Mindfulness Bundle Impact on Nurse Burnout Study

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Background & Significance

- Nurses caring for SARS-CoV-2 infected patients during the height of the 2020 pandemic reported experiencing higher than usual levels of burnout (Bellanti et al., 2021).
- Prevalence of nurse burnout can be as high as 40% (Duarte & Pinto-Gouveia, 2016).
- Higher levels of burnout can have a negative impact on job satisfaction, patient outcomes and increase nursing absenteeism and turnover (Green & Kitchen, 2021).
- Mindfulness-based stress reduction programs (MBSR) have been utilized (Ghawadra et al., 2019).
Background & Significance

- No “gold standard” for primary outcomes for nursing mental health (Jung et al., 2021).
- Intensive care unit (ICU) nurses have reported the highest rates of burnout (Rivaz et al., 2020).
- Studies have demonstrated strong relationships between nurse work environments and job satisfaction, work-related burnout, and intent to leave (Alharbi et al., 2020).

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What effects does a mindfulness bundle have on Maslach Burnout Inventory (MBI), Nurse Work Index (NWI), and Stress Arousal Checklist (SACL) scores in nurses working in critical care units designated for the care of SARS-CoV-2 patients?
A quantitative quasi-experimental repeated measures design was utilized in this IRB approved study.

Intervention group consisted of two ICUs caring for SARS-CoV-2 patients.

Study participants consisted of (N = 52) a convenience sample of front-line ICU registered nurses.

Interventions included approximately 1 – 1.5 hours per week for 6 weeks of intervention including:

- Hydration
- Massage
- Yoga
- Rest
- Mindfulness
- Nourishment
- Self-care
- Spirituality
- Music
- Reflection
- Blue-light therapy
- Course
- Therapeutic
Methodology

Data was collected at three time periods.
Descriptive analysis was conducted on all study variables.
Normality was examined for interval-level dependent variables.
A one-way repeated measures analysis of variance (ANOVA) was conducted to determine the effects of the mindfulness bundle on emotional exhaustion (EE), personal accomplishment (PA), depersonalization (DP), NWI, Stress and Arousal scores.

The results of the analysis indicated a statistically significant effect from the mindfulness bundle on front-line nurses in three areas pertaining to burnout:

- **Emotional Exhaustion**, Wilks’ Lambda = .657, $F(1, 41) = 19.02$, $p < .005$, $\eta^2 = .31$
- **Depersonalization**, Wilks’ Lambda = .704, $F(1, 41) = 7.93$, $p < .007$, $\eta^2 = .16$
- **Stress**, Wilks’ Lambda = .81, $F(1, 41) = 8.81$, $p < .005$, $\eta^2 = .17$
Discussion & Clinical Implications

- No standard practice guidelines are available to measure and mitigate mental health of nurses.
- Inconsistency found among mindfulness-based programs and interventions.
- Interventions were easy to implement.
- Low-cost programs may have been shown to be effective in decreasing burnout.
- Not limited to nurses caring for SARS-CoV-2 patients.
Conclusion

- Study findings suggest the use of a 6-week mindfulness bundle toolkit is effective to mitigate EE, DP, and stress linked to burnout in critical care nurses.
- Significant effects were not found from the mindfulness bundle on the measures of PA, NWI and Arousal scores.
- Replication of the intervention with a larger, randomized sample is recommended.
- Although not reported, nurses expressed appreciation for interventions.
- SARS-CoV-2 highlighted the burnout nurses globally had been experiencing, this may have contributed to the mindfulness bundle toolkit being embraced by nurses.
References


References


References


References


