Supplemental Digital Content 4

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SUPPLEMENTAL TABLE 1. Differences in Participants' Moral Distress Levels Between Both Periods of Study

Participants	MMD-HP-SPA October-December 2019 Median (IQR), max-min	MMD-HP-SPA September-November 2020 Median (IQR), max-min	*p*-value
All	68 (38.0 – 134.0), 2 – 359	77.0 (40.0 – 141.0), 0 – 392	0.120
Nurse	61 (35.0 – 133.0), 2 – 359	74.0 (41.0 – 143.0), 2 – 392	0.019
Physician	80 (40.0 – 135.0), 3 – 352[a]	81.0 (39.0 – 138.5), 0 – 384[b]	0.806

Abbreviations: MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Health Care Professionals; IQR = Interquartile range.

Data are expressed as median (interquartile range). [a]Nurse *vs.* physician mean difference (October-December 2019) = 19, *p* = 0.026. [b]Nurse *vs.* physician mean difference (September-November 2020) = 7, *p* = 0.837.

SUPPLEMENTAL TABLE 2. Sociodemographic Characteristics of Participants and Moral Distress Levels during COVID-19 Pandemic (September-November 2020)

Characteristics	Participants n = 1115 (%)	MMD-HP-SPA			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Gender					
Female	833 (74.7)	75.5 (33.2 – 132.0)	1 - 384	1.159 (0.145)	1.191 (0.289)
Male	282 (25.3)	77.0 (43.0 – 143.0)	0 - 392	1.063 (0.085)	0.672 (0.169)
Age (years)‡					
≤ 35	415 (37.2)	97.0 (46.0 – 159.0)***	6 -392	0.838 (0.120)	0.185 (0.239)
35- 50	490 (43.9)	71.0 (38.0 – 125.7)***	0 - 388	1.251 (0.110)	1.259 (0.220)
>50	210 (18.8)	64.0 (36.2 – 118.7)***	4 - 316	1.159 (0.168)	1.151 (0.334)
Marital status‡					
Single	481 (43.1)	88.0 (45.0 – 159.0)***	4 – 392	0.852 (0.111)	0.221 (0.222)
Married/cohabiting	578 (51.8)	69.0 (34.2 – 124.0)***	0 - 384	1.295 (0.102)	1,507 (0.203)
Separate/divorced/widow	56 (5.1)	58.0 (45.7 – 134.2)***	5 - 351	1.336 (0.319)	1.547 (0.628)
Offspring					
Yes	523 (46.9)	85.0 (46.0 – 153.0)***	0 - 384	1.352 (0.107)	1.612 (0.213)
No	592 (53.1)	67.0 (34.0 – 122.0)***	4 - 392	0.890 (0.100)	0.337 (0.201)
PhD					
Yes	116 (10.4)	80.5 (44.0 – 126.0)	5 - 384	1.360 (0.225)	2.247 (0.446)
No	999 (89.6)	75.0 (40.0 – 143.0)	0 - 392	1.054 (0.077)	0.640 (0.155)
Position‡					
Registered nurse	630 (56.5)	75.0 (41.2 – 143.0)	2 – 392	1.127 (0.097)	0.871 (0.194)
Nursing supervisor	22 (1.9)	64.0 (23.2 – 72.7)	8 - 233	1.299 (0.491)	0.515 (0.953)
Attending physician	368 (33.0)	84.5 (39.7 – 140.2)	19 -337	0.837 (0.361)	-0.095 (0.709)
Resident physician	43 (3.8)	89.0 (41.0 – 169.5)	0 - 384	0.973 (0.127)	0.713 (0.254)
Head physician	52 (4.6)	55.5 (23.0 – 119.7)	5 - 316	1.365 (0.330)	1.150 (0.650)
Appointment					
Permanent worker	513 (46.0)	66.0 (37.0 – 122.0)***	0 - 388	1.197 (0.108)	1.188 (0.215)
Casual worker	602 (54.0)	86.5 (44.0 – 153.7)***	2 - 392	0.966 (0.100)	0.446 (0.199)
Years of experience in the ICU‡					
≤10	553 (49.6)	87.0 (45.0 – 153.0)***	4 - 392	0.977 (0.104)	0.613 (0.207)
11 – 20	310 (27.8)	71.5 (39.0 – 132.7)***	0 - 307	1.091 (0.138)	0.470 (0.276)
>20	252 (22.6)	64.0 (31.7 – 119.5)***	5 -384	1.367 (0.175)	7.872 (0.348)
Hospital bed size‡					
<200	121 (10.8)	68.0 (36.0 – 121.0)***	0 - 293	1.162 (0.220)	1.055 (0.437)
200 – 500	396 (35.5)	86.0 (45.0 – 152.0)***	2 - 388	1.322 (0.123)	1.531 (0.245)
>500	598 (53.7)	64.5 (38.7 – 123.7)***	2 - 392	0.924 (0.100)	0.397 (0.200)
ICU type‡					
Mixed	821 (73.6)	75.0 (39.0 – 137.0)	0 - 384	1.093 (0.085)	0.761 (0.170)
Medical	101 (9.0)	83.0 (46.0 – 141.0)	5 - 388	1.174 (0.240)	0.979 (0.476)
Surgical	42 (3.7)	108.5 (44.5 – 159.5)	9 - 392	1.066 (0.365)	1.068 (0.717)
Cardiac/Coronary	42 (3.7)	88.0 (47.0 – 151.5)	4 – 344	1.020 (0.365)	0.894 (0.717)
Neuroscience/Trauma	45 (4.0)	73.0 (40.0 – 133.0)	5 - 259	0.732 (0.354)	-0.380 (0.695)
Paediatric	64 (5.7)	77.5 (41.7 – 143.0)	2 - 301	0.775 (0.299)	-0.261 (0.590)
Number of ICU beds‡					
1-10	243 (21.8)	76.0 (40.0 – 135.5)	0 - 392	1.180 (0.156)	1.154 (0.311)
11-20	475 (42.6)	77.0 (40.0 – 141.0)	2 - 356	1.033 (0.112)	0.577 (0.224)
>20	397 (35.6)	76.0 (40.0 – 143.0)	2 - 388	1.084 (0.122)	0.815 (0.244)
Teaching unit					
Yes	902 (80.9)	79.0 (41.0 – 143.0)	2 - 288	1.023 (0.081)	0.616 (0.163)
No	213 (19.1)	68.0 (36.0 – 126.0)	0 - 392	1.355 (0.167)	1.646 (0.332)

Abbreviations: IQR = interquartile range; SE = standard error; ICU = intensive care unit; MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Health Care Professionals.
Data are expressed as the number (%) or median (interquartile range). p-values calculated by Mann-Whitney U test (‡Kruskal-Wallis test).
Statistically significant difference between groups: * 0.01 < p < 0.05; ** 0.001 < p < 0.01; *** p < 0.001.

Supplemental Figure 1. Differences in moral distress levels between periods of study (October-December 2019 *vs.* September-November 2020) regarding years of experience in the ICU. (**A**) Participants with ≤10 years of experience working in the ICU. (**B**) Participants with 11-20 years of experience working in the ICU. (**C**) Participants with >20 years of experience working in the ICU. MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Healthcare Professionals.
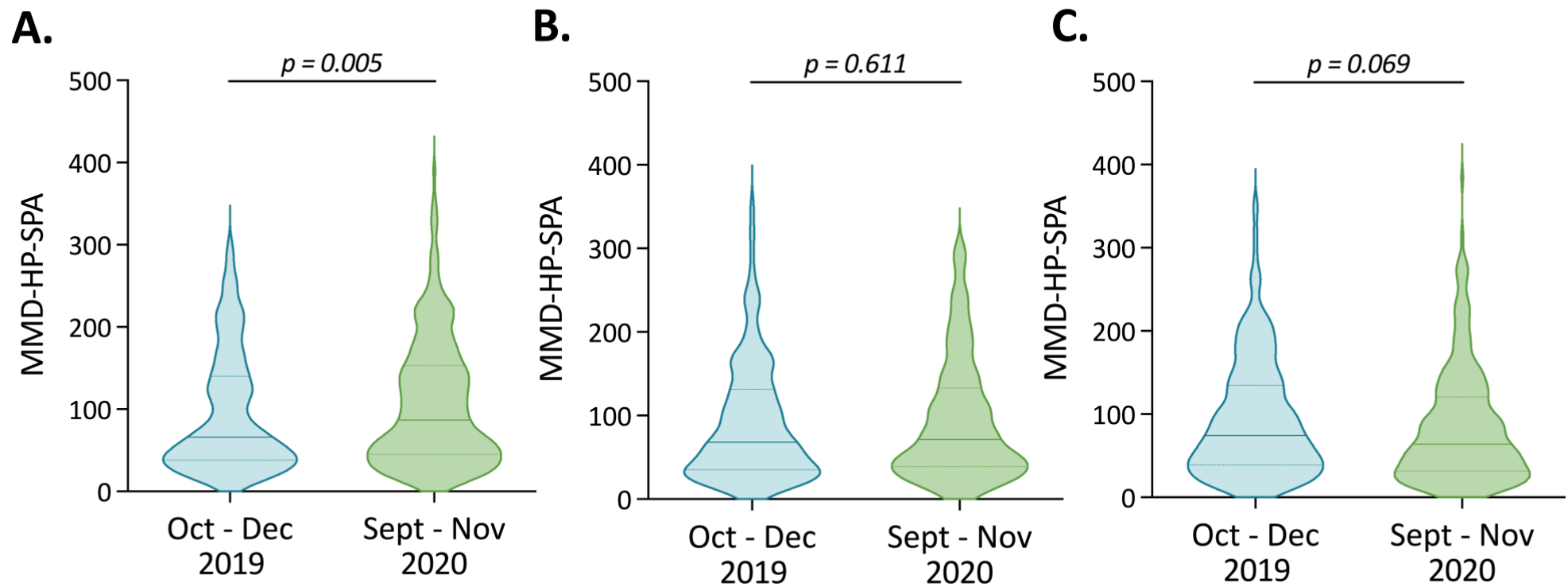
SUPPLEMENTAL TABLE 3. Differences in Moral Distress Levels Between Periods of Study Regarding Years of Experience in the ICU

| Years of experience in the ICU	MMD-HP-SPA October-December 2019 Median (IQR)	MMD-HP-SPA September-November 2020 Median (IQR)	*p*-value
≤10	66.0 (38 – 139)	87.0 (45.0 – 153.0)	0.005
11 – 20	68.0 (35 – 130)	71.5 (39.0 – 132.7)	0.611
>20	74.5 (39 – 134)	64.0 (31.7 – 119.5)	0.069

Abbreviations: MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Health Care Professionals; IQR = Interquartile range.

Data are expressed as median (interquartile range).

Supplemental Figure 2. Changes in ranking position of moral distress root causes between October-December 2019 and September-November 2020. (**A**) Root causes of moral distress that have risen in the ranking. (**B**) Root causes of moral distress that have dropped in the ranking.
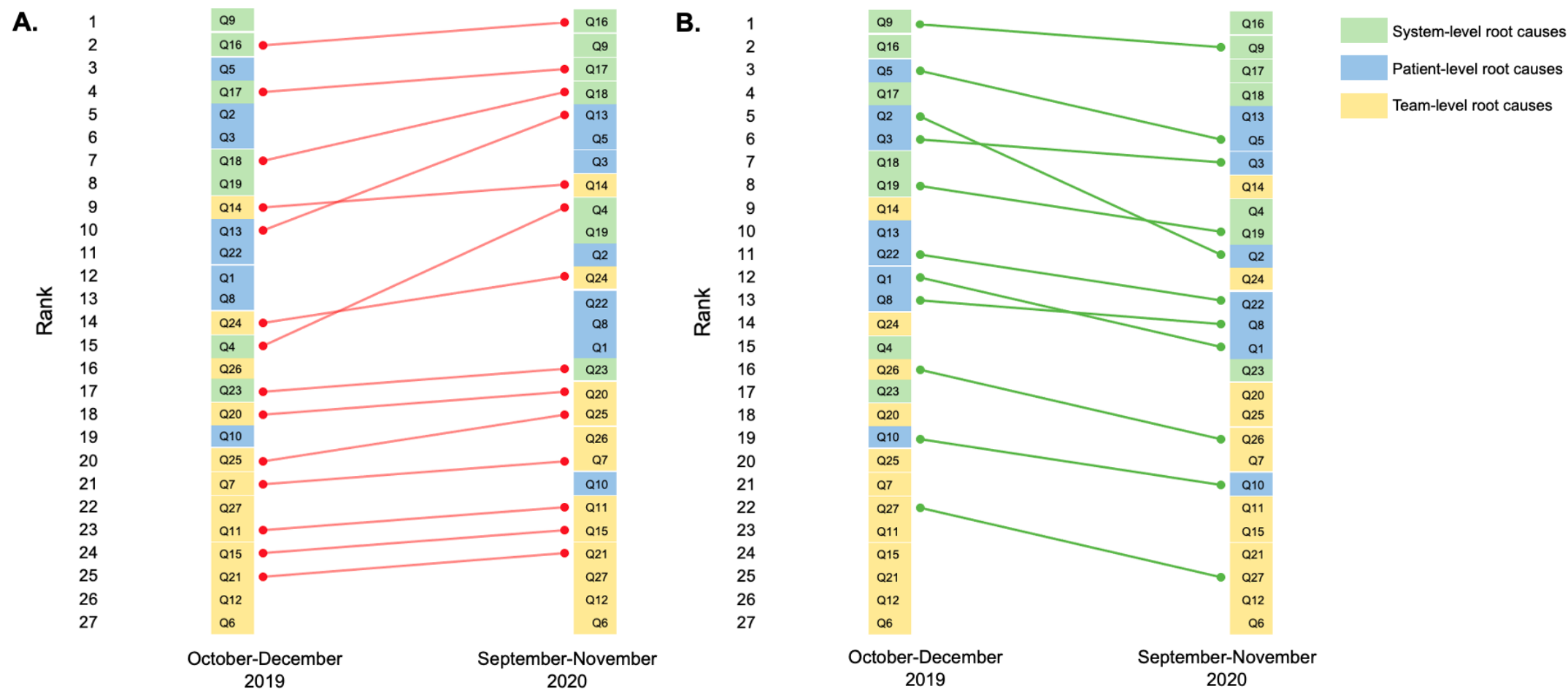
Supplemental Figure 3. Intention to leave a position due to moral distress in all participants. (**A**) Past intention to leave a position due to moral distress. (**B**) Current intention to leave a position due to moral distress. NCL = Not consider leaving a position, CL = Consider leaving a position, L = Left a position.
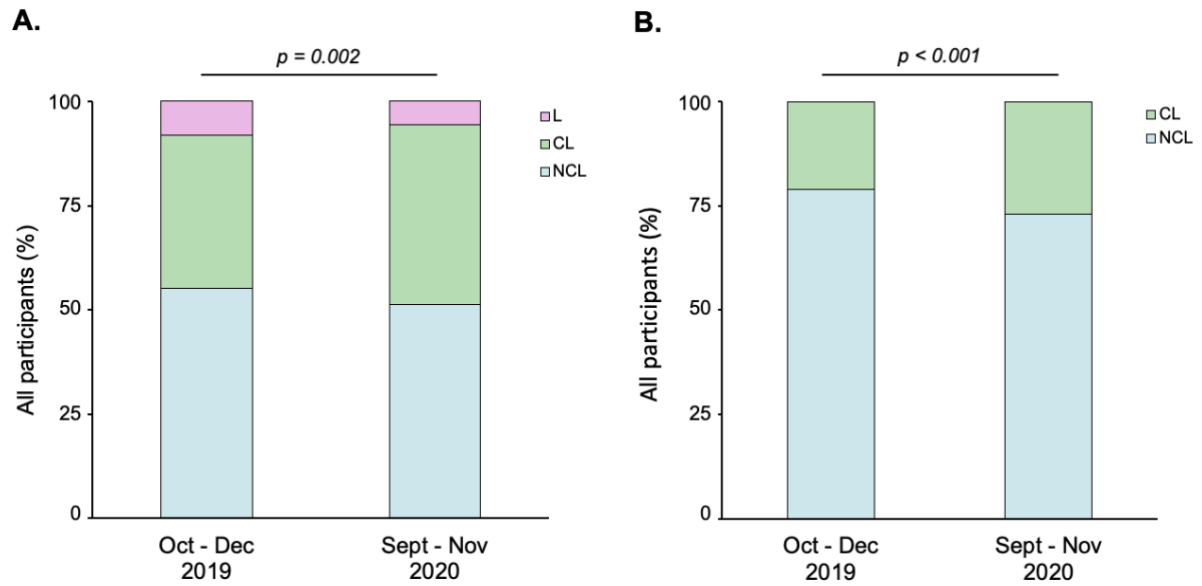
SUPPLEMENTAL TABLE 4. Intention to Leave a Position Between October-December 2019 with Median MMD-HP-SPA Scores

All participants n = 1065					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	588 (55.2)	60.5 (31.7 – 117.0)	2 - 338	1.208 (0.101)	1.249 (0.201)
Considered leaving in the past	390 (36.6)	77.5 (46.0 – 163.0)	2 - 359	0.885 (0.124)	-0.093 (0.247)
Left a position in the past	87 (8.2)	85.0 (47.0 – 174.5)	18 - 352	0.867 (0.258)	0.010 (0.511)
Currently		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	842 (79.0)	66.0 (35.0 – 129.0)	2 - 359	1.070 (0.084)	0.589 (0.168)
Considering leaving now	223 (21.0)	77.0 (50.5 – 167.5)	2 - 352	0.997 (0.163)	0.136 (0.324)
Nurse n = 608					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	317 (52.1)	51.0 (30.0 – 117.0)	2 - 338	1.416 (0.137)	1.615 (0.273)
Considered leaving in the past	235 (38.7)	66.0 (41.5 – 159.5)	2 - 259	1.025 (0.159)	0.104 (0.316)
Left a position in the past	56 (9.2)	72.5 (49.0 – 171.2)	21 - 346	0.908 (0.319)	0.108 (0.628)
Currently	n (%)	Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	460 (75.6)	55.0 (34.0 – 131.0)	2 - 359	1.218 (0.114)	0.800 (0.227)
Considering leaving now	148 (24.4)	69.5 (46.7 – 148.7)	2 - 347	1.134 (0.199)	0.404 (0.396)
Physician n = 457					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	271 (59.3)	72.0 (32.5 – 116.5)	3 - 236	0.699 (0.148)	-0.314 (0.295)
Considered leaving in the past	155 (33.9)	107.0 (56.0 – 164.5)	7 - 324	0.727 (0.195)	-0.204 (0.387)
Left a position in the past	31 (6.8)	105.0 (42.0 – 187.5)	18 - 352	0.779 (0.421)	-0.161 (0.821)
Currently	n (%)	Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	382 (83.6)	76.5 (39.0 – 127.7)	3 - 287	0.795 (0.125)	-0.006 (0.249)
Considering leaving now	75 (16.4)	107.0 (59.0 – 174.5)	5 - 352	0.784 (0.277)	-0.118 (0.548)

Abbreviations: MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Health Care Professionals; IQR = Interquartile range; SE = standard error. Data are expressed as the number (%) and median (IQR).

SUPPLEMENTAL TABLE 5. Intention to Leave a Position Between September-November 2020 with Median MMD-HP-SPA Scores

All participants n = 1065					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	571 (51.2)	62.0 (30.0 – 112.0)	0 - 337	1.205 (0.102)	1.439 (0.204)
Considered leaving in the past	480 (43.1)	103.5 (51.0 – 172.2)	1 - 388	0.761 (0.111)	-0.161 (0.222)
Left a position in the past	64 (5.7)	82.0 (46.7 – 155.7)	6 - 392	1.224 (0.299)	1.275 (0.590)
Currently		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	814 (73.0)	67.0 (34.2 – 122.7)	0 - 392	1.261 (0.086)	1.620 (0.171)
Considering leaving now	301 (27.0)	112.0 (54.0 – 192.0)	7 - 388	0625 (0.140)	-0.397 (0.280)
Nurse n = 608					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	307 (47.1)	58.0 (30.0 – 105.0)	2 - 307	1.258 (0.139)	1.257 (0.277)
Considered leaving in the past	300 (46.0)	102.0 (50.0 – 172.0)	2 - 388	0.830 (0.141)	-0.009 (0.281)
Left a position in the past	45 (6.0)	94.0 (55.0 – 155.0)	11 - 392	1.333 (0.354)	1.433 (0.695)
Currently	n (%)	Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	450 (69.0)	64.0 (34.0 – 127.0)	2 - 392	1.407 (0.115)	2.044 (0.230)
Considering leaving now	202 (31.0)	106.5 (52.7 – 186.7)	8 - 388	0.669 (0.171)	-0.324 (0.341)
Physician n = 457					
In the past	n (%)	**MMD-HP-SPA**			
		Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considered leaving in the past	264 (57.0)	67.5 (31.0 – 114.7)	0 - 337	1.143 (0.150)	1.752 (0.299)
Considered leaving in the past	180 (38.9)	109.5 (53.0 – 175.2)	1 - 384	0.652 (0.181)	-0.370 (0.360)
Left a position in the past	19 (4.1)	61.0 (27.0 – 150.5)	6 - 235	0.688 (0.524)	-0.981 (1.014)
Currently	n (%)	Median (IQR)	Min-Max	Skew (SE)	Kurtosis (SE)
Not considering leaving now	364 (78.6)	75.0 (35.7 – 121.0)	0 - 337	0.999 (0.128)	0.690 (0.255)
Considering leaving now	99 (21.4)	128.0 (54.5 – 207.0)	7 - 384	0.541 (0.243)	-0.496 (0.481)

Abbreviations: MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Health Care Professionals; IQR = Interquartile range; SE = standard error. Data are expressed as the number (%) and median (IQR).
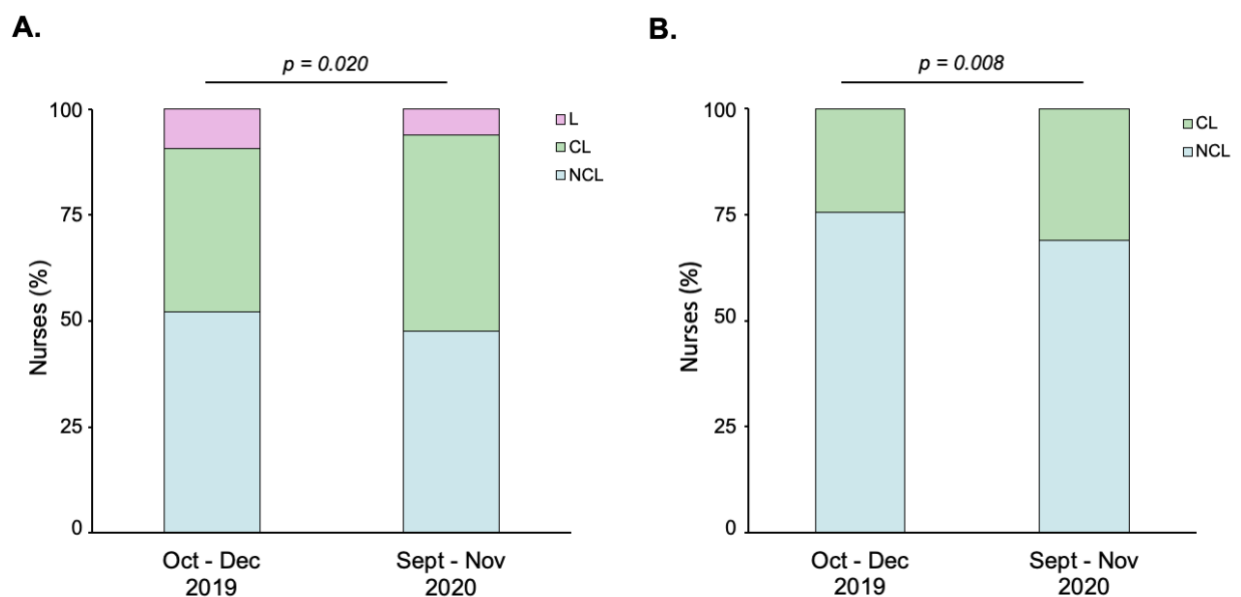
Supplemental Figure 4. Intention to leave a position due to moral distress in physicians. (**A**) Past intention to leave a position due to moral distress. (**B**) Current intention to leave a position due to moral distress. NCL = Not consider leaving a position, CL = Consider leaving a position, L = Left a position.
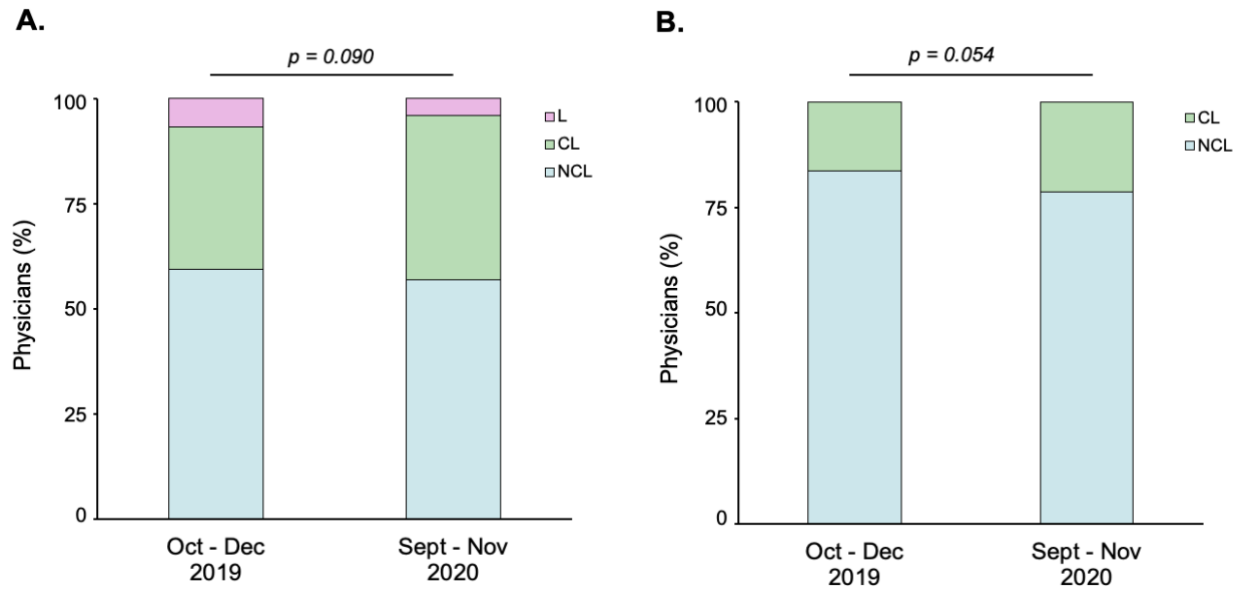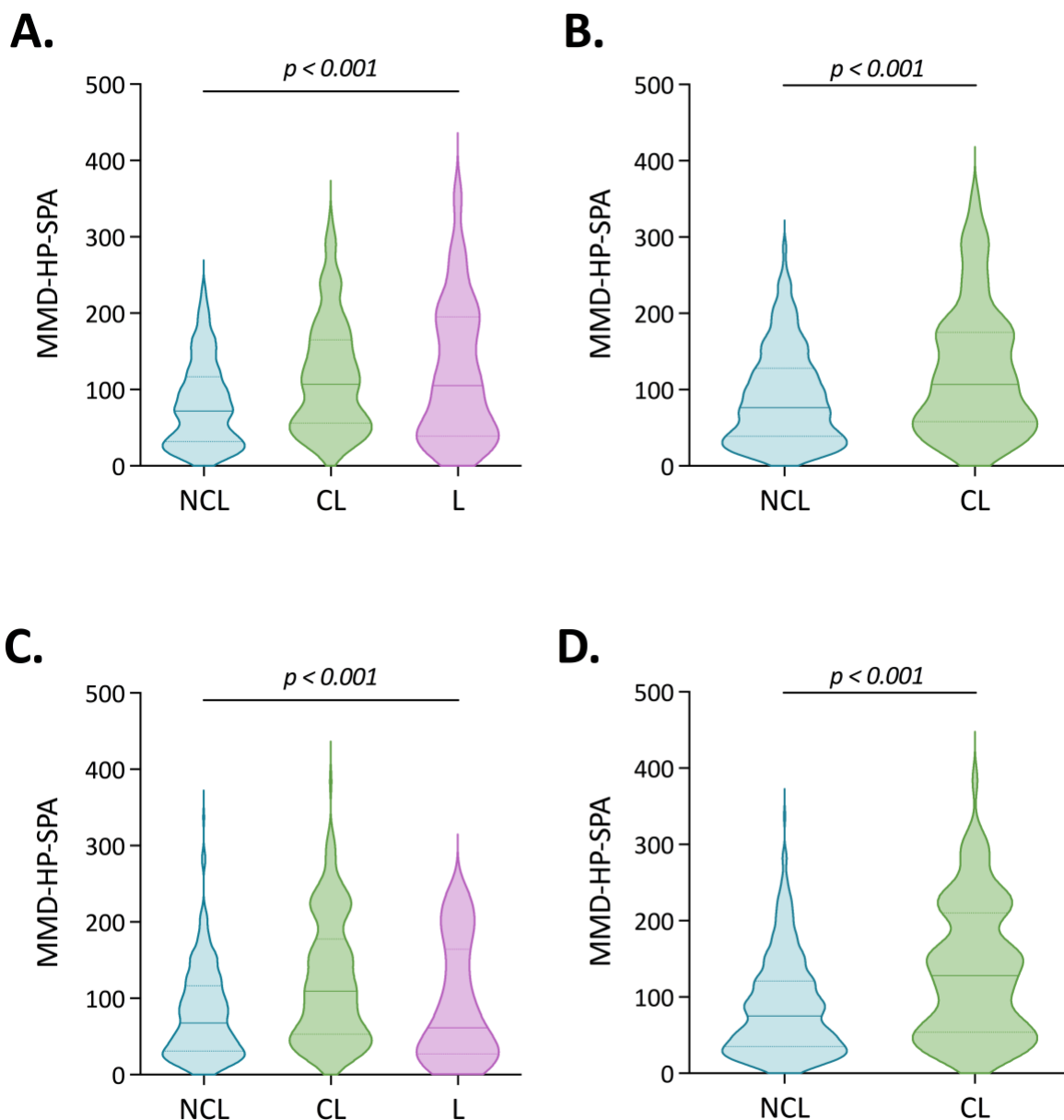

Supplemental Figure 5. Intention to leave a position due to moral distress in nurses. (**A**) Past intention to leave a position due to moral distress. (**B**) Current intention to leave a position due to moral distress. NCL = Not consider leaving a position, CL = Consider leaving a position, L = Left a position.

Supplemental Figure 6. Physicians' moral distress levels and their intention to leave a position. (A) Past intention to leave a position due to moral distress between October-December 2019. (B) Current intention to leave a position due to moral distress between October-December 2019. (C) Past intention to leave a position due to moral distress between September-November 2020. (D) Current intention to leave a position due to moral distress between September-November 2020. MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Healthcare Professionals, NCL = Not consider leaving a position, CL = Consider leaving a position, L = Left a position.

Supplemental Figure 7. Nurses' moral distress levels and their intention to leave a position. (A) Past intention to leave a position due to moral distress between October-December 2019. (B) Current intention to leave a position due to moral distress between October-December 2019. (C) Past intention to leave a position due to moral distress between September-November 2020. (D) Current intention to leave a position due to moral distress between September-November 2020. MMD-HP-SPA = Spanish version of the Measure of Moral Distress for Healthcare Professionals, NCL = Not consider leaving a position, CL = Consider leaving a position, L = Left a position.