Creating Healthy Work Environments VIRTUAL 2021

A Cross-Sectional Study Examining Resilience and Work Environment Among ICU Nurses During the COVID-19 Pandemic Emily Calabro, PhD, RN

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Purpose: In a cross-sectional survey, we sought to examine how internal (individual resilience) and external (critical care environment characteristics) protective factors impacted burnout among ICU nurses during the COVID-19 Pandemic.

Methods: Surveys were emailed to 47,510 Oregon registered nurses from February-May 2020. The nurses completed the Connor-Davidson Resilience Scale, the Practice Environment Scale of the Nursing Work Index, the Maslach Burnout Inventory, and the Negative Acts Questionnaire-Revised. An optional open-ended question was available for nurses to share any experience, insight, or story that related to the research variables. Hierarchical regression analysis was used to examine what protective factors directly contributed to mitigating burnout among ICU nurses working during the COVID-19 Pandemic.

Results: Complete data were available on a total of 893 nurses for a survey response rate of 20%. Eight percent of the ICU nurses were categorized as being highly resilient, 58.4% of the participants were positive in at least one domain of job burnout, and 35% of the nurses reported being victim to bullying in the workplace. In a hierarchical regression analysis that adjusted for twelve potential confounding variables, internal (resilience) and external (organizational characteristics) protective factors were independently associated with a lower prevalence in every domain of burnout (emotional exhaustion, $R^2\Delta = 0.345$, F=71.1 (7, 836), p<.0001; personal accomplishment, $R^2\Delta = 0.183$, F=28.7 (7, 836), p<.0001; depersonalization, $R^2\Delta = 0.165$, F=27.62 (7, 836), p<.0001). We discovered that bullying was the primary direct contributor to predicting total burnout F(1, 843), p<.0001, $\eta_p^2=.159$.

Conclusion: Internal and external protective factors directly contribute to the mitigation of burnout among ICU nurses working the COVID-19 Pandemic. To support ICU nurses during this unprecedented time, it is imperative to focus on both the critical care environment and the individual resilience of the ICU nurse. To support nurses, we suggest administration and managers listen to their concerns; provide safe staffing ratios; lessen the exposure to workplace bullying; recognize nurses for their accomplishments; create clear nursing models; and foster healthy relationships between colleagues, management, and physicians. To cultivate resilience in nurses we suggest nurses prioritize work-life balance; pursue moments to self-reflect; find resilient role models; connect and bond with nurse colleagues; challenge themselves mentally, physically, and psychologically; and re-frame traumatic and stressful situations into those of purpose and meaning.

The critical care environment and individual resilience are mutually reinforcing. Resilience alone is not enough to mitigate an environment that was perceived as unhealthy by nurses; focusing on both the critical care environment and individual nurse resilience will optimize a nurse's ability to mitigate the toll of pandemic nursing and thrive within the workplace.

Title:

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Keywords:

Covid-19 Pandemic, ICU Nurse and Resilience

Abstract Summary:

This research provides knowledge on how resilience and the ICU work environment impacts burnout among nurses working the COVID-19 pandemic. Novel evidence-informed guidance will address the physical, psychological, and organizational needs of ICU nurses as they are faced with challenges related to pandemic nursing.

Late Breaking Reason:

Surveys were collected during the onset of COVID-19 Pandemic, from February to May of 2020. This is the first known study to examine protective factors and burnout among US critical care nurses in the context of COVID-19 and significant for understanding the toll the pandemic is taking on ICU nurses.

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Author Summary: Emily Calabro is a Ph.D. graduate from Oregon Health and Science University in Portland, Oregon. Emily has practiced as a critical care nurse for over a decade. Additionally, she earned a Bachelor's degree in Business Administration and Entrepreneurship in 2006. Her research involves the promotion of healthier work environments and fostering individual resilience in nurses and healthcare employees.