Healthcare is a Team Sport: Stress, Resilience, and Correlates of Well-Being Among Health System Employees in a Crisis

Katherine A. Meese, PhD, Department of Health Services Administration, University of Alabama at Birmingham (UAB) and UAB Medicine Office of Wellness, Birmingham, Alabama; Alejandra Colón-López, Department of Sociology, UAB; Jasvinder A. Singh, MD, Department of Medicine at the School of Medicine, UAB; Department of Epidemiology at the UAB School of Public Health; and Medicine Service, VA Medical Center; Greer A. Burkholder, MD, Division of Infectious Diseases, UAB Medicine; and David A. Rogers, MD, UAB Medicine and UAB

EXECUTIVE SUMMARY

While the COVID-19 pandemic has added stressors to the lives of healthcare workers, it is unclear which factors represent the most useful targets for interventions to mitigate employee distress across the entire healthcare team. A survey was distributed to employees of a large healthcare system in the Southeastern United States, and 1,130 respondents participated. The survey measured overall distress using the 9-item Well-Being Index (WBI), work-related factors, moral distress, resilience, and organizational-level factors. Respondents were also asked to identify major work, clinical, and nonwork stressors. Multivariate regression was used to evaluate associations between employee characteristics and WBI distress score. Overall, 82% of employees reported high distress (WBI ≥ 2), with nurses, clinical support staff, and advanced practice providers reporting the highest average scores. Factors associated with higher distress included increased job demands or responsibilities, heavy workload or long hours, higher frequency of moral distress, and loneliness or social isolation. Factors associated with lower distress were perceived organizational support, work control, perceived fairness of salary cuts, and resilience. Most factors significantly associated with distress—heavy workloads and long hours, increased job demands, and moral distress, in particular—were work-related, indicating that efforts can be made to mitigate them. Resilience explained

a small portion of the variance in distress relative to other work-related factors. Ensuring appropriate staffing levels may represent the single largest opportunity to significantly move the needle on distress. However, the financial impact of the COVID-19 pandemic on the healthcare system may represent a barrier to addressing these stressors.

INTRODUCTION

Burnout among clinicians is a topic of special interest in the research literature, particularly for physicians and nurses, yet little is known about how other members of the healthcare team, such as administration and clinical support staff, experience burnout and distress. Whether a storm or pandemic, when a crisis hits a health system, all members of the healthcare team contribute to the response. The purpose of this study was to understand the factors contributing to distress across the entire healthcare team during a crisis, specifically in the context of the COVID-19 pandemic.

Early reports from across the globe indicated high levels of stress for frontline healthcare workers during the onset of the COVID-19 pandemic (Moore & Kolencik, 2020). The economic impacts of the virus (Godinic et al., 2020), limitations in testing and personal protective equipment (PPE), school closures (Donohue & Miller, 2020), and social distancing created a unique culmination of stressors (Azoulay et al., 2020; Banerjee & Rai, 2020; Chow et al., 2020; Shechter et al., 2020; Stephenson, 2020).

Physicians and nurses are not the only members of the healthcare workforce who have been experiencing a convergence of work, personal, and societal stressors. Leaders face mounting financial and operational challenges and limited resources. Clinical support staff such as nurse aides may also be at high risk for COVID-19 exposure, with less power to shape their work environments, yet little is known about the stress and mental health of these members of the healthcare team either before or after the onset of the pandemic.

Existing evidence suggests that levels of burnout differ across the healthcare team. Prevalence of burnout prior to the pandemic was reported at 60% among senior healthcare executives (WittKieffer, 2019), 42% among physicians (Berg, 2020), 50% among nurses (King & Leigh, 2019), 80% among advanced practice providers (APPs) (Orozco et al., 2019), and 61% among pharmacists (Morgan Jones et al., 2017). However, the ability to make direct comparisons between different types of healthcare workers is limited by the use of different survey instruments and the lack of controls for individual, environmental, and organizational factors. In addition, work on clinician burnout often controls variables such as working hours but not on sources of stress both inside and outside of work. This approach fails to consider the porous boundaries between the many roles of healthcare workers as employees, friends, parents, spouses, and children. It is likely that an amalgamation of demands and resources (Demerouti et al., 2001) arising from these spheres explains overall distress. Lastly, the degree to which individual resilience counters the effects of these stressors among various healthcare workers is not well understood.

Understanding the degree of distress across the healthcare team is important for several reasons. Leaders and colleagues who

are burned out experience depersonalization, which may make it difficult for them to empathize with others (De Paiva et al., 2017). This can perpetuate conditions that increase burnout among those they manage or work alongside (Maslach et al., 2001). Organizations with limited financial resources may need to triage the areas of greatest distress. Therefore, understanding the scope and sources of clinical and nonclinical employee distress can help them appropriately target resources designed to mitigate it.

Empirical studies of stress and burnout across entire healthcare teams within a single organization are scant but may provide novel insights, given the ability to use the same metrics for all team members and the fact that employees within an organization often have access to similar resources such as employee assistance and wellness programs. The purpose of this study was to address a current gap in the literature by identifying unique stressors and correlates of distress, including resilience, for various team members within a health system during the COVID-19 pandemic using the same validated instruments.

METHODS
Study Design
This anonymous cross-sectional survey study was conducted within a large medical center in the Southeastern United States and was approved by the organization's institutional review board. In June 2020, an optional online employee survey was sent to 6,276 employees. The survey measured levels of distress, resilience, and individual and organizational-level factors. In addition, respondents were asked to identify major general work, clinical, and nonwork stressors.

Dependent Variable
Distress levels were measured by the validated 9-item Well-Being Index (WBI) tool (Dyrbye et al., 2013, 2016, 2019; Tawfik et al., 2018). The WBI results in scores ranging from −2 up to 9, with higher scores indicating higher distress. In the general population, a WBI ≥ 2 is considered "high distress." Higher WBI distress scores have been correlated with a number of detrimental outcomes such as an increased risk of burnout, medical error, poor quality of life, and suicidal ideation (Beresin et al., 2016; Hall et al., 2016; Tawfik et al., 2018).

Independent Variables
Work-Related Factors
Respondents were asked to identify their role and work-related factors such as location, clinical specialty, exposure to aerosolizing procedures, and shift types. Nonclinical employees, including researchers, administration, human resources, and information technology, were grouped into a single administration/nonclinical category. Physicians and nurses were categorized independently. Nurse practitioners, physician assistants, and certified registered nurse anesthetists were combined into an APP category. Other employees directly involved in the care of patients such as respiratory therapists, pharmacists, patient care technicians, and nurse aides were included in the clinical support staff category.

Moral distress was measured using a single-item measure from a U.S. Department of Veterans Affairs employee survey (U.S. Department of Veterans Affairs, 2018). The survey asked how frequently they experienced moral distress such as feeling like they could not do the right thing or were unsure of what the right

thing to do was (5-point scale, with 5 indicating almost every workday).

Perceived organizational support was measured using a 3-question adaptation of the 8-Item Perceived Organizational Support Scale (Eisenberger et al., 1986). Respondents were asked to assess the degree to which they agreed the organization cared about their satisfaction, well-being, and extra efforts and contributions (0–15 scale).

Decisional involvement was measured using single-item measures from the 2018 VA Employee Survey. Using a 5-point Likert scale, questions in the survey asked employees to indicate the degree to which they agreed that they had input into decisions that affected their work (U.S. Department of Veterans Affairs, 2018). The work control measurement was adapted from a single-item measure of whether employees felt that they had control over how their work was carried out (0–5 scale) (Fisher et al., 2016).

In March 2020, elective procedures were canceled nationwide to curtail the spread of COVID-19. The cancellation was projected to result in estimated losses of $16.3 billion to $17.7 billion per month in revenue and $4 billion to $5.4 billion per month in net income to U.S. hospitals (Best et al., 2020). Furthermore, the scope of government aid and subsidies was unclear initially. As a result, many health systems implemented pay cuts, furloughs, and other expense reduction tactics (Bebinger, 2020). This hospital implemented compensation reductions for most employees in May 2020, which were graduated according to income. Administrative leaders took the largest reduction, and those making under $30,000 per year had no reduction. Reductions did not differ among those

with differing levels of productivity or risk of exposure to COVID-19. Survey respondents were asked the degree to which they agreed that, given the financial challenges the organization was facing, the compensation reductions were fair, transparent, and equitable (5-point Likert scale) and which type of compensation reduction they believed to be most fair and equitable.

Respondents chose their major general work-related stressors such as increased responsibilities or job demands, reduced productivity, exposure to COVID-19, and reduced income. Clinicians selected their major clinical stressors from choices including inadequate PPE, telemedicine, scope of practice concerns, and testing shortages.

Nonwork-Related Factors

Individual resilience was measured using the 2-item CD-RISC-2 scale (Vaishnavi et al., 2007), which results in scores ranging from 0 to 8, with 8 indicating the highest resilience. Respondents selected their top nonwork stressors such as childcare, loneliness or social isolation, and societal response to COVID-19. Gender and family status were also collected.

Analytic Strategy

WBI score; resilience score; and counts of overall, clinical, work, and nonwork stressors were calculated and stratified by job type. Frequency and percentages of major work and nonwork-related stressors by role were calculated. Analysis of variance (ANOVA) and chi-square tests were conducted to determine whether employee groups differed along the main variables of interest. Multivariate regression analysis was conducted to examine the degree to

which the counts of general work, clinical, and nonwork stressors were associated with distress, with subsequent analysis applied to identify specific stressors within those categories associated with distress. Dominance analysis identified the relative contribution of each variable to the variance in distress.

RESULTS

A total of 1,130 respondents took the survey with a response rate of 18%. Cases missing key variables of interest were excluded from the analysis ($n = 78$).

A summary of WBI and resilience scores and average counts of general work, clinical, and nonwork stressors by role is depicted in Table 1. The health system had baseline WBI scores prior to the COVID-19 pandemic for APPs ($M = 2.99$), nurses ($M = 2.78$), and physicians ($M = 2.03$). These scores are compared to WBI scores for all employee types during COVID-19 in Figure 1, showing a substantial increase relative to prepandemic scores. During the early days of the pandemic, the organization saw an increase in the WBI distress scores, and most employees were

FIGURE 1

Change in WBI Distress Scores from Prepandemic to Early Pandemic Phases
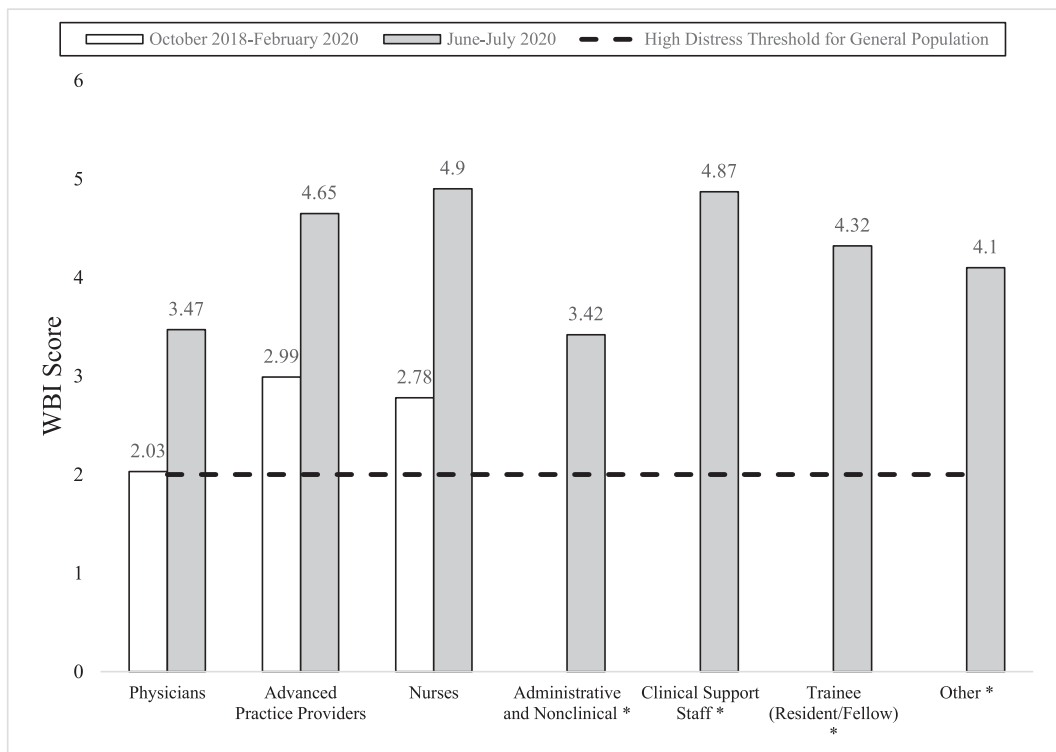
Note. WBI = Well-Being Index.
* Data not available from October 2018–February 2020 for these roles.

TABLE 1

Variance in Well-being, Resilience, and Stressors Among Healthcare Worker Roles

	Administrative and Nonclinical	APP	Clinical Support Staff	Nurse	Physician	Trainee, Resident, or Fellow	Other	p^*
Number	387	217	166	136	192	19	10	
WBI score (−2 to 9) mean (SD)	3.42 (2.19)	4.65 (2.19)	4.87 (2.28)	4.90 (2.25)	3.47 (2.17)	4.32 (1.76)	4.10 (2.38)	<.001
WBI score % ≥2	75.13	89.40	92.17	89.71	71.35	100.00	70.00	<.001
Resilience score (0–8) mean (SD)	6.47 (1.36)	6.87 (1.13)	6.51 (1.32)	6.57 (1.20)	6.59 (1.21)	6.37 (1.16)	6.3 (1.16)	.017
Count of general work (0–16) stressors mean (SD)	3.88 (2.34)	4.92 (2.23)	4.87 (2.29)	5.53 (2.59)	3.39 (2.42)	3.33 (1.41)	3.67 (1.86)	<.001
Count of clinical stressors (0–13) mean (SD)	N/A	3.08 (1.95)	1.62 (2.34)	3.22 (2.44)	2.62 (2.17)	1.61 (1.58)	N/A	<.001
Count of nonwork stressors (0–14) mean (SD)	4.17 (2.64)	4.84 (2.32)	5.41 (2.55)	4.93 (2.58)	3.85 (2.36)	3.72 (2.21)	4.57 (2.88)	<.001
Count of total stressors (0–37) mean (SD)	8.51 (43.38)	12.81 (5.31)	11.81 (5.70)	13.51 (6.41)	10.32 (5.88)	8.67 (3.97)	6.75 (4.77)	<.001
Moral distress frequency (1–5) mean (SD)	1.17 (1.49)	1.47 (1.52)	1.42 (1.61)	1.83 (1.72)	1.30 (1.42)	1.22 (1.35)	1.43 (1.81)	.003
Increased job demands/responsibilities (%)	36.68	53.70	51.22	61.94	48.17	33.33	3.33	<.001
Heavy workload or long hours (%)	26.64	36.57	48.17	45.52	22.51	22.22	16.66	<.001
Perceived organization support (0–15) mean (SD)	9.18 (4.31)	7.71 (3.80)	7.53 (4.13)	7.71 (3.81)	7.00 (5.26)	9.12 (3.87)	7.75 (4.77)	<.001
Work control mean (1–5) (SD)	3.69 (1.11)	3.26 (1.16)	3.52 (1.14)	3.26 (1.10)	3.52 (1.17)	3.26 (0.73)	3.00 (1.33)	<.001
Perceived fairness/equity of pay cut (0–4) mean (SD)	2.31 (1.07)	1.70 (1.22)	1.56 (1.35)	1.27 (1.12)	2.03 (1.32)	2.47 (0.90)	1.70 (1.06)	<.001
High risk of COVID-19 exposure while treating patients (%)	N/A	50.46	25.93	41.79	37.37	16.67	N/A	<.001

TABLE 1

(Continued)

	Administrative and Nonclinical	APP	Clinical Support Staff	Nurse	Physician	Trainee, Resident, or Fellow	Other	p^*
Reduction in income (%)	33.77	70.83	59.15	67.16	43.98	11.11	16.67	<.001
Reduced productivity (%)	20.05	16.20	12.20	17.65	28.80	16.67	3.33	.005
Loneliness/social isolation (%)	39.52	21.96	36.20	40.30	62.06	3.89	42.86	.073
Strained relationship with a loved one (%)	12.37	14.95	19.63	14.93	9.04	16.67	0.00	.103
Fear of infecting family with COVID-19%	36.56	70.56	65.03	61.19	46.81	38.89	42.86	<.001
Gender								<.001
Female (%)	68.03	71.89	75.90	78.26	40.61	42.11	50.00	
Male (%)	17.65	14.29	13.25	8.70	45.08	42.11	30.00	
Prefer not to answer (%)	13.04	13.82	10.84	12.32	12.95	15.79	20.00	
Self-describe (%)	1.27	0.00	0.00	0.72	0.52	0.00	0.00	
Family status								<.001
Married/partnered, no children	17.39	14.75	15.06	18.12	7.77	42.11	10.00	
Married/partnered with children at home (%)	24.30	50.23	37.95	18.12	50.78	10.53	20.00	
Married/partnered with grown children (%)	14.58	5.07	5.42	13.77	16.06	0.00	20.00	
Other (%)	15.35	11.98	19.28	13.77	15.03	26.32	20.00	
Single, no children (%)	17.39	11.98	14.46	13.77	7.25	21.05	30.00	
Single with children at home (%)	4.86	2.30	3.61	5.07	1.55	0.00	0.00	
Single with grown children (%)	6.14	3.69	4.22	5.80	1.55	0.00	0.00	

Note. Resilience measured by the CD-RISC (Connor-Davidson Resilience Scale; score ranges from 0 to 8); WBI = Well-Being Index distress score (score ranges from –2 to 9).
*Analysis of variance (ANOVA) and chi-square test p values.

above the threshold considered high distress among the general population. Nurses (*M* = 4.9, *SD* = 2.25, 90% in high distress) and APPs (*M* = 4.65, *SD* = 2.19, 90% high distress) had the highest average WBI distress scores, while physicians (*M* = 3.47, *SD* = 2.17, 71% high distress) and administrative/nonclinical employees (*M* = 3.42, *SD* = 2.19, 75% high distress) had the lowest. Clinical support staff had the greatest percentage of WBI scores above the general population high distress threshold (WBI ≥ 2) at 92% (*M* = 4.87, *SD* = 2.28).

Regression analyses results are listed in Tables 2 and 3. For all types of employees, the total number of general work stressors (*β* = 0.203, *p* < .001) and home stressors (*β* = 0.078, *p* = .003) was associated with higher distress scores at statistically significant levels, while the count of clinical stressors failed to reach significance (Table 2). The variables that explained the greatest contribution to the variance in distress, ranked from high to low, were heavy workload or long hours, increased job demands or responsibilities, frequency of moral distress, perceived organizational support, perceived fairness of the salary cuts, work control, loneliness, and resilience (Table 3).

Work-Related Factors

Differences in various stressors across roles are depicted in Table 1. In multivariate analysis, work-related factors associated with higher distress scores on average included role as clinical support staff (*β* = 0.483, *p* = .008), frequent moral distress (*β* = 0.258, *p* < .001), increased job demands or responsibilities (*β* = 0.670, *p* < .001), heavy workload (*β* = 1.517, *p* < .001), and high risk of personal exposure to COVID-19 while providing care

(*β* = 0.342, *p* = .015). Respondents who reported moral distress almost every day had a WBI 1.2 points higher on average than those with no moral distress.

Factors associated with lower distress scores on average included greater perceived organizational support (*β* = −0.057, *p* = .011) and higher perceived fairness, transparency, and equity of compensation reductions (*β* = −0.104, *p* = .044). Reduction in income as a major stressor was not significantly associated with distress. 58 percent of respondents believed lower reductions for employees treating COVID patients or working physically with patients was most fair. Twenty-eight percent supported graduated compensation reductions by income regardless of productivity, and 5% saw equal compensation reduction for all as most fair and equitable.

Nonwork-Related Factors

Physicians and APPs had the highest resilience scores. Resilience scores were negatively associated with distress (*β* = −0.204, *p* < .001), meaning that the variance in distress score between the most and least resilient person is approximately 1.6 points on an 11-point spread, controlling for other factors.

Those reporting loneliness or social isolation (*β* = .562, *p* < .001), strained relationship with a loved one (*β* = .468, *p* = .002), or fear of infecting their family with COVID-19 (*β* = 0.255, *p* = .020) as a major stressor had higher distress on average compared to those who did not.

Males were less distressed than females on average (*β* = −0.335, *p* = .014), and no significant differences were noted among family statuses.

TABLE 2

Results of Multivariate Regression, Correlates of WBI Distress Score by Stress Type

Well-Being Index Distress Score (–2 to 9)*	Coefficient (95% CI)	$p > t$	Rank by Explanation of Variance
$N = 1,055$			
Work-related factors			
Job category			11
Administration and nonclinical	[Reference]		
Advanced practice provider	0.568 (0.121 to 1.016)	0.013	
Clinical support staff	0.712 (0.313 to 1.111)	<0.001	
Nurse	0.487 (0.018 to 0.955)	0.042	
Other	0.931 (–0.670 to 2.533)	0.254	
Physician	0.052 (–0.392 to 0.497)	0.817	
Trainee resident/fellow	0.741 (–0.155 to 1.636)	0.105	
Count of general work stressors (0–16)	0.203 (0.140 to 0.266)	<0.001	1
Moral distress frequency (1–5)	0.298 (0.216 to 0.379)	<0.001	2
Perceived organizational support (0–15)	–0.083 (–0.133 to –0.034)	0.001	3
Work control (1–5)	–0.222 (–0.355 to –0.089)	0.001	5
Perceived fairness/equity of pay cut (0–4)	–0.124 (–0.235 to –0.013)	0.029	6
Count of clinical stressors (0–13)	–0.030 (–0.104 to 0.043)	0.420	7
Decisional involvement (1–5)	0.086 (–0.037 to 0.208)	0.170	9
Work location			12
Administration/office	[Reference]		
Ambulatory/outpatient	0.151 (–0.264 to 0.566)	0.475	
Hospital-based/ICU	–0.393 (–.119 to 0.904)	0.132	
Hospital-based/non-ICU	0.149 (–0.269 to 0.566)	0.485	
Operating room/surgical	0.002 (–0.530 to 0.535)	0.993	
Other	–0.066 (–0.411 to 0.279)	0.707	
Procedural	0.702 (–0.681–2.085)	0.320	
Nonwork related factors			
Count of nonwork stressors (0–14)	0.078 (0.026–0.130)	0.003	4
Resilience (0–8)	–0.207 (–0.295 to –0.119)	< 0.001	8
Gender			10
Female	[Reference]		
Male	–0.406 (–0.704 to –0.107)	0.008	
Prefer not to answer	–0.165 (–0.614 to 0.284)	0.472	
Self describes	–0.108 (–1.484 to 1.268)	0.878	
Family status			13
Married/partnered, no children	[Reference]		
Married/partnered with children at home	–0.021 (–0.359 to 0.317)	0.903	
Married/partnered with grown children	–0.310 (–0.751 to 0.132)	0.169	

TABLE 2

(Continued)

Well-Being Index Distress Score (−2 to 9)*	Coefficient (95% CI)	$p > t$	Rank by Explanation of Variance
Other	−0.023 (−0.502 to 0.456)	0.924	
Single, no children	0.166 (−0.235 to 0.567)	0.416	
Single with children at home	0.254 (−0.402 to 0.910)	0.447	
Single with grown children	−0.071 (−0.653 to 0.411)	0.811	

Note. ICU = intensive care unit.
*WBI ≥ 2 is considered high distress for the general population. A higher score indicates greater distress.

TABLE 3

Results of Multivariate Regression, Correlates of WBI Distress Score by Stressor

Well-Being Index Distress Score (−2 to 9)*	Coefficient (95% CI)	$p > t$	Rank by Explanation of Variance
$N = 1,052$			
Work-related factors			
Job category			15
Administration and nonclinical	[Reference]		
Advanced practice provider	0.262 (−0.118 to 0.642)	0.176	
Clinical support staff	0.483 (0.125 to 0.841)	0.008	
Nurse	0.171 (−0.226 to 0.567)	0.399	
Other	1.168 (−0.260 to 2.600)	0.109	
Physician	−0.157 (−0.526 to 0.212)	0.404	
Trainee resident/fellow	0.627 (−0.168 to 1.421)	0.122	
Work location			17
Administration/office	[Reference]		
Ambulatory/outpatient	0.278 (−0.097 to 0.652)	0.146	
Hospital-based/ICU	−0.070 (−0.533 to 0.393)	0.766	
Hospital-based/non-ICU	0.026 (−0.351 to 0.403)	0.892	
Operating room/surgical	0.021 (−0.466 to 0.508)	0.934	
Other	−0.015 (−0.326 to 0.295)	0.923	
Procedural	0.471 (−0.765 to 1.708)	0.455	
Heavy workload or long hours (0–1)	1.517 (1.274 to 1.760)	< 0.001	1
Increased job demands/responsibilities (0–1)	0.670 (0.436 to 0.904)	< 0.001	2
Moral distress frequency (1–5)	0.258 (0.186 to 0.330)	< 0.001	3
Perceived organizational support (0–15)	−0.057 (−0.101 to −0.013)	0.011	4
Work control (1–5)	−0.213 (−0.331 to −0.094)	< 0.001	5
Perceived fairness/equity of pay cut (0–4)	−0.104 (−0.206 to −0.003)	0.044	6

TABLE 3

(Continued)

Well-Being Index Distress Score (−2 to 9)*	Coefficient (95% CI)	*p* > *t*	Rank by Explanation of Variance
High risk of COVID-19 exposure while treating patients (0–1)	0.342 (0.067 to 0.618)	0.015	8
Decisional involvement (1–5)	0.018 (−0.090 to 0.127)	0.740	12
Reduction in income (0–1)	0.064 (−0.162 to 0.290)	0.579	13
Nonwork-related factors			
Loneliness/social isolation (0–1)	0.562 (0.344 to 0.780)	< 0.001	7
Resilience (0–8)	−0.204 (−0.283 to −0.125)	< 0.001	9
Fear of infecting family with COVID-19 (0–1)	0.255 (0.040 to 0.470)	0.020	10
Strained relationship with a loved one (0–1)	0.468 (0.172 to 0.763)	0.002	11
Gender			14
Female	[Reference]		
Male	−0.335 (−0.602 to −0.069)	0.014	
Prefer not to answer	−0.236 (−0.635 to 0.164)	0.247	
Self describe	0.501 (−0.723 to 4.725)	0.422	
Family status			16
Married/partnered, no children	[Reference]		
Married/partnered with children at home	0.004 (−0.301 to 0.308)	0.980	
Married/partnered with grown children	−0.297 (−0.693 to 0.099)	0.141	
Other	−0.166 (−0.595 to 0.262)	0.447	
Single, no children	−0.068 (−0.430 to 0.294)	0.712	
Single with children at home	0.468 (−0.121 to 1.057)	0.119	
Single with grown children	0.146 (−0.375 to 0.667)	0.583	

* WBI ≥ 2 is considered high distress for the general population. A higher score indicates greater distress.

DISCUSSION

In this cross-sectional survey, we found that distress has been common among all types of healthcare employees during the COVID-19 pandemic. Research on burnout and distress in healthcare has generally focused on specific clinical employees such as nurses or physicians, including recent studies on the psychological impact of the COVID-19 pandemic.

Our results suggest all healthcare workers are at risk for high distress and deserve consideration in the conversation on improving well-being. For instance, 75% of administrative and nonclinical staff and 92% of clinical support staff reported WBI ≥ 2, which is considered "high distress" for the general population. The unique stressors of each subgroup are important, but the conversation needs to move beyond siloed

approaches to include the entire team. Although the sources of major stress differ by employee role, there are common stressors associated with higher distress scores across groups. These represent an opportunity for organizationwide interventions that are most likely to lessen distress across the entire healthcare team.

Work-Related Factors

Both sources of major stress indicated by respondents and distress scores varied significantly by role, yet each group had an average distress score that would be considered "high distress" compared to the general population. While nurses experienced the highest average distress scores, clinical support staff and APPs also had higher levels of distress compared to administrative/nonclinical staff and physicians. The multivariate analysis indicated that having a role as a clinical support staff member was significantly associated with a higher distress score after controlling for other characteristics. However, this group is largely absent in the discussion about the well-being of healthcare employees. For clinical support staff, lower levels of compensation may mean there are fewer resources such as childcare or counseling to offset stressors. Notably, respiratory therapists and patient care technicians have a high risk of COVID-19 exposure at work yet typically have low representation among senior leadership and therefore fewer advocates (relative to physicians and nurses) for changes to their work environment.

Heavy workloads, long hours, and increased job demands and responsibilities explained the greatest portion of the variance in distress; nurses and APPs had the greatest percentage of respondents

indicating these as major stressors. These outcomes are a direct result of staffing levels and work allocation. Thin staffing means longer shifts and fewer people to share the collective workload required to keep a hospital running. Staffing ratios that were sufficient or thin prior to COVID-19 were likely insufficient for an influx of patients with complex care needs spreading illness among healthcare workers (Nguyen et al., 2020; Renwick & Dubnow, 2020). The financial strain from canceled elective procedures led many hospitals to enact hiring freezes, adding another barrier to maintaining appropriate workloads.

After heavy workload, long hours, and increased job demands, the frequency of moral distress accounted for the next-greatest portion of the variance in distress. Nurses and APPs had the highest reported frequencies of moral distress, followed by clinical support staff. This is consistent with the growing concerns about physician burnout regarding "moral injury" (Talbot & Dean, 2018) and whether a moral injury or a lack of resilience is to blame for the burnout epidemic. Press coverage of the COVID-19 pandemic includes an abundance of examples of possible moral distress faced by healthcare workers, such as fear about rationing ventilators, being assigned to unfamiliar tasks or units, watching patients die alone, and choosing between clinical duties and hugging their own children (Antommaria et al., 2020; Bryant, 2020; Lamas, 2020; Mogul, 2020; Ouyang, 2020; Schumaker, 2020; White & Lo, 2020). Furthermore, the stress caused by heavy workloads and long hours may exacerbate moral distress, as clinicians juggling a heavy patient load may not feel they are delivering optimal care.

In the survey results, the degree to which an employee disagreed that the compensation reductions were fair, equitable, and transparent was associated with increased distress, while the reduction in income as a major stressor was not associated with elevated distress. This suggests that the perceived injustice of the reduction in income was more distressing than the actual reduction in income. It is likely that during the COVID-19 pandemic, healthcare workers have simultaneously experienced an increase in their workload, an increase in moral distress and personal risk, and a reduction in compensation. Compensation is a form of expressing value for one's services, efforts, and risk. Thus, while healthcare workers worked long hours and put themselves at great personal risk while others stayed home, the message they received was that those sacrifices had less financial value. Most respondents indicated support for a compensation reduction plan that considers whether the employee works in person with patients, and more specifically with COVID-19 patients. This is consistent with prior research results suggesting that people with higher job pressure have a higher expectation for rewards (Narisada, 2020).

Higher perceived organizational support was associated with lower distress. Organizations must consider how their operational decisions, leadership styles, communication, and recognition collectively convey information about employees' value in the organization. Gestures of appreciation are welcome (e.g., nurses week and employee of the month) but not sufficient. When an organization simultaneously maintains thin staffing ratios, prioritizes financial over human capital, or is unable to provide appropriate PPE, these messages of appreciation can create cynicism rather than a genuine feeling of value.

The only clinical stressor associated with higher distress was the high risk of exposure to COVID-19 while providing patient care. A possible explanation is that the intensity and duration of clinicians' training gives them an outsized ability to endure clinical stressors in fulfilling their mission to care for others (Sihha, 2020). However, the culmination of nonclinical stressors, in addition to their taxing clinical work, may be driving their distress. Therefore, there is value in efforts to reduce the number of nonclinical stressors that healthcare workers face.

Nonwork-Related Factors
Consistent with prior research, females were more distressed than males on average (Lai et al., 2020). We expected family status to be significantly related to distress, particularly for parents balancing work responsibilities with young children at home during school closures. However, that was not the case. It may be that the effect of stressors such as limited childcare options have been offset by benefits of parenting such as reduced social isolation.

This study's findings suggest a balanced perspective on the concept of resilience. Although greater individual resilience was associated with lower distress, it explained less of the variance in distress than other factors such as heavy workload and long hours, increased job responsibilities, perceived organizational support, and frequency of moral distress. Recent studies of physicians have found that they tend to be more resilient than the general population,

which suggests that a deficiency in resilience is not the primary cause of distress (West et al., 2020). Efforts to improve the work environment may do more to reduce distress than efforts to increase individual resilience (Panagioti et al., 2017; West et al., 2016, 2020). Individual resilience is important, but it does not absolve the organization from addressing work-related sources of stress.

Study Limitations

An important caveat to this work is that we measured correlates of distress—not job satisfaction, engagement, or stress. Therefore, although some variables may not reach statistical significance, they may still be important for creating healthy and productive environments where all members of the healthcare team can do their best work. A lack of distress is not the goal; flourishing is. These findings may help identify the first steps in mitigating healthcare worker distress during the COVID-19 pandemic, but more work is needed to create environments that allow healthcare teams to thrive.

Given the cross-sectional nature of the study, we cannot determine causality. This study was conducted within one organization, which facilitates a clear comparison among healthcare team members, but it may not be generalizable to other organizations. Lastly, nonresponse bias may limit the generalizability of the findings to all employees. Although a greater proportion of respondents were male compared to the employee population, it is unknown whether people who are more or less distressed would be more likely to complete an optional survey. Nevertheless, this study makes an important contribution in identifying

the relative magnitude and correlates of distress among various employee groups within the healthcare team.

Implications for Policy and Practice

The results represent an important message and opportunity for healthcare leaders. Most of the factors that are significantly associated with distress are work related, which means they can be mitigated. This is particularly true of ensuring appropriate staffing levels, perhaps the single largest opportunity to significantly move the needle on distress and reduce moral distress. In addition, what decision-makers believe to be fair, equitable, or transparent may not be perceived as such. When possible, leaders should seek input from a wide range of employees to understand their preferences and recommendations on issues ranging from compensation to vaccine distribution plans or any other allocation of limited resources. This can help leaders mitigate employees' frustration or perceptions of inequity and guide communications that will engender trust in the organization. Having a mechanism in place to gather employee feedback can help facilitate this decisional involvement even when decisions must be made quickly.

While our study found that work-related factors contributed most to distress, even the nonwork factors can be somewhat addressed in the workplace—support for childcare, for example. Loneliness and social isolation may be assuaged by creating a sense of community and social cohesion within teams. Strained relationships with loved ones may diminish when reasonable workloads allow employees enough time outside of work to tend to their relationships at home.

Healthcare organizations are operating in extraordinary times, with financial strain as a primary concern prior to the COVID-19 pandemic (American College of Healthcare Executives, 2020) and a bleak financial outlook after it (Barnett et al., 2020). However, our data suggest that even small steps to minimize or reduce work and home stressors for healthcare employees may lead to reductions in overall distress. Low-cost options such as leadership rounding in the units to check on employees and identify opportunities for immediate improvement can make an impact.

In addition, leaders must vigilantly maintain their own well-being. This study highlights that a majority of nonclinical and administrative healthcare employees are also at risk for high distress. When in high distress, leaders can experience burnout, fatigue, worsening quality of life, and other symptoms of chronic stress. This state of being is hardly conducive to optimal decision-making. Furthermore, if leaders do not prioritize their own well-being, they may have difficulty recognizing its importance and developing systems that support healthy work among those they lead and serve.

Leaders must consider the unique stressors and needs of each of the many groups working together for the good of the patient—from administration and nursing to physicians and environmental services employees.

Lastly, many healthcare organizations embed the goals of taking care of the communities they serve in their mission and vision statements. Healthcare systems are frequently the largest employers in a city or region. They cannot attend to the health of their communities without committing to creating a healthy work environment within their walls.

CONCLUSION

Findings from our large survey of healthcare workers during the early phases of the COVID-19 crisis found all employees at increased risk of high distress, including administrative and nonclinical employees and clinical support staff, as well as physicians, nurses, and APPs. The major causes of distress were predominantly

FIGURE 2

Top 10 Correlates of Distress Ranked by Contribution to Variance

1. Heavy workload/long hours
2. Increased job demands/ responsibilities
3. Higher frequency of moral distress
4. Perceived organizational support
5. Autonomy/work control
6. Perceived inequity of pay cut
7. Loneliness/social isolation
8. High risk of COVID-19 exposure while treating patients
9. Individual resilience
10. Fear of infecting family with COVID-19

work-related, such as heavy workload and long hours, moral distress, lack of organizational support, autonomy, and the perceived inequity of pay cuts. The top 10 correlates are listed in Figure 2. Greater resilience was associated with decreased distress, but it accounted for a small portion of the overall variance relative to work-related factors. Taken together, these findings suggest that decreasing work demands may provide the greatest opportunity for reducing distress—starting at the top. Leaders must tend to their own well-being as well as each of the many different employee groups experiencing distress during a crisis.

ACKNOWLEDGMENTS

REFERENCES

American College of Healthcare Executives. (2020). Top issues confronting hospitals. https://www.ache.org/learning-center/research/about-the-field/top-issues-confronting-hospitals

Antommaria, A. H. M., Gibb, T. S., McGuire, A. L., Wolpe, P. R., Wynia, M. K., Applewhite, M. K., Caplan, A., Diekema, D. S., Hester, D. M., Lehmann, L. S., McLeod-Sordjan, R., Schiff, T., Tabor, H. K., Wieten, S. E., & Eberl, J. T. (2020). Ventilator triage policies during the COVID-19 pandemic at U.S. hospitals associated with members of the association of bioethics program directors. *Annals of Internal Medicine*, *173*(3), 188–194. https://doi.org/10.7326/M20-1738

Azoulay, E., De Waele, J., Ferrer, R., Staudinger, T., Borkowska, M., Povoa, P., Iliopoulou, K., Artigas, A., Schaller, S. J., Hari, M. S., Pellegrini, M., Darmon, M., Kesecioglu, J., & Cecconi, M. (2020). Symptoms of burnout in intensive care unit specialists facing the COVID-19 outbreak. *Annals of Intensive Care*, *10*(1), 110. https://doi.org/10.1186/s13613-020-00722-3

Banerjee, D., & Rai, M. (2020). Social isolation in COVID-19: The impact of loneliness. *International Journal of Social Psychiatry*, *66*(6), 525–527. https://doi.org/10.1177/0020764020922269

Barnett, M. L., Mehrotra, A., & Landon, B. E. (2020). COVID-19 and the upcoming financial crisis in health care. *NEJM Catalyst*, https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0153

Bebinger, M. (2020, April 2). COVID-19 hits some workers with pay cuts and layoffs. National Public Radio. https:// www.npr.org/sections/health-shots/2020/04/02/ 826232423/covid-19-hits-some-health-care-workers-with-pay-cuts-and-layoffs

Beresin, E. V., Milligan, T. A., Balon, R., Coverdale, J. H., Louie, A. K., & Roberts, L. W. (2016). Physician wellbeing: A critical deficiency in resilience education and training. *Academic Psychiatry*, *40*:9–12. https://doi.org/10.1007/s40596-015-0475-x

Berg, S. (2020, January 21). Physician burnout: Which medical specialties feel the most stress. *AMA Physician Health.* https://www.ama-assn.org/practice-management/physician-health/physician-burnout-which-medical-specialties-feel-most-stress

Best, M. J., McFarland, E. G., Anderson, G. F., & Srikumaran, U. (2020). The likely economic impact of fewer elective surgical procedures on US hospitals during the COVID-19 pandemic. *Surgery*, *168*(5), 962–967. https://doi:10.1016/j.surg.2020.07.014

Bryant, M. (2020, April 16). "I can't hug my kid": How coronavirus is upending medical workers' lives. *The Guardian.* https://www.theguardian.com/world/2020/apr/16/us-medical-workers-lives-upended-coronavirus

Chow, K. M., Law, B. M.H., Ng, M. S.N., Chan, D. N. S., So, W. K.W., Wong, C. L., & Chan, C. W.H. (2020). A review of psychological issues among patients and healthcare staff during two major coronavirus disease outbreaks in China: Contributory factors and management strategies. *International Journal of Environmental Research and Public Health*, *17*(18), 6673. https://doi.org/10.3390/ijerph17186673

De Paiva, L. C., Gomes Canário, A. C., Corsino de Paiva China, E. L., & Gonçalves, A. K. (2017).

Burnout syndrome in health-care professionals in a university hospital. *Clinics*, *72*(5), 305–309. https://doi.org/10.6061/clinics/2017(05)08

Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Donohue, J. M., & Miller, E. (2020). COVID-19 and school closures. *JAMA*, *324*(9), 845–847. https://doi.org/10.1001/jama.2020.13092

Dyrbye, L. N., Johnson, P. O., Johnson, L. M., Halasy, M. P., Gossard, A. A., Satele, D., & Shanafelt, T. (2019). Efficacy of the Well-Being Index to identify distress and stratify well-being in nurse practitioners and physician assistants. *Journal of the American Association of Nurse Practitioners*, *31*(7), 403–412. https://doi.org/10.1097/JXX.0000000000000179

Dyrbye, L. N., Satele, D., & Shanafelt, T. (2016). Ability of a 9-Item Well-Being Index to identify distress and stratify quality of life in US workers. *Journal of Occupational and Environmental Medicine*, *58*(8), 810–817. https://doi.org/10.1097/JOM.0000000000000798

Dyrbye, L. N., Satele, D., Sloan, J., & Shanafelt, T. D. (2013). Utility of a brief screening tool to identify physicians in distress. *Journal of General Internal Medicine*, *28*(3), 421–427. https://doi.org/10.1007/s11606-012-2252-9

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500

Fisher, G., Matthews, R., & Gibbons, A. (2016). Developing and investigating the use of single-item measures in organizational research. *Journal of Occupational Health Psychology*, *21*(1), 3–23. https://doi.org/10.1037/a0039139

Godinic, D., Obrenovic, B., & Khudaykulov, A. (2020). Effects of economic uncertainty on mental health in the COVID-19 pandemic context: Social identity disturbance, job uncertainty and psychological well-being model. *International Journal of Innovation and Economic Development*, *6*(1), 61–74. https://doi.org/10.18775/ijied.1849-7551-7020.2015.61.2005

Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O'Connor, D. B. (2016). Healthcare staff wellbeing, burnout, and patient safety: A systematic review. *PLOS ONE*, *11*(7), e0159015. https://doi.org/10.1371/journal.pone.0159015.

King, C., & Leigh, B. A. (2019). Trends and implications with nursing engagement PRC national nursing engagement report utilizing the PRC nursing quality assessment inventory. *PRCCustom Research*, 1–15. https://prccustomresearch.com/wp-content/uploads/2019/PRC_Nursing_Engagement_Report/PRC-NurseReport-Final-031819-Secure.pdf

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease. *JAMA Network Open*, *3*(3), e203976. https://doi.org/10.1001/jamanetworkopen.2020.3976

Lamas, D. J. (2020). I'm on the front line. I have no plan for this. *New York Times*. https://www.nytimes.com/2020/03/24/opinion/coronavirus-hospital-visits.html

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, *52*, 397–422. https://doi.org/10.1146/annurev.psych.52.1.397

Mogul, F. (2020, April 19). Shortage of dialysis equipment leads to difficult decisions in New York ICUs. National Public Radio. https://www.npr.org/sections/health-shots/2020/04/19/838103327/shortage-of-dialysis-equipment-leads-to-difficult-decisions-in-new-york-icus

Moore, C., & Kolencik, J. (2020). Acute depression, extreme anxiety, and prolonged stress among COVID-19 frontline healthcare workers. *Psychosociological Issues in Human Human Resource Management*, *8*(1), 55–60. https://doi.org/10.22381/PIHRM8120209

Morgan Jones, G., Roe, N. A., Louden, L., & Tubbs, C. R. (2017). Factors associated with burnout among US hospital clinical pharmacy practitioners: Results of a nationwide pilot survey. *Hospital Pharmacy*, *52*(11), 742–751. https://doi.org/10.1177/0018578717732339

Narisada, A. (2020). Job pressure, the work-family interface, and the sense of distributive injustice:

An elaboration of work-related inputs among twenty-first century workers. *Social Psychology Quarterly*, *83*(2), 107–128. https://doi.org/10.1177/0190272519874294

Nguyen, L. H., Drew, D. A., Graham, M. S., Joshi, A. D., Guo, C. -G., Ma, W., Mehta, R. S., Warner, E. T., Sikavi, D. R., Lo, C., Kwon, S., Song, M., Mucci, L. A., Stampfer, M. J., Willett, W. C., Eliassen, A. H., Hart, J. E., Chavarro, J. E., Rich-Edwards, J. W., & …. Zhang, F. (2020). Risk of COVID-19 among front-line health-care workers and the general community: A prospective cohort study. *Lancet Public Health*, *5*(9), e475–e483. https://doi.org/10.1016/S2468-2667(20)30164-X

Orozco, J. M., Furman, J., McAndrews, K. K., Keenan, M. M., Roman, C., Guthrie, J., Lloyd, C. J., & Wilson, A. B. (2019). Assessing burnout among advanced practice providers (APPs) compared with APP trainees. *Medical Science Educator*, *29*(4), 1023–1031. https://doi.org/10.1007/s40670-019-00799-x

Ouyang, H. (2020, April 14). I'm an E.R. Doctor in New York. None of us will ever be the same. *New York Times*. https://www.nytimes.com/2020/04/14/magazine/coronavirus-er-doctor-diary-new-york-city.html

Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Chew-Graham, C., Dawson, S., van Marwijk, H., Geraghty, K., & Esmail, A. (2017). Controlled interventions to reduce burnout in physicians. *JAMA Internal Medicine*, *177*(2), 195. https://doi.org/10.1001/jamainternmed.2016.7674

Renwick, D., & Dubnow, S. (2020, August 11). *Exclusive: Over 900 health workers have died of* COVID-19*, and the toll is rising.* Kaiser Family Foundation. https://www.news-medical.net/news/20200811/Exclusive-Over-900-health-workers-have-died-of-COVID-19-And-the-toll-is-rising.aspx

Schumaker, E. (2020, May 31). Front-line doctors face a mental health crisis amid coronavirus. Can medicine overcome the culture of stoicism? ABC News. https://abcnews.go.com/Health/front-line-doctors-face-mental-health-crisis-amid/story?id=70660931

Shechter, A., Diaz, F., Moise, N., Anstey, D. E., Ye, S., Agarwal, S., Birk, J. L., Brodie, D., Cannone, D. E., Chang, B., Claassen, J. Cornelius, T., Derby, L., Dong, M., Givens, R. C., Hochman, B.,

Homma, S., Kronish, I. M., Lee, S. A. J. . . . Abdalla, M. (2020). Psychological distress, coping behaviors, and preferences for support among New York healthcare workers during the COVID-19 pandemic. *General Hospital Psychiatry*, *66*, 1–8. https://doi.org/10.1016/j.genhosppsych.2020.06.007

Sihha, P. (2020, September 4). Why do doctors commit suicide? *New York Times*. https://www.nytimes.com/2014/09/05/opinion/why-do-doctors-commit-suicide.html

Stephenson, J. (2020). CDC report reveals "considerably elevated" mental health toll from COVID-19 stresses. *JAMA Health Forum*, *1*(8), e201078–e1201078. https://doi.org/10.1001/jamahealthforum.2020.1078

Talbot, S. G., & Dean, W. (2018, July 26). Physicians aren't "burning out." They're suffering from moral injury. *Stat*, *7*(26), 18. https://www.statnews.com/2018/07/26/physicians-not-burning-out-they-are-suffering-moral-injury/

Tawfik, D. S., Profit, J., Morgenthaler, T. I., Satele, D. V., Sinsky, C. A., Dyrbye, L. N., Tutty, M. A., West, C. P., & Shanafelt, T. D. (2018). Physician burnout, well-being, and work unit safety grades in relationship to reported medical errors. *Mayo Clinic Proceedings*, *93*(11), 1571–1580. https://doi.org/10.1016/j.mayocp.2018.05.014

U.S. Department of Veterans Affairs. (2018). National Center for Organizational Development VA All Employee Survey. https://www.va.gov/NCOD/VAworkforcesurveys.asp

Vaishnavi, S., Connor, K., & Davidson, J. R. T. (2007). An abbreviated version of the Connor-Davidson Resilience Scale (CD-RISC), the CD-RISC2: Psychometric properties and applications in psychopharmacological trials. *Psychiatry Research*, *152*(2–3), 293–297. https://doi.org/10.1016/j.psychres.2007.01.006

West, C. P., Dyrbey, L. N., Erwin, P. J., & Shanafelt, T. D. (2016). Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis. *Lancet*, *388*(10057), 2272–2281. https://doi.org/10.1016/S0140-6736(16)31279-X

West, C. P., Dyrbye, L. N., Sinsky, C., Trockel, M., Tutty, M., Nedelec, L., Carlasare, L. E., & Shanafelt, T. D. (2020). Resilience and burnout among physicians and the general US working population. *JAMA Network Open*, *3*(7),

e209385–e1209385. https://doi.org/10.1001/jamanetworkopen.2020.9385

White, D. B., & Lo, B. (2020). A framework for rationing ventilators and critical care beds during the COVID-19 pandemic. *JAMA*, *323*(18), 1773. https://doi.org/10.1001/jama.2020.5046

WittKieffer. (2019). *The impact of burnout on healthcare executives: A WittKieffer study*. https://www.wittkieffer.com/thought-leadership/impact-of-burnout-on-healthcare-executives-witt-kieffer-study/

PRACTITIONER APPLICATION:
Healthcare is a Team Sport: Stress, Resilience, and Correlates of Well-Being Among Health System Employees in a Crisis

Daniel R. Kelly, DHA, FACHE, FACHCA, CEO, McKenzie County Healthcare Systems, Watford City, North Dakota

Coping with COVID-19 has challenged the healthcare system and, therein, our healthcare workers. The time is right to give special attention to the physical and psychosocial effects of the pandemic on the healthcare workforce.

The effects related to the pandemic may be driven by diverse factors. These factors include uncertainty about when the pandemic will end, the initial lack of proven therapeutic interventions and vaccines, shortages of personal protective equipment, and the limited supply of employees. Moreover, healthcare workers have experienced the same social stressors as the public—notably the inability to physically interact with relatives and friends along with the heightened threat of personal and family illness and death.

Meese and colleagues suggest ways that healthcare leaders can effectively deal with worker distress such as the following actions and responses:

- Lessen heavy workloads and long hours.
- Provide necessary resources (supplies and medicines).
- Reduce moral distress by addressing fears.
- Communicate openly and honestly.
- Stress the altruistic positives associated with serving the greater good during a pandemic.

I serve as CEO of a healthcare system in the Upper Midwest. Although we have not been a COVID-19 hot spot, our employees have experienced many stressors. They faced a public that doubted the existence of the disease and the morbidity and mortality