



## The COVID-19 Pandemic: Exploration of nurse leaders' experiences managing the clinical environment during a crisis

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Yale  
NewHaven  
Health

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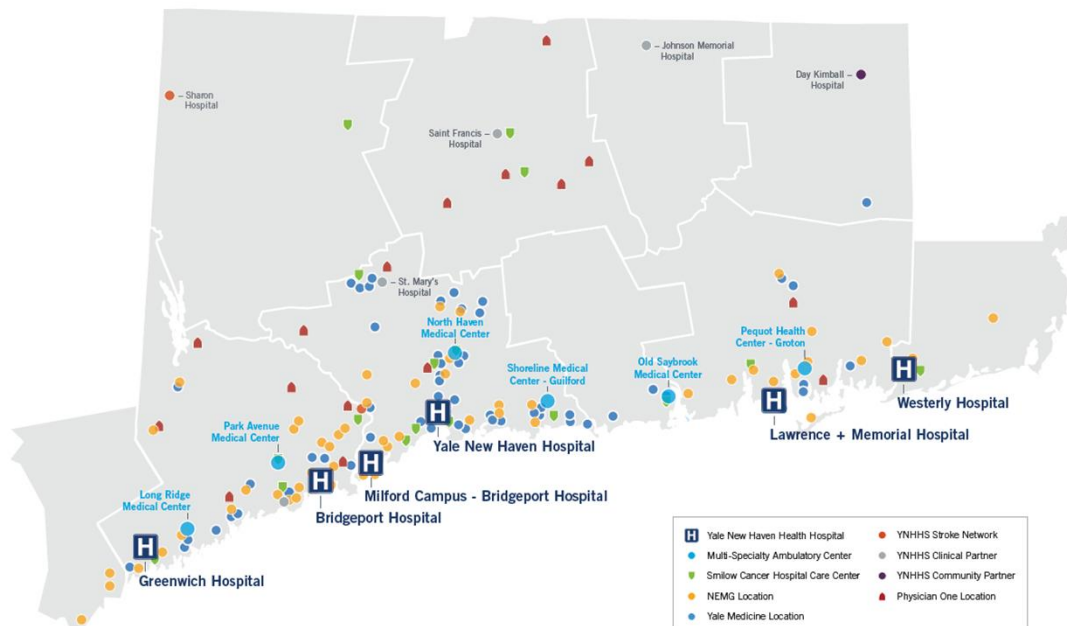
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## Presentation Objectives

- Recognize the **top three experiences associated with distress** for leaders during Covid-19.
- Summarize nurse leaders' perception of the **importance and challenges related to leadership competencies**.
- Outline the **characteristics associated with leadership competencies** that were extremely challenging.
- Share **recommendations** based on these research findings.

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## Who we are: YaleNewHavenHealth





## Study Purpose

- Describe experiences of nurse leaders as they manage nursing staff and their practice settings during the COVID-19 pandemic

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## Study Aims

- **Aim 1:** Examine nurse leaders' **experiences** during the COVID 19 pandemic and associated **intensity of distress** and the mechanisms used to **alleviate stress**
- **Aim 2:** Describe nurse leaders' perceptions regarding **importance** of and **challenges** associated with specific **leadership competencies** during the COVID 19 pandemic
- **Aim 3:** Identify factors independently associated with leadership competences that were challenging

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## Framework



- Based on Nurse Manager Learning Domain Framework (2015)
  - 3 domains guiding nurse leader's practice

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## Methods

**Design:** Cross-sectional, descriptive

**Sample:** Nurse managers and assistant nurse managers practicing during COVID 19 pandemic (March 2020 to August 2022)

**Setting:** YNHHS inpatient & ambulatory areas

**Data Collection:** Qualtrics survey

**Data Analysis:** Descriptive statistics, bivariate analysis

**Human Subjects:** Yale University IRB / Bridgeport Hospital approved

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## Results Demographics

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## Results (N = 151)

| Sample Characteristics                 | Nurse Managers<br>n = 99 | Assistant Nurse Managers<br>n = 52 | <i>p</i> |
|--|--------------------------|------------------------------------|----------|
| Age                                    | n (mean)<br>92 (46.8)    | n (mean)<br>46 (41.7)              | .006     |
| Gender                                 | n (%)                    | n (%)                              | .14      |
| Female                                 | 88 (88.9)                | 44 (84.6)                          |          |
| Male                                   | 11 (11.1)                | 6 (11.5)                           |          |
| Preferred not to answer                | 0 (0)                    | 2 (3.8)                            |          |
| Race/ethnicity                         | n (%)                    | n (%)                              | .13      |
| White non-Hispanic                     | 78 (78.8)                | 40 (76.9)                          |          |
| Black or African American non-Hispanic | 4 (4)                    | 4 (7.7)                            |          |
| Hispanic                               | 7 (7.1)                  | 0 (0)                              |          |
| Asian                                  | 4 (4)                    | 2 (3.8)                            |          |
| Preferred not to answer                | 6 (6.1)                  | 4 (7.7)                            |          |
| Other                                  | 0 (0)                    | 2 (3.8)                            |          |

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## Results (N = 151)

| Sample Characteristics        | Nurse Managers<br>n = 99 | Assistant Nurse Managers<br>n = 52 | <i>p</i> |
|-------------------------------|--------------------------|------------------------------------|----------|
| Practice setting              | n (%)                    | n (%)                              | .75      |
| Ambulatory                    | 19 (19.2)                | 12 (23.1)                          |          |
| Critical care unit            | 15 (15.2)                | 10 (19.2)                          |          |
| Inpatient unit                | 44 (44.4)                | 22 (42.3)                          |          |
| Combined unit                 | 21 (21.2)                | 8 (15.4)                           |          |
| Number of units managed, mean | 1.9                      | 1.6                                | .14      |
| Number of FTEs managed, mean  | 60.1                     | 45.2                               | .02      |
| My unit                       | n (%)                    | n (%)                              |          |
| Became a COVID-19 unit        | 46 (46.5)                | 29 (55.8)                          | .23      |
| Moved its physical location   | 32 (32.3)                | 13 (25)                            | .35      |

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## Results

### Aim 1

- nurse leaders' experiences during COVID-19
- associated intensity of distress
- mechanisms used to alleviate stress

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## Results: Aim #1 Top 5 Sources of Distress (N = 151)

| Sources of Distress   | Total Sample<br>N = 151<br>mean (SD) | Nurse<br>Managers<br>n = 99<br>mean (SD) | Assistant Nurse<br>Managers<br>n = 52<br>mean (SD) | <i>p</i> |
|---|--------------------------------------|--|--|----------|
| 1. Managing changes to unit staffing patterns                             | 7.96 (2.1)                           | 7.96 (2.1)                               | 7.96 (2)   | 1.00     |
| 2. Dealing with conflicting information about infection control practices | 7.77 (2.2)                           | 7.79 (2.2)                               | 7.73 (2.1)   | 0.88     |
| 3. Needing to constantly adapt to changing COVID-19 related policies      | 7.73 (2.2)                           | 7.78 (2.3)                               | 7.63 (2)   | 0.70     |
| 4. Managing an increased need to provide staff with emotional support     | 7.53 (2.3)                           | 7.79 (2.2)                               | 7.04 (2.5)   | 0.06     |
| 5. Worrying about the health and/or safety of your family and friends     | 7.27 (2.4)                           | 7.29 (2.4)                               | 7.3 (2.3)  | 0.62     |

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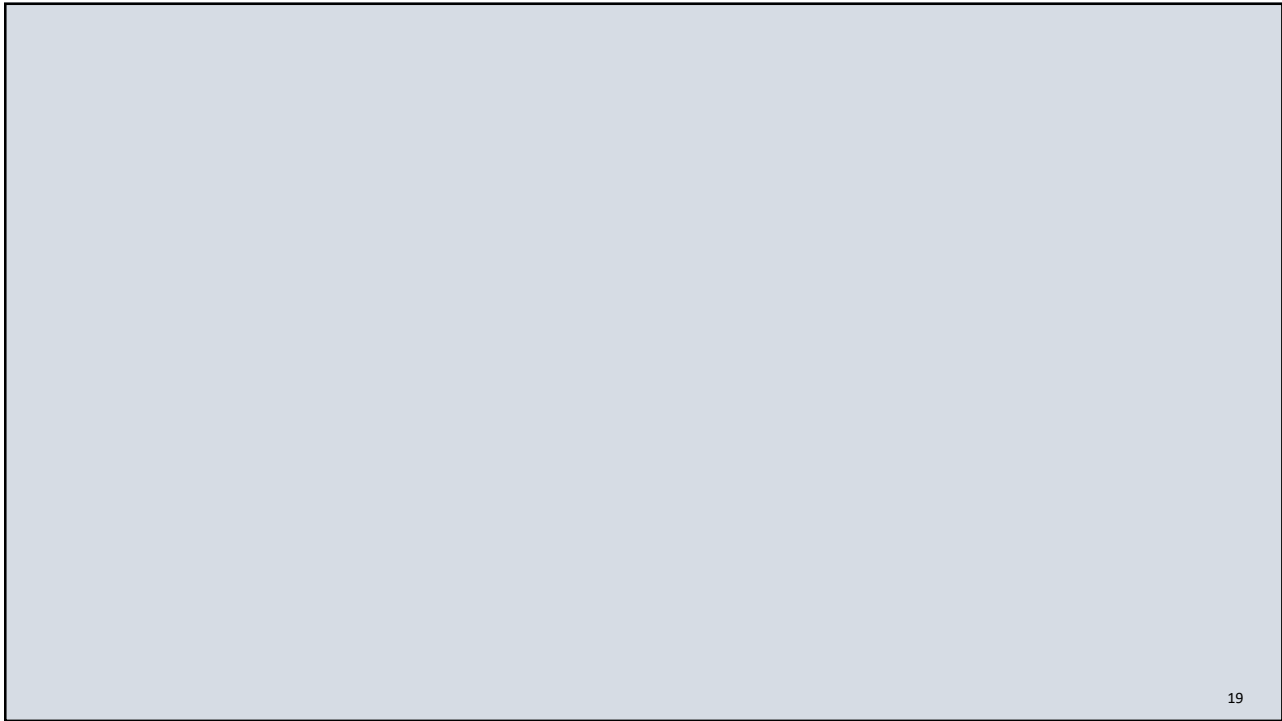


## Aim #1 Sources of Distress



## Results: Aim #1 Mechanisms to Alleviate Stress (N = 164)

| Stress alleviation   | Used | Most helpful |
|--|------|--------------|
| Personal support from friends and family                         | 152  | 67           |
| Physical exercise/activity                                       | 88   | 38           |
| Virtual colleague support  | 6    | 30           |
| Faith-based practice/spirituality                                | 49   | 14           |
| Talking with my direct report (boss)                             | 69   | 11           |
| Talk therapy   | 38   | 11           |
| Meditation   | 21   | 6            |
| Yoga   | 17   | 2            |
| COVID related employee wellness resources                        | 6    | 0            |
| Other ( <b>Emotional well being support/self care/Time off</b> ) | 36   | 30           |



## Results Aim 2

- importance of leadership competencies
- challenge associated with leadership competencies

## Results: Aim #2 Leadership Competencies Level of Importance

| Competency (Domain)  | Very/Extremely Important<br>n (%) | mean (SD)   |
|--|-----------------------------------|-------------|
| Advocating for nursing staff to ensure their safety (Science)                                    | 147 (97.4)                        | 9.64 (0.88) |
| Maintaining effective communication pathways to keep up with the daily changes and updates (Art) | 146 (96.7)                        | 9.51 (1.06) |
| Managing internal experiences, staying grounded, and being clear as a leader (Leader)            | 140 (92.7)                        | 9.13 (1.53) |
| Ensuring employee wellbeing and psychological safety using interdisciplinary approaches (Art)    | 142 (94)                          | 9.11 (1.47) |
| Managing scarce human resources during a time of crisis (Science)                                | 142 (94)                          | 9.11 (1.35) |

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## Results: Aim #2 Leadership Competencies Level of Importance

All competencies were rated as having a high level of importance.

The mean range of importance (6.99 – 9.64)



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## Results: Aim #2 Leadership Competencies Level of Challenge

The mean range of challenge (5.73 – 8.40)



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## Results: Aim #2 Leadership Competencies Level of Challenge

| Competency  | Very/Extremely Challenging n (%) | mean (SD)   |
|---|----------------------------------|-------------|
| Managing scarce human resources during a time of crisis (Science)                                     | 125 (82.8)                       | 8.40 (2.21) |
| Managing scarce material resources during a time of crisis (Science)                                  | 114 (75.5)                       | 7.86 (2.23) |
| Managing practice environment during constant state of disaster (Science)                             | 114 (75.5)                       | 7.77 (2.33) |
| Making decisions without having specific details and in the absence of complete information (Science) | 121 (80.1)                       | 7.71 (2.16) |
| Relaying difficult news to staff (Art)  | 104 (68.0)                       | 7.64 (2.3)  |

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## Aim #2 Leadership Competencies

The image shows a hospital hallway with several people, including healthcare workers and a man in a suit. Overlaid on the image are ten white hexagonal callouts, each containing a leadership competency term. The terms are arranged in a roughly circular pattern around the center of the image.

- Workforce safety
- Resilience
- Innovation & Change management
- Leadership integrity
- Agility & Adaptability
- Communication & transparency
- Emotional & Physical wellbeing
- Psychological safety
- Emotional intelligence
- Leading in ambiguity

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The image shows five women wearing face masks, standing in a line. Overlaid on the image are four white hexagonal callouts and two teal text boxes. The callouts contain the terms: Resilience, Agility & Adaptability, Innovation & Change management, and Emotional intelligence. The teal text boxes contain the following text:

**Resiliency and capacity to change**

**Being in touch with my emotions and regulating these emotional responses during interactions with staff**

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## Results Aim 3

- factors independently associated with 2 leadership competencies that were extremely challenging

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## Results: Aim #3 Factors Associated with Leadership Competencies

| Challenging Competency  | Very/Extremely Challenging<br>n (%) | mean (SD)   |
|---|-------------------------------------|-------------|
| Having resiliency and capacity for change (Leader within)   | 91 (60.3)                           | 6.98 (2.68) |
| Being in touch with my emotions and regulating these emotional responses during interactions with staff (Leader within) | 79 (52.3)                           | 6.69 (2.76) |

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## Results: Aim #3

Identifying potential predictors for perceived high level of challenge (scored 8-10) (Bivariate Analysis)

| Independent Variable                   | Resiliency and Capacity for Change |                                      | In Touch with Emotion and Regulation |                                      |
|--|------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
|  | n (%)                              | <i>p</i>                             | n (%)                                | <i>p</i>                             |
| Gender                                 |                                    | <i>p</i> = .070                      |                                      | <i>p</i> = .896                      |
| Female                                 | 70 (53.0)                          |                                      | 70 (53.0)                            |                                      |
| Male                                   | 5 (29.4)                           |                                      | 8 (47.1)                             |                                      |
| Preferred not to answer                | 2 (100)                            |                                      | 1 (1.3)                              |                                      |
| Race/ethnicity                         |                                    |                                      |                                      | <i>p</i> = .009                      |
| White non-Hispanic                     | 55 (46.6)                          |                                      | 61 (51.7)                            |                                      |
| Black or African American non-Hispanic | 3 (37.5)                           |                                      | 0 (0.0)                              |                                      |
| Hispanic Or Latino                     | 5 (71.4)                           |                                      | 6 (85.7)                             |                                      |
| Asian                                  | 4 (66.7)                           |                                      | 4 (66.7)                             |                                      |
| Other                                  | 10 (83.3)                          |                                      | 8 (66.7)                             |                                      |
| Became a COVID-19 Unit                 |                                    |                                      |                                      | <i>p</i> = .028                      |
| No                                     | 35 (46.1)                          |                                      | 52 (49.1)                            |                                      |
| Yes                                    | 23 (51.1)                          |                                      | 27 (60.0)                            |                                      |
| Age*                                   | Mean(SD)                           | <i>t</i> (136) = 1.9; <i>p</i> = .05 | Mean(SD)                             | <i>t</i> (136) = .47; <i>p</i> = .63 |
| Score 0-7                              | 46.82 (10.90)                      |                                      | 45.57 (10.67)                        |                                      |
| Score 8-10                             | 43.46 (9.83)                       |                                      | 44.71 (10.34)                        |                                      |

## Results: Aim #3

Predictors for high level of challenge:  
Resiliency and Capacity for Change  
(Multivariate Analysis)

| Independent Variable                     | Odds Ratio | 95% CI     | <i>p</i> |
|--|------------|------------|----------|
| Race/ethnicity                           |            |            |          |
| Non-Hispanic Black vs Non-Hispanic White | .770       | .163-3.65  | .74      |
| Hispanic vs Non-Hispanic White           | 5.14       | .706-37.5  | .10      |
| Asian vs Non-Hispanic White              | 2.12       | .36-12.36  | .40      |
| Other vs Non-Hispanic White              | 3.08       | .58-16.33  | .18      |
| Gender                                   | .225       | .05-.87    | .03      |
| Age                                      | .968       | .934-1.003 | .07      |
| Current Role                             | .174       | .45-2.22   | .98      |

## Discussion



- Alignment with AONL Leadership Competencies (2021)







## Study Implications

- 1**  
Innovative self-care programs.
- 2**  
Structured peer support and mentorship.



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- 1**  
Innovative self-care programs.
- 2**  
Structured peer support and mentorship.
- 3**  
Prepare nurse leaders for leadership in challenging times.

## Study Implications



1

Innovative self-care programs.

2

Structured peer support and mentorship.

3

Prepare nurse leaders for leadership in challenging times.

4

Customize programs that are equitable for diverse leaders.



**“We were standing on one side of a massive river of uncertainty and hardship... We’re now seeing the other side of the river.”**

**Christine Lagarde**  
**President, European Central Bank**

