffer higher rates of depression, anxiety, and burnout when compared to the general population.
- International studies during COVID-19 found that psychological wellbeing and work performance were decreased in medical students in Saudi Arabia, and students in India had worse mental health.
- A comprehensive survey of medical student wellness during COVID-19 has yet to be conducted.
- One definition describes wellness as having eight dimensions: Intellectual, emotional, physical, social, occupational, financial, environmental, and spiritual.

Objectives

• To utilize the eight domains of wellness to assess and compare US medical student wellness before and during the COVID-19 pandemic.

Methods

- A survey was created to assess the eight dimensions of wellness.
- The survey was distributed via Survey Monkey to US allopathic and osteopathic medical students via email and social media.
- The survey was administered from March 29th, 2020 to June 23rd, 2020.
- Univariable and multivariable linear mixed-effects models were used to estimate the change in students' overall wellness using an 11-point scale ranging from 0 (least well) to 10 (most well). Subsequently, generalized estimating equations were used to compare students' responses to the eight dimensions of wellness before and during the COVID-19 pandemic.

38 U.S. STATES



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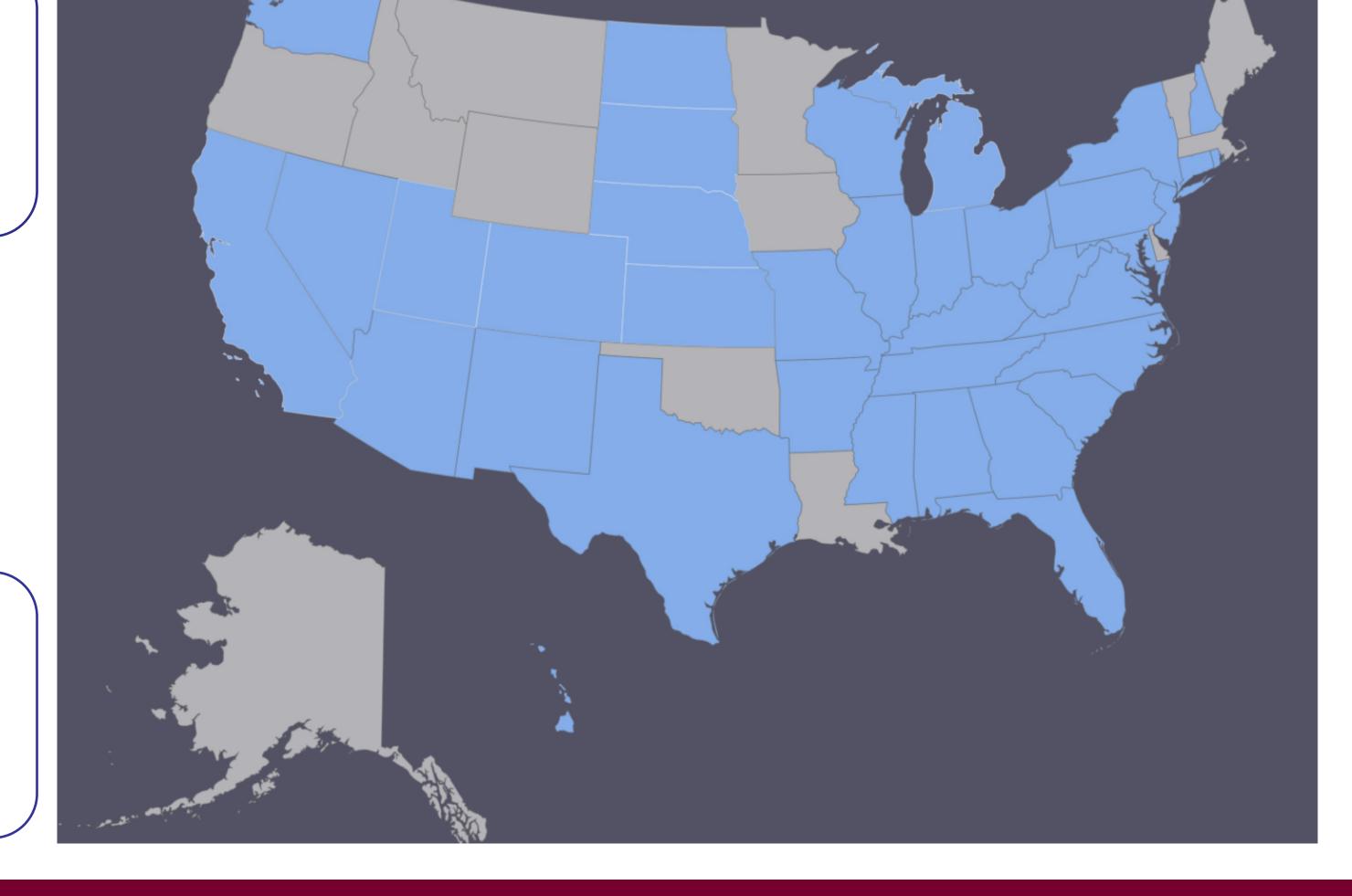


Figure 1. Effect of Class Year on Changes in Overall Wellness

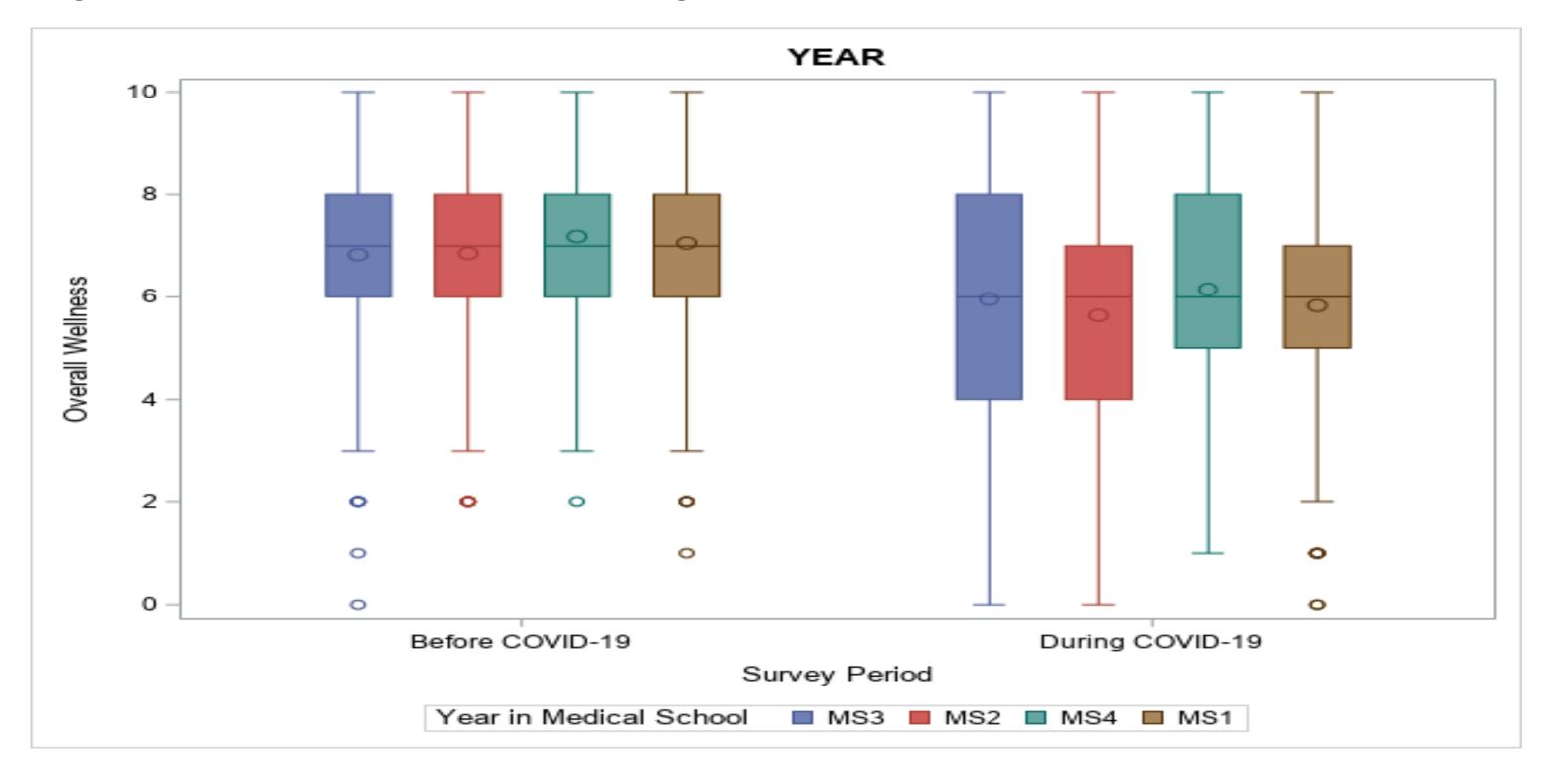


Figure 2. Effect of COVID-19 Incidence Rate on Changes in Overall Wellness

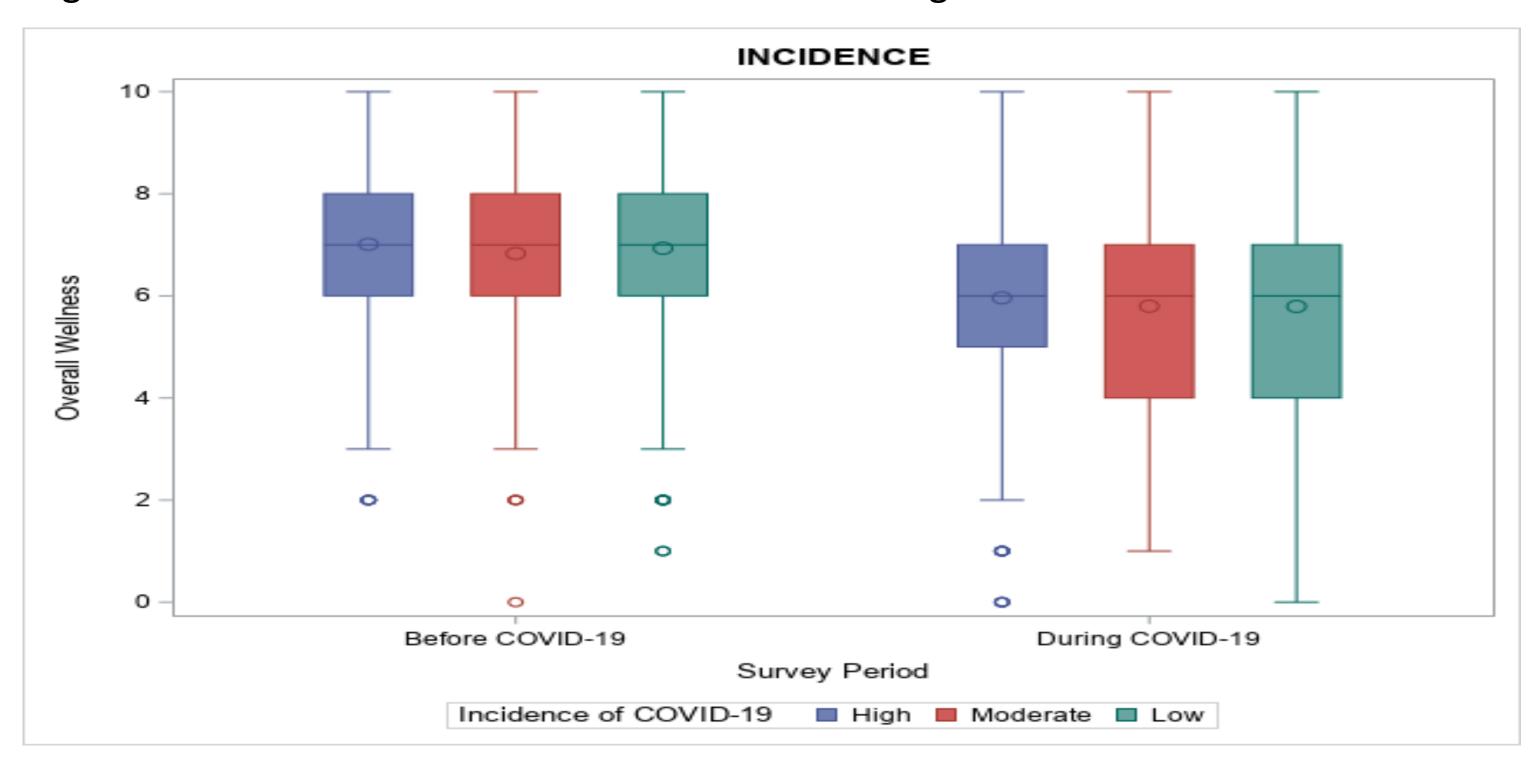
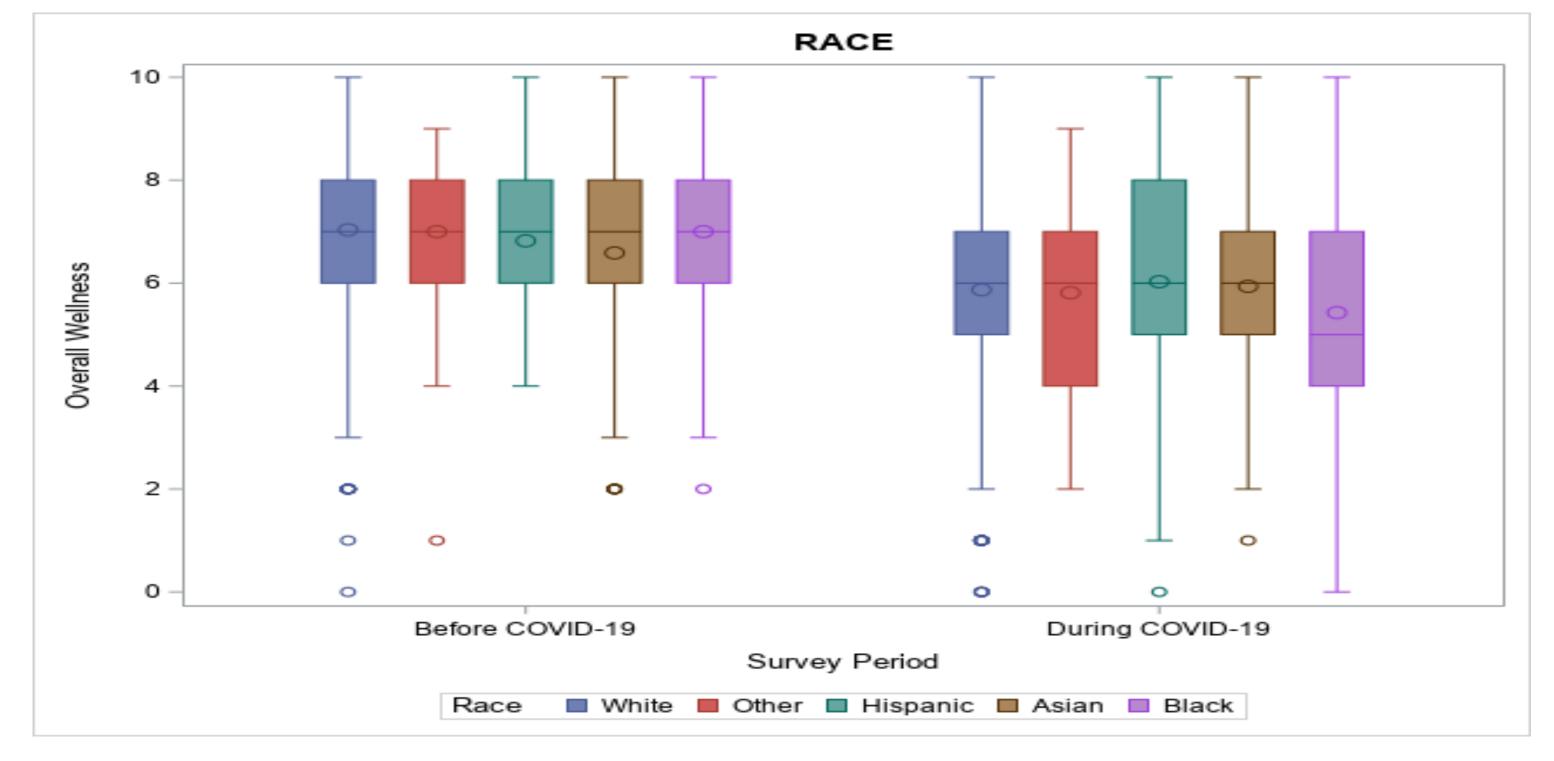


Figure 3. Effect of Race on Changes in Overall Wellness



Results

Table 1. Secondary Wellness Variables	Valid N	Odds Ratio	95% CI	
			Lower	Upper
Physical				
Hours sleeping per night	1,321	3.25	2.80	3.77
Satisfaction with sleep	1,288	1.26	1.12	1.43
High energy levels	1,288	0.28	0.24	0.32
Satisfaction with nutritional intake	1,288	0.73	0.65	0.83
Days exercising per week	1,321	1.25	1.11	1.41
Satisfaction with exercise	1,288	0.85	0.74	0.98
Social				
Days speaking with family per week	1,321	2.10	1.89	2.34
Supported by social environment	1,288	0.47	0.42	0.53
Spiritual				
Days reflecting on sense of purpose	1,321	3.28	2.96	3.63
Satisfaction with sense of purpose	1,288	0.33	0.29	0.36
Environmental				
Comfort with daily environment	1,288	0.45	0.39	0.52
Financial				
Days worrying about finances	1,321	1.71	1.59	1.85
Satisfaction with financial status	1,288	0.75	0.70	0.79
Intellectual				
More hours studying per day	1,321	0.99	0.90	1.10
Enough time to study	1,288	3.96	3.43	4.56
Worry about grades	1,288	1.12	1.03	1.22
Confidence in medical education	1,288	0.15	0.13	0.17
Occupational				
Comfort in providing patient care	1,286	0.30	0.27	0.33
Satisfaction with work/school	1,288	0.11	0.09	0.13
Enjoyment of work/schoolwork	1,288	0.25	0.22	0.28
Emotional				
Higher stress	1,288	2.98	2.59	3.42
Higher anxiousness	1,288	3.37	2.99	3.81
Higher depression	1,288	2.05	1.88	2.23
Higher burn out	1,288	1.60	1.43	1.80
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Conclusion

- Overall, medical students reported a nominal decline in overall wellness.
- Students reported reductions in wellness in each of the eight domains.
- These findings can be used to implement changes to improve medical student wellness.

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