

# Wake Up Call: Pediatric Cardiac Intensive Care Registered Nurse Well-Being



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## INTRODUCTION/BACKGROUND

- There is a paucity of literature evaluating well-being among Registered Nurses (RNs) in the pediatric cardiac intensive care unit (PCICU).

## OBJECTIVE

- To describe PCICU RN well-being.
- To identify factors that negatively impact PCICU RN well-being, including COVID-19.

## METHODS

- Mixed methods REDCap® survey.
- Conducted between October 2021 and January 2022.
- RNs at centers within the United States participating in Collaborative Research from the Pediatric Cardiac Intensive Care Society (CoRe-PCICS) were surveyed.
- Survey included the Well-Being Index (WBI) and questions regarding demographics and potential risk factors affecting well-being, including COVID-19.
- The WBI is a 9-item tool that predicts distress and well-being in US workers and has been validated in multiple health disciplines.<sup>1</sup>
  - WBI score of  $\geq 2$  for RNs signifies at-risk for burnout, severe fatigue, poor quality of life, making a medical error, and vacating their position.<sup>1</sup>
- The WBI score and participant characteristics were described using mean and standard deviation (SD) for continuous variables or absolute counts with percentages for categorical variables.
- Differences in WBI scores were compared using student t-test and one-way ANOVA, as appropriate.
- A p-value  $< 0.05$  was considered statistically significant..

## RESULTS

- Among 180 bedside PCICU RNs, the mean WBI score (SD) was 2.96 ( $\pm 2.23$ ) and 76% of respondents had an at-risk score.
- 61% of PCICU RNs reported an intent to leave their job with a significant difference in mean WBI scores between those with and without intent to leave ( $<0.01$ ).
- There were no significant differences in well-being by years of experience, age, gender, region, unit type, shifts worked, participation in exercise or self-care activities, or availability of hospital wellness services.
- Potential risk factors contributing to poorer well-being were identified (Table 1).

**Table 1.** Mean Well-Being Index Score by Risk Factor

| Characteristic (n [%])                   | Mean $\pm$ SD | t/F (p-value)    |
|--|---------------|------------------|
| Feel supported by unit leadership        |               |                  |
| Yes (71 [41%])                           | 2.31 (2.29)   | 5.05 ( $<.01$ )  |
| Sometimes (84 [48%])                     | 3.17 (2.05)   |                  |
| No (20 [11%])                            | 4.30 (2.23)   |                  |
| Feel supported by institution leaders    |               |                  |
| Yes (31 [17%])                           | 1.29 (2.07)   | 9.37 ( $<.01$ )  |
| Sometimes (66 [37%])                     | 2.91 (1.85)   |                  |
| No (77 [43%])                            | 3.58 (2.31)   |                  |
| Comments (4 [2%])                        | 4.25 (1.71)   |                  |
| Someone to rely on for emotional support |               |                  |
| Yes (150 [89%])                          | 2.85 (2.15)   | 3.23 (.04)       |
| Sometimes (25 [14%])                     | 3.96 (2.39)   |                  |
| No (4 [2%])                              | 2.00 (1.83)   |                  |
| Enough time & job resources in COVID     |               |                  |
| Yes (35 [20%])                           | 1.51 (2.32)   | 14.03 ( $<.01$ ) |
| Sometimes (72 [41%])                     | 2.88 (1.79)   |                  |
| No (67 [39%])                            | 3.81 (2.24)   |                  |
| Change in stress since COVID pandemic    |               |                  |
| Increased (148 [83%])                    | 3.22 (2.15)   | 3.67 ( $<.01$ )  |
| Decreased (0 [0%])                       |               |                  |
| No change (30 [17%])                     | 1.63 (2.22)   |                  |
| Change in sleep since the COVID pandemic |               |                  |
| Increased (12 [7%])                      | 2.58 (2.15)   | 6.73 ( $<.01$ )  |
| Decreased (59 [33%])                     | 3.97 (2.05)   |                  |
| No (99 [56%])                            | 2.44 (2.23)   |                  |

## CONCLUSIONS

- This study highlights that PCICU RNs are at risk for poor well-being.
- Majority of our respondents reported an intent to leave their position.
- Risk factors for poorer well-being in PCICU RNs may include: lack of support from unit or institution leaders, not enough time and resources to do their job well during COVID-19, increased stress or decreased sleep since COVID-19, and only sometimes having someone for emotional support.

## FUTURE DIRECTIONS

- Further data analysis using linear regression to examine predictors of PCICU RN well-being
- Analysis will inform future intervention(s) to target modifiable risk factors

## LIMITATIONS

- Sample size was small compared to the number of bedside PCICU RNs nationwide.
- Convenience sample increased risk for survey bias
- Well-being Index (WBI) Question 8 response format differed from original survey.

## REFERENCES

1. Dyrbye LN, Johnson PO, Johnson LM, Satele DV, Shanafelt TD. Efficacy of the Well-Being Index to Identify Distress and Well-Being in U.S. Nurses. *Nurs Res.* 2018 Nov/Dec; 67(6): 447-455.

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