THE IMPACT OF MINDFULNESS-BASED STRESS REDUCTION PROGRAM ON PERCEIVED NURSE STRESS IN THE EMERGENCY DEPARTMENT

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PRACTICE PROBLEM

- High stress levels are prevalent among emergency department (ED) nurses and often affect 100% of nurses (Jiaru et al., 2023).
- Stress increases risk of iatrogenic errors and medical complications (Jiaru et al., 2023)
- Stress and burnout, are key determinants of staff turnover with 60% of nurses citing stress as a reason for leaving the profession (Kriakous et al., 2021)
- At the practicum site, there was a need for effective stress management program because internal data indicated high rates of staff turnover due to stress and burnout

Project Aim: This project aimed to reduce stress among ED nurses by educating them on how to cope with stressful work environment by practicing mindfulness strategies.

PRACTICE QUESTION

For emergency department nurses, does the implementation of a mindfulness-based stress reduction (MBSR) program, compared to current practice, impact perceived stress over 8 weeks?

METHODOLOGY

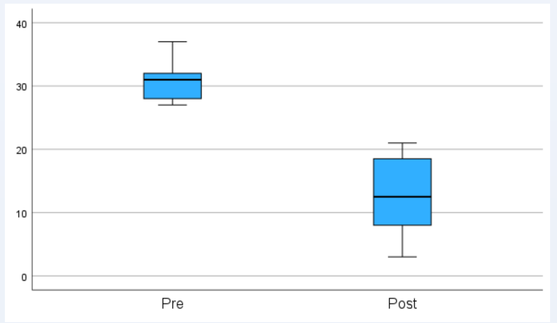
- Translational Science Model: Knowledge-to-Action Model
- Setting: ED in a large urban hospital in the Northeast United State
- Population: ED nurses (n = 8) completed the program
- Inclusion Criteria: ED nurses expecting to stay in the unit for at least 8 weeks
- Exclusion Criteria: Refusal or schedule conflict preventing participation in 6 out of 8 sessions.
- Intervention: 8-week MBSR program for stress reduction (Kang & Myung, 2022)
- Summative Evaluation: Comparison of the pre- and post-intervention Perceived Stress Scale (PSS) scores
- Formative Evaluation: Weekly attendance monitoring and informal feedback.
- Outcome: Nurses' PSS scores
- Data Collection: Online, using LimeSurvey platform
- Instrument: Perceived Stress Scale (PSS) (Cohen et al., 1983)
- Data Analysis: Wilcoxon signed-rank test, Cohen's d for effect size
- Timeframe: Total project implementation 12 weeks, including 8 weeks intervention

RESULTS

- Mean PSS score decreased from M = 30.75, SD = 3.240 (pre-intervention) to M = 12.75, SD = 6.341 (post-intervention).
- Wilcoxon signed-rank test (Z = -2.530, p = .011) indicated that the change in stress scores was statistically significant
- Cohen's effect size was large d = 3.473, 95% CI (1.556, 5.369), suggesting practically significant effect
- Figure 1 shows boxplots for pre-intervention and post-intervention PSS scores

Figure 1

Boxplots for pre-intervention and post-intervention PSS scores



IMPLICATIONS

- MBSR may (Kriakous et al., 2021)
  - Reduce nurse stress and burnout
  - Improve patient outcomes
  - Reduce risk of errors
  - Improve staff retention
- MBSR should become a workforce management tool
- MBSR fosters positive work environment (Kriakous et al., 2021)

CONCLUSIONS

- MBSR program, reduced perceived stress among ED nurses
- MBSR program is feasible in real-world settings and generated positive response from participants

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