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## An emergency medicine physician well-being study focusing on gender differences and years of practice during the COVID-19 pandemic

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Wellness is built on emotional, physical, social, financial, spiritual, intellectual and environmental pillars. Stressors affect Emergency Medicine (EM) physicians' wellness during their shifts, potentially leading to substance abuse, depression, anxiety, relationship difficulties, and even death [1,15,31].

During the COVID-19 pandemic, physicians experienced multiple stressors, anxiety, and depression [2–6,9,35]. Educational systems in critical resilience skills must be developed by organizations to support physicians in coping with these issues [7–10]. Hospital wellness systems and physician groups, focusing on increased engagement and resiliency have been expanding [11–13].

Studies have not examined the psychological effects of the pandemic on gender differences and years of experience for EM physicians [18–21]. Our goal was to assess how the COVID-19 pandemic affected physicians' well-being, focusing on these determinants.

The descriptive survey study involved all EM attending physicians in our health system. A 25-item anonymous online survey was sent to 477 EM physicians assessing their wellbeing during the COVID-19 pandemic. Email distribution included 14 hospitals over six months. Our Institutional Review Board approved this study with a waiver of informed consent. No identifiers were collected. Participation was voluntary. No compensation was offered.

Descriptive statistics, including frequencies and proportions, are reported for all survey items for the total study sample, and are stratified by physician gender (female vs. male) and years of experience (<11 years vs. ≥11 years). Chi-square tests, or Fisher's exact tests were used to assess differences in survey responses by gender and years of experience. A *p*-value of <0.05 was considered statistically significant. All analyses were conducted using SAS 9.4 (SAS Institute, Cary, North Carolina, United States).

Table 1 shows emotional wellness survey results.

During the pandemic, more females had difficulties with depression, appetite, concentration and sleep. Females were more emotional. They felt easily irritated, cried, and lashed out more than males.

Female physicians had more changes in appetite. They ate and hydrated less during their shifts. One study on women stressed with high cortisol levels found they ate more on the day they were stressed than on their control day [25]. Stress and depression are connected to poor nutritional choices [26,27].

Concentration issues were more common in female EM physicians and physicians with less than 11 years in practice.

Females had more sleep disturbances during the pandemic. Only 13% used more sleep aids. A few revealed aids were ineffective.

Alcohol use was higher in females and those with less than 11 years of experience. A link exists between substance abuse and high stress. Substance abuse, associated with stress or depression, is associated with physician suicide [40–42]. Poor wellbeing, including depression, anxiety, poor quality of life, stress and high level of burnout, are associated with more self-reported errors [23] as well as decreased quality of patients' care, malpractice risk and early retirement [6,14,24].

Table 2 presents intellectual and physical wellness survey results. Routinely, 83.1% of physicians listened to the news or other social media for pandemic updates. Forty percent of physicians worked out less. Close to half did exercise, with males comprising the majority.

Table 3 details questions on financial and social wellness during the pandemic.

Most participants weren't impacted financially and remained with their families during the pandemic.

Social wellness improved during the pandemic. Physicians increased their social connections, more in females and slightly more in less experienced physicians. Physicians with strong social supports are happier and have lower risk of burnout [15,51,52]. Persons having higher levels of perceived social support, are less likely to develop psychological conditions [49,50].

To de-stress, males mostly exercised and females shopped online. For other activities, gender or years of practice were not impacted (Table 1).

Physical appearance was not a concern, more in females and less experienced physicians.

Table 4 displays environmental and spiritual wellness results. Environmentally, more than 50% of physicians were worried about safety due to reuse of their N95 mask, mostly females. N95 mask reuse leads to decreased effectiveness in protection against contracting the COVID-19 virus [43]. With increased potential transmission, stress levels increase.

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**Table 1**  
Emotional wellness survey results stratified by respondent gender and years of experience.

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)	
<b>Emotional wellness prior to the pandemic</b>							
Feel down, depressed or hopeless				0.9229			0.7879
Not at all	96 (67.6%)	43 (66.2%)	51 (68.0%)		48 (65.8%)	48 (69.6%)	
Several days	45 (31.7%)	22 (33.9%)	23 (30.7%)		24 (32.9%)	21 (30.4%)	
Does not apply	1 (0.7%)	0 (0.0%)	1 (1.3%)		1 (1.4%)	0 (0.0%)	
Have poor appetite or overeating				0.6469			0.4739
Not at all	96 (67.6%)	42 (64.6%)	52 (69.3%)		47 (64.4%)	49 (71.0%)	
Several days	45 (31.7%)	23 (35.4%)	22 (29.3%)		25 (34.3%)	20 (29.0%)	
Does not apply	1 (0.7%)	0 (0.0%)	1 (1.3%)		1 (1.4%)	0 (0.0%)	
Have trouble concentrating on things such as reading a newspaper or watching television				0.5139			0.7821
Not at all	100 (70.4%)	48 (73.9%)	50 (66.7%)		50 (68.5%)	50 (72.5%)	
Several days	41 (28.9%)	17 (26.2%)	24 (32.0%)		22 (30.1%)	19 (27.5%)	
Does not apply	1 (0.7%)	0 (0.0%)	1 (1.3%)		1 (1.4%)	0 (0.0%)	
Have thoughts that you would be better off dead, or thoughts of hurting yourself in some way				0.1830			1.0000
Not at all	136 (95.8%)	61 (93.9%)	73 (97.3%)		69 (94.5%)	67 (97.1%)	
Several days	5 (3.5%)	4 (6.2%)	1 (1.3%)		3 (4.1%)	2 (2.9%)	
Does not apply	1 (0.7%)	0 (0.0%)	1 (1.3%)		1 (1.4%)	0 (0.0%)	
Have trouble falling or staying asleep, or sleeping too much or had nightmares				0.4409			0.1296
Not at all	66 (46.5%)	27 (41.5%)	37 (49.3%)		29 (39.7%)	35 (53.6%)	
Several days	75 (52.8%)	38 (58.5%)	37 (49.3%)		43 (58.9%)	32 (46.4%)	
Does not apply	1 (0.7%)	0 (0.0%)	1 (1.3%)		1 (1.4%)	0 (0.0%)	
<b>Emotional wellness during to the pandemic</b>							
Feel down, depressed or hopeless				<0.0001			0.0558
Not at all	52 (36.6%)	12 (18.5%)	38 (50.7%)		21 (28.8%)	31 (44.9%)	
Several days	90 (63.4%)	53 (81.5%)	37 (49.3%)		52 (71.2%)	38 (55.1%)	
Does not apply	0 (0.0%)	0 (0.0%)	0 (0.0%)		0 (0.0%)	0 (0.0%)	
Have poor appetite or overeating				0.0021			0.5006
Not at all	65 (45.8%)	20 (30.8%)	43 (57.3%)		31 (42.5%)	34 (49.3%)	
Several days	76 (53.5%)	44 (67.7%)	32 (42.7%)		41 (56.2%)	35 (50.7%)	
Does not apply	1 (0.7%)	1 (1.5%)	0 (0.0%)		1 (1.4%)	0 (0.0%)	
Have trouble concentrating on things such as reading a newspaper or watching television				0.0079			0.0280
Not at all	64 (45.1%)	21 (32.3%)	41 (54.7%)		26 (35.6%)	38 (55.1%)	
Several days	78 (54.9%)	44 (67.7%)	34 (45.3%)		47 (64.4%)	31 (44.9%)	
Does not apply	0 (0.0%)	0 (0.0%)	0 (0.0%)		0 (0.0%)	0 (0.0%)	
Have thoughts that you would be better off dead, or thoughts of hurting yourself in some way				0.1448			0.7195
Not at all	134 (94.4%)	59 (90.8%)	73 (97.3%)		68 (93.2%)	66 (95.7%)	
Several days	8 (5.6%)	6 (9.2%)	2 (2.7%)		5 (6.9%)	3 (4.4%)	
Does not apply	0 (0.0%)	0 (0.0%)	0 (0.0%)		0 (0.0%)	0 (0.0%)	
Have trouble falling or staying asleep, or sleeping too much or had nightmares				0.0055			0.3686
Not at all	44 (31.0%)	12 (18.4%)	30 (40.0%)		20 (27.4%)	24 (34.8%)	
Several days	98 (69.0%)	53 (81.5%)	45 (60.0%)		53 (72.6%)	45 (65.2%)	
Does not apply	0 (0.0%)	0 (0.0%)	0 (0.0%)		0 (0.0%)	0 (0.0%)	
<b>Sleeping habits that have changed***</b>							
Trouble falling asleep	53 (37.3%)	33 (50.8%)	20 (26.7%)	0.0034	31 (42.5%)	22 (31.9%)	0.2259
Trouble staying asleep	59 (41.6%)	30 (46.2%)	29 (38.7%)	0.3709	31 (42.5%)	28 (40.6%)	0.8657
Sleeping too much	11 (7.6%)	7 (10.8%)	4 (5.3%)	0.2332	7 (9.6%)	4 (5.8%)	0.5341
Had nightmares	25 (17.6%)	15 (23.1%)	10 (13.3%)	0.1333	17 (23.3%)	8 (11.6%)	0.0800
Became more emotional				<0.0001			0.1734
Yes	83 (58.5%)	50 (76.9%)	33 (44.0%)		47 (64.4%)	36 (52.2%)	
No	59 (41.6%)	15 (23.1%)	42 (56.0%)		26 (35.6%)	33 (47.8%)	
Felt easily irritated				0.0001			0.5054
Yes	66 (46.5%)	42 (64.6%)	24 (32.0%)		36 (49.3%)	30 (43.5%)	
No	76 (53.5%)	23 (35.4%)	51 (68.0%)		37 (50.7%)	39 (56.5%)	
Cried				0.0010			0.1043
Yes	45 (31.7%)	30 (46.2%)	15 (20.0%)		28 (38.4%)	17 (24.6%)	
No	97 (68.3%)	35 (53.9%)	60 (80.0%)		45 (61.6%)	52 (75.4%)	
Lashed out				0.0009			0.1555
Yes	30 (21.1%)	22 (33.9%)	8 (10.7%)		19 (26.0%)	11 (15.9%)	
No	112 (78.9%)	43 (66.2%)	67 (89.3%)		54 (74.0%)	58 (84.1%)	
Other emotional issues				0.4856			0.3574
Yes	11 (7.8%)	4 (6.2%)	7 (9.3%)		4 (5.5%)	7 (10.1%)	
No	131 (92.3%)	61 (93.9%)	68 (90.7%)		69 (94.5%)	62 (89.9%)	
Speaking out more regarding COVID-19 to either coworkers, friends, family, and/or media				0.1411			0.0505

(continued on next page)

**Table 1** (continued)

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)	
Never	9 (6.3%)	1 (1.5%)	8 (10.7%)	0.0321	8 (11.0%)	1 (1.5%)	0.0766
Sometimes	59 (41.6%)	30 (46.2%)	27 (36.0%)		33 (45.2%)	26 (37.7%)	
Often	49 (34.5%)	23 (35.4%)	26 (34.7%)		22 (30.1%)	27 (39.1%)	
All the time	25 (17.6%)	11 (16.9%)	14 (18.7%)		10 (13.7%)	15 (21.7%)	
Effect of COVID-19 on empathy towards patients							
No change	44 (31.0%)	13 (20.0%)	29 (38.7%)		21 (28.8%)	23 (33.3%)	
More empathetic	59 (41.6%)	31 (47.7%)	28 (37.3%)		26 (35.6%)	33 (47.8%)	
Less empathetic	21 (14.8%)	14 (21.5%)	7 (9.3%)	16 (21.9%)	5 (7.3%)		
Not sure	18 (12.7%)	7 (10.8%)	11 (14.7%)	0 (0.0%)	0 (0.0%)		

Note: some column percentages may not sum to 100% due to rounding.

\* Stratified analysis excludes two respondents who identified as “Other” gender.

\*\* p-Values derived from chi-square tests or Fisher’s exact tests were appropriate.

\*\*\* Response options are not mutually exclusive.

Religious practices were unchanged. Females, more than males, had empathy changes. A study using the Jefferson Scale of Empathy showed females commonly score higher than males, suggesting females are more empathetic than males [44]. Most providers did not lose empathy towards their patients. Maintaining empathy is essential in preventing burnout [45].

Our study found that physician wellness was negatively affected by the pandemic, particularly in female EM physicians. There has been a paucity of studies investigating gender and years of practice differences in relation to the impact that the COVID-19 pandemic has had on EM physicians’ well-being. Female physicians and physicians who have been in practice less than 11 years are more likely to have negative

**Table 2**  
Intellectual and physical wellness survey results stratified by respondent gender and years of experience.

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**		
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)			
Intellectual wellness									
Change in non-COVID-19 self-academic reading or learning during the pandemic				0.1379			0.4638		
Researched, listened, or watched podcasts more	39 (27.5%)	12 (18.5%)	25 (33.3%)	0.8158	17 (23.3%)	22 (31.9%)	0.0730		
Researched, listened, or watched podcasts less	27 (19.0%)	14 (21.5%)	13 (17.3%)		16 (21.9%)	11 (15.9%)			
Researched, listened, or watched podcasts more, but all or mostly about COVID-19	76 (53.5%)	39 (60.0%)	37 (49.3%)		40 (54.8%)	36 (52.2%)			
Read about academic/EBM COVID-19 updates				0.4755			0.2128		
Few times a day / daily	77 (54.2%)	37 (56.9%)	39 (52.0%)	0.4755	33 (45.2%)	44 (63.8%)	0.2128		
Every other day / twice a week	40 (28.2%)	18 (27.7%)	22 (29.3%)		24 (32.9%)	16 (23.2%)			
Weekly / rarely	25 (17.6%)	10 (15.4%)	14 (18.7%)		16 (21.9%)	9 (13.0%)			
Listened to the news or used other social media to get updates on the pandemic				0.0653			0.1845		
Few times a day / daily	118 (83.1%)	56 (86.2%)	62 (82.7%)	0.0653	57 (78.1%)	61 (88.4%)	0.1845		
Every other day / twice a week	13 (9.2%)	4 (6.2%)	9 (12.0%)		8 (11.0%)	5 (7.3%)			
Weekly / rarely	11 (7.8%)	5 (7.7%)	4 (5.3%)		8 (11.0%)	3 (4.4%)			
Physical wellness									
Use of sleeping aids to fall asleep prior to the pandemic				0.6357			0.4881		
Never	88 (62.0%)	41 (63.1%)	46 (61.3%)	0.6357	45 (61.6%)	43 (62.3%)	0.4881		
Sometimes	46 (32.4%)	17 (26.2%)	28 (37.3%)		21 (28.8%)	25 (36.2%)			
Often	6 (4.3%)	5 (7.7%)	1 (1.3%)		5 (6.9%)	1 (1.5%)			
All of the time	2 (1.4%)	2 (3.1%)	0 (0.0%)		2 (2.7%)	0 (0.0%)			
Change in use of sleeping aids to fall asleep during the pandemic				0.1585			0.0708		
No, never used sleeping aids	81 (57.0%)	35 (53.9%)	45 (60.0%)	0.1585	41 (56.2%)	40 (58.0%)	0.0708		
No, used the same amount	39 (27.5%)	17 (26.2%)	21 (28.0%)		20 (27.4%)	19 (27.5%)			
Yes, used more	19 (13.4%)	11 (16.9%)	8 (10.7%)		9 (12.3%)	10 (14.5%)			
Yes, sleeping aid stopped working	3 (2.1%)	2 (3.1%)	1 (1.3%)		3 (4.1%)	0 (0.0%)			
Effect of pandemic on exercise routine					0.0049				0.3312
Does not apply, I do not exercise	21 (14.8%)	13 (20.0%)	8 (10.7%)		0.0049	8 (11.0%)		13 (18.8%)	0.3312
I worked out much less	57 (40.1%)	31 (47.7%)	26 (34.7%)	37 (50.7%)		20 (29.0%)			
I worked out more	27 (19.0%)	9 (13.9%)	18 (24.0%)	15 (20.6%)		12 (17.4%)			
I had to change my exercise routine	18 (12.9%)	6 (9.2%)	12 (16.0%)	7 (9.6%)		11 (15.9%)			
I joined virtual classes to continue with my routine	8 (5.6%)	2 (3.1%)	6 (8.0%)	2 (2.7%)		6 (8.7%)			
Other	11 (7.6%)	4 (6.2%)	5 (6.7%)	4 (5.5%)		7 (10.1%)			
Alcohol use during pandemic				0.0049				0.3312	
I drank less	16 (11.3%)	7 (10.8%)	9 (12.0%)	0.0049	9 (12.3%)	7 (10.1%)	0.3312		
I drank more	35 (24.7%)	22 (33.9%)	13 (17.3%)		22 (30.1%)	13 (18.8%)			
I drank the same	53 (37.3%)	15 (23.1%)	38 (50.7%)		26 (35.6%)	27 (39.1%)			
Does not apply, I do not drink	38 (26.8%)	21 (32.3%)	15 (20.0%)		16 (21.9%)	22 (31.9%)			

\*\*\* Response options are not mutually exclusive.

Note: some column percentages may not sum to 100% due to rounding.

\* Stratified analysis excludes two respondents who identified as “Other” gender.

\*\* p-Values derived from chi-square tests or Fisher’s exact tests where appropriate.

**Table 3**  
Financial and social wellness survey results stratified by respondent gender and years of experience.

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)	
<b>Financial wellness</b>							
<b>Financial effect of pandemic</b>							
Worked less and thus, made less	16 (11.3%)	7 (10.8%)	9 (12.0%)	0.6666	8 (11.0%)	8 (11.6%)	0.7710
Lost savings/retirement or investments	8 (5.6%)	2 (3.1%)	6 (8.0%)		4 (5.5%)	4 (5.8%)	
Worked more and thus, had greater compensation	21 (14.8%)	9 (13.9%)	10 (13.3%)	0.0734	13 (17.8%)	8 (11.6%)	0.4057
Stayed the same, no change	97 (68.3%)	47 (72.3%)	50 (66.7%)		48 (65.8%)	49 (71.0%)	
<b>Will retire later than originally planned due to financial effects of the pandemic</b>							
Yes	7 (4.9%)	3 (4.6%)	4 (5.3%)	0.0734	2 (2.7%)	5 (7.3%)	0.4057
No	81 (57.0%)	31 (47.7%)	50 (66.7%)		42 (57.5%)	39 (56.5%)	
Maybe	50 (35.2%)	30 (46.2%)	20 (26.7%)	0.0734	28 (38.4%)	22 (31.9%)	0.4057
Other	4 (2.8%)	1 (1.5%)	1 (1.3%)		1 (1.4%)	3 (4.4%)	
<b>Social wellness during the pandemic</b>							
<b>Connected with friends and family</b>							
More often than prior to the pandemic	109 (76.8%)	57 (87.7%)	52 (69.3%)	0.0111	58 (79.5%)	51 (73.9%)	0.5918
Less often than prior to the pandemic	9 (6.3%)	4 (6.2%)	5 (6.7%)		5 (6.9%)	4 (5.8%)	
No change	24 (16.9%)	4 (6.2%)	18 (24.0%)	0.0111	10 (13.7%)	14 (20.3%)	0.5918
<b>Methods used to destress at home***</b>							
Alcohol	42 (29.6%)	21 (32.3%)	21 (28.0%)	0.5791	29 (39.7%)	13 (18.8%)	0.0064
Read books	40 (28.2%)	17 (26.2%)	22 (29.3%)	0.6756	20 (27.4%)	20 (29.0%)	0.8540
Watched a movie	101 (72.1%)	48 (73.9%)	53 (70.7%)	0.6756	53 (72.6%)	48 (69.6%)	0.6897
Exercised	73 (51.4%)	26 (40.0%)	46 (61.3%)	0.0118	37 (50.7%)	36 (52.2%)	0.8592
Practiced meditation	30 (21.1%)	14 (21.5%)	15 (20.0%)	0.8227	20 (27.4%)	10 (14.5%)	0.0597
Listened to music	57 (40.1%)	26 (40.0%)	30 (40.0%)	1.0000	32 (43.8%)	25 (36.2%)	0.3556
Shopped online	57 (40.1%)	36 (55.4%)	21 (28.0%)	0.0010	32 (43.8%)	25 (36.2%)	0.3556
Explored the web	56 (39.4%)	25 (38.5%)	31 (41.3%)	0.7294	28 (38.4%)	28 (40.6%)	0.7864
Spoke to family/friends	108 (76.1%)	49 (75.4%)	59 (78.7%)	0.6446	58 (79.5%)	50 (72.5%)	0.3294
Played with a pet	45 (31.7%)	20 (30.8%)	24 (32.0%)	0.8757	27 (37.0%)	18 (26.1%)	0.1630
Other	18 (12.7%)	8 (12.3%)	9 (12.0%)	0.9557	8 (11.0%)	10 (14.5%)	0.5270
<b>Concern about physical appearance during the pandemic</b>							
More concerned about appearance	7 (4.9%)	5 (7.7%)	2 (2.7%)	<0.0001	6 (8.2%)	1 (1.5%)	0.0059
Less concerned about appearance	72 (50.7%)	45 (69.2%)	27 (36.0%)		43 (58.9%)	29 (42.0%)	
No change	63 (44.4%)	15 (23.1%)	46 (61.3%)	<0.0001	24 (32.9%)	39 (56.5%)	0.0059

Note: some column percentages may not sum to 100% due to rounding.

\* Stratified analysis excludes two respondents who identified as "Other" gender.

\*\* p-Values derived from chi-square tests or Fisher's exact tests where appropriate.

\*\*\* Response options are not mutually exclusive.

**Table 4**  
Environmental and spiritual wellness survey results stratified by respondent gender and years of experience.

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)	
<b>Environmental</b>							
<b>Worried about safety due to reusing N95 for 1 week</b>							
Yes	90 (63.4%)	49 (75.4%)	39 (52.0%)	0.0098	45 (61.6%)	45 (65.2%)	0.5208
No	47 (33.1%)	14 (21.5%)	33 (44.5%)		24 (32.9%)	23 (33.3%)	
Other	5 (3.5%)	2 (3.1%)	3 (4.0%)	0.0042	4 (5.5%)	1 (1.5%)	0.0013
<b>Took a break to eat and drink during shift</b>							
Yes, ate more due to all the food being donated	34 (23.4%)	14 (21.5%)	20 (26.7%)	0.0042	13 (17.8%)	21 (30.4%)	0.0013
Yes, ate/hydrated as usual	31 (21.8%)	6 (9.2%)	25 (33.3%)		9 (12.3%)	22 (31.9%)	
No, ate/hydrated less due to having less time	50 (35.2%)	30 (46.2%)	19 (25.3%)	0.3703	33 (45.2%)	17 (24.6%)	0.2269
No, did not eat or drink during shift due to concern about self-contamination	22 (15.5%)	13 (20.0%)	9 (12.0%)		16 (21.9%)	6 (8.7%)	
Other	5 (3.5%)	2 (3.1%)	2 (2.7%)	0.3703	2 (2.7%)	3 (4.4%)	0.2269
<b>Isolation from family</b>							
Moved out and did not see family	10 (7.0%)	7 (10.8%)	3 (4.0%)	0.3703	4 (5.5%)	6 (8.7%)	0.2269
Stayed in a separate room with minimal to no interaction with family	22 (15.5%)	8 (12.3%)	14 (18.7%)		10 (13.7%)	12 (17.4%)	
Continued living with family	89 (62.7%)	41 (63.1%)	48 (64.0%)	0.7637	44 (58.3%)	45 (65.2%)	0.3873
Does not apply, live alone	21 (14.8%)	9 (13.9%)	10 (13.3%)		15 (20.6%)	6 (8.7%)	
<b>Spiritual wellness</b>							
<b>Practice or affiliate with any religion</b>							
Yes	89 (62.7%)	40 (61.5%)	48 (64.0%)	0.7637	43 (58.9%)	46 (66.7%)	0.3873

(continued on next page)



Table 4 (continued)

Survey item	Total sample (n = 142)	Gender*		p-Value*	Years of experience		p-Value**
		Female (n = 65)	Male (n = 75)		<11 years (n = 73)	≥11 years (n = 69)	
No	53 (37.3%)	25 (38.5%)	27 (36.0%)	0.2056	30 (41.1%)	23 (33.3%)	0.1676
Effect of pandemic on religious practice							
Engaged in religious practice more	16 (11.3%)	10 (15.4%)	6 (8.0%)		9 (12.3%)	7 (10.1%)	
Engaged in religious practice less	13 (9.2%)	3 (4.6%)	10 (13.3%)		3 (4.1%)	10 (14.5%)	
Engaged in religious practice the same	68 (47.9%)	32 (49.2%)	35 (46.7%)		35 (48.0%)	33 (47.8%)	
Does not apply; do not practice or affiliate with any religion	45 (31.7%)	20 (30.8%)	24 (32.0%)	26 (35.6%)	19 (27.5%)		

\*\*\* Response options are not mutually exclusive.

Note: some column percentages may not sum to 100% due to rounding.

\* Stratified analysis excludes two respondents who identified as "Other" gender.

effects. The study informs what aspects of wellness require support as post COVID-19 physician well-being recovers.

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### Author contribution

HL, NB and NG conceived the study, and designed the trial. We had no research funding. HL, NB, and NG supervised the conduct of the trial and data collection. HL and NB undertook recruitment of participating centers and patients and managed the data, including quality control. TL provided statistical advice on study design and analyzed the data; HL chaired the data oversight committee. HL and NB drafted the manuscript, and all authors contributed substantially to its revision. HL takes responsibility for the paper as a whole.

### Declaration of Competing Interest

No conflicts of interest.

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