Effects of Mindfulness Stress Reduction Program on Nurses: An Integrated Research Review

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Background & Significance
- Prevalence of nurse burnout can be as high as 40% (Duarte & Pinto-Gouveia, 2016)
- Higher levels of burnout have been associated to have a negative impact on job satisfaction, patient outcomes and increase nursing absenteeism and turn over (Green & Kinchen, 2021).
- Variations of mindfulness-based stress reduction programs (MBSR) developed by Dr. Kabat-Zinn have been utilized to help reduce burnout and other psychological effects on nurses (Ghawadra et al., 2019).
- MBSR programs aim to aid in the improvement of mindfulness through the practice of linking one’s physical and mental state in a nonjudgmental way (Ghawadra et al., 2019).
- Multiple Instruments have been utilized to capture effects of interventions.
- No “gold standard” for primary outcomes for nurses (Jung et al., 2021).

Methodology
- The integrative research review method was derived from search design recommendations from Brown (2018), Whittemore & Knafle (2005) and “The Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines (Page, et al., 2021).
- Comprehensive search was conducted with following search terms, “mindfulness-based interventions”, “nurses”, “effects or impacts or consequences or influence outcomes”.
- Databases utilized: Cochrane Library, Medline Complete, Cinahl & Pubmed
- Same search terms applied to all databases with exception to Pubmed was limited to systematic reviews and meta-analysis
- Exclusion Criteria: Qualitative studies, studies with
- Comprehensive search was conducted with following search terms, “mindfulness-based interventions”, “nurses”, “effects or impacts or consequences or influence outcomes”.
- Databases utilized: Cochrane Library, Medline Complete, Cinahl & Pubmed
- Search Results: Initial search results included 125 articles and included thirty-three duplicates

Research Question
“What effect does a mindfulness bases stress reduction program have on nurses?”

Literature Synthesis
- Systematic review (SR) showed results of varying levels of a positive impact on burnout (Alkawaldehet al., 2020; Jung et al., 2021).
- SR of nine studies utilizing a mindfulness-based intervention (MBI) contained ten different measuring instruments across the studies (Ghawadra et al., 2019).
- Four-week mindfulness-based training (MBT) showed reduced anxiety and improved job satisfaction (Ghawadra et al., 2020).
- Statistically favorable results of a mindfulness-based intervention (MBIB) vs. education-based intervention (EB) (Xie et al., 2020).
- Improvement on burnout measures noted after four-hour mindfulness workshop (Sarazine et al., 2020).
- According to Green & Kinchen (2021) mindfulness meditation is effective in decreasing stress and burnout and may lead to increase resiliency, compassion and emotional regulation.
- Statistically significant lower scores of anxiety post MBSR/MBI (Chen & Cui 2020; Fadzil et al., 2021).
- MBIs showed significant decrease in psychological distress and beneficial effects on psychological wellbeing (Kang & Myung’s 2021).
- Statistically significance in resiliency noted in a RCT at the three-month mark post MBSR intervention (Lin et al., 2019).
- Significant reduction in compassion fatigue, burnout, stress, experiential avoidance and increase in self-compassion posted MBI (Duatre & Pinto-Gouveia, 2016).
- Inability to perform meta-analysis due to heterogeneity of studies (Ghawadra et al., 2019; Jung et al., 2021).

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Level Of Evidence
- No standard practice guidelines are available to measure and mitigate mental health of nurses
- Inconsistency found among mindfulness-based programs and interventions
- The heterogeneity of studies creates an obstacle for researchers to perform meta-analysis.

Clinical Implications
- Although each study varied in intervention and data collection strategies, MBSR/MBIs have shown to have some form of positive impact on overall psychological wellbeing of nurses
- No standard practice guidelines are available to measure and mitigate mental health of nurses
- Inconsistency found among mindfulness-based programs and interventions
- The heterogeneity of studies creates an obstacle for researchers to perform meta-analysis.

References
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