

Enhancing Patient Care And Mitigating Nurse Burnout: An Examination Of The Efficacy Of Mindfulness-Based Strategies

● عام ٢٠٢٢ ●

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Abstract:

This study evaluates how mindfulness-based treatments (MBIs) reduce nurse tiredness and improve patient care. The hard nature of nursing often causes stress and tiredness. This research examines how MBIs affect nurses' mental health. Eleven studies are analyzed after reviewing the literature. MBIs may improve nurses' mental health, according to the findings. Relaxation and mindfulness methods like meditation help nurses manage stress, exhaustion, and enhance health. MBI effectiveness was measured by stress, depressive disorders, anxiety, exhaustion, adaptability, quality of life, self-forgiveness, contentment, and mindfulness. The results show that mindfulness-based training may significantly lower nursing stress. They also reduce tiredness and improve mindfulness and self-compassion. Validated measures like the depression, anxiety, and stress scale help this research quantify outcomes. This investigation shows that MBIs can improve nurses' mental health. Nurses may manage work stress and maximize job happiness by incorporating mindfulness techniques into their everyday routines. Thus, patient care and results may improve.

Keywords: Patient care, Mindfulness-based interventions, Psychological well-being, Stress reduction.

1. Introduction

Nurses are prone to experiencing elevated levels of fatigue and psychological strain due to the rigorous demands and challenging circumstances inherent in their occupation (1,2). Nurses face a range of challenging stressors in their job, such as long work schedules, high patient loads, frequent interactions with sick patients and their families, inadequate nursing staff, extended work hours, and a feeling of powerlessness regarding their work (3-5). Bernal et al. (6) found that stress is the primary occupational health risk for nurses, second only to musculoskeletal problems. Nurses' well-being may be greatly affected by stressful situations (7). Stress may disturb the balance of human equanimity and hormonal or physiological homeostasis (8). The long-term professional burnout and stress experienced by nurses have a significant impact on their emotional and physical well-being, leading to concerns such as hormone imbalances, fatigue, coronary artery disease, sleep disorders, diabetes, obesity, depressive disorders, and anxiety (9,10). Absenteeism, reduced work satisfaction, and employee turnover are signs that fatigue and stress might negatively impact job performance and productivity (11).

The nursing profession has had an extraordinary challenge due to the COVID-19 epidemic, since their responsibilities usually include managing infections, implementing isolation measures, and enforcing confinement protocols (12). Nurses face increased stress due to the increased workload and complexity of their responsibilities. They also have to deal with additional challenges, such as changing protocols, unfamiliar work environments, and unprecedented exposure to trauma, all while having limited opportunities related to COVID-19. The COVID-19 pandemic further emphasized the empathetic presence of nurses at moments of distress (13,14). On a global scale, nurses may face substantial physiological and mental health repercussions due to this epidemic. As a result, there is a possibility of inadequate treatment, higher rates of medical mistakes, reduced patient satisfaction, and poor communication. As a result, there is a growing need for effective strategies to alleviate stress among this specific group of people (15-17).

Several techniques, such as progressive muscle relaxation, biofeedback, diaphragmatic breathing, autogenic training, relaxation response, psychotherapy, and educational programs, may be used to decrease burnout and stress and improve overall well-being. Mindfulness-based initiatives (MBIs) are a modern and extensively used technique (18-20). Mindfulness, as described by Bazarko et al. (21), is a discipline in which individuals intentionally

focus their attention on their current state of awareness, with the goal of achieving mental and physical relaxation. Furthermore, it involves attentively observing the present moment, including external aspects like as the physical and social environment, as well as interior inputs like thoughts and body sensations, without making judgments or attributing significance to them. Developing a heightened awareness of the present moment may result in enhanced clarity and accuracy in perception, less negative emotions, and greater energy and ability to handle challenges (22). The first mindfulness intervention to be clinically evaluated was mindfulness-based stress reduction, which was first developed by Dr. Jon Kabat-Zinn in the 1970s (23).

Meditation-based treatments (MBIs) are therapeutic approaches that are founded on the practice of mindfulness. Individuals with high degrees of mindfulness have an improved ability to manage their own well-being via increased emotional awareness, comprehension, and acceptance, as well as the power to rectify or repair negative emotions (24). Mindfulness training may have an impact on brain areas that control concentration, awareness, and emotion regulation (25). Research has shown that Multiple Body Types (MBIs) may improve the mental health of different groups, such as those with malignancies, university staff, students, persons with multiple sclerosis, and individuals dealing with workplace anxiety (26-30). More precisely, in the field of healthcare, as shown by the research conducted by Montanari et al. (31), Yang et al. (32), and Lan et al. (33). Four thorough assessments of a group consisting of healthcare workers have determined that mindfulness-based programs are a feasible and successful intervention that may enhance the mental well-being of these professionals (34).

According to the study done by Guillaumie et al. (11), mindfulness has a significant positive impact on the psychological well-being of both nurses and nursing students. A further investigation (35) revealed data supporting the effectiveness of mindfulness-based stress reduction therapies in alleviating the psychological discomfort experienced by nurses. In addition, Suleiman-Martos et al. (36) found in their research that MBI successfully reduced levels of burnout and emotional stress in nurses diagnosed with burnout syndrome.

Although there is a significant amount of research on the benefits of mindfulness for nurses, there is still a lack of understanding regarding the specific types of mindfulness-based interventions (MBIs) used to improve nurses' psychological well-being, the measures used to assess their well-being, and the overall effectiveness of MBIs in enhancing their psychological well-

being. The purpose of this study was to identify contemporary studies that investigated the effects of mindfulness-based therapies on the mental well-being of nurses.

2. Qualities exhibited by mindfulness-based approaches

All mindfulness-based therapies, except for one trial, were conducted in person. The research (37) did not give any information on the implementation process or the people responsible for carrying it out. Unlike previous studies, Ghawadra et al. (20) observed a framework that included a four-week period of self-directed learning, complemented by a two-hour session facilitated by a website. While nine research documented the implementation of mindfulness-based programs, two of those investigations did not publish the identity of the intervention providers (37,38). Researchers served as mindfulness teachers in two distinct research (20,39). The research conducted by Duarte and Pinto-Gouveia (39) was authored by a clinical psychologist who had six years of expertise in mindfulness practice. The psychologist had participated in various retreats, workshops, and other meditation and training activities specifically centered on mindfulness. The author who implemented the intervention in the research conducted by Ghawadra et al. (20) was not specified. Furthermore, none of the studies provided specific information on the length of the sessions.

The outcome most often evaluated was stress, since it was referenced in seven of the publications. The investigations included outcome markers such as stress, depressive disorders, anxiety, tiredness, adaptability, quality of life, self-forgiveness, satisfaction, and mindfulness capacity. A total of thirty unique monitoring techniques and devices were used to determine the results. The Maslach Burnout Inventory (MBI) was the most often used tool in the research, being used in them (37,38,40). The depression, anxiety, and stress scale was used as the subsequent instrument in four of the trials. Both instruments are extensively used by a significant number of researchers on a frequent basis, and their texts have been translated into several languages. The research investigations included a maximum of seven instruments, with a minimum need of two tools across all studies. Out of the publications (38-42) that were considered, they all gave explanations of the validity and reliability of the scales utilized. However, the other studies did not describe these features (40,43).

3. The effectiveness of programs based on mindfulness

All outcomes analyzed in the study, except for the one by Watanabe et al. (2), were good. Based on previous researches, it

has been concluded that introducing mindfulness-based programs might be a potentially beneficial technique for improving the psychological well-being of nurses. Implementing mindfulness-based interventions led to improved primary outcomes in ten of the research analyzed. All research that has investigated the matter (37-43) have shown that mindfulness-based programs effectively decrease the stress levels of nurses. Secondary outcomes also showed improved results. Except for one study conducted by Watanabe et al. (2), other research investigations have shown that mindfulness-based interventions are successful in reducing tiredness among nurses (40,42). Previous studies investigating the impact of mindfulness-related programs (20,33,39) revealed their effectiveness in improving levels of mindfulness. Other independent studies have shown that mindfulness-based courses are beneficial in improving self-compassion among nurses (39-42).

4. Comparative analysis

The current literature review analyzed the available information about the possible influence of Mindfulness-Based Interventions (MBI) on the mental well-being of nurses. A total of eleven articles that met the specified criteria were carefully analyzed. Overall, the results suggest that mindfulness-based therapies, programs, and trainings may positively impact the psychological well-being of nurses. All investigations, with the exception of Watanabe et al. (2), found that Mindfulness-Based Interventions (MBIs) had positive benefits (37-43). However, the length of mindfulness practices in the research varied depending on the kind of mindfulness-based intervention (MBI) and the study setting. The lack of clear information on the effects of different doses and long-term implications prevents the formulation of unambiguous causal conclusions.

Consistent with the results reported in other research (34,36), the findings of this study offer further evidence for the usefulness of mindfulness therapies in improving the psychological well-being of nurses. However, this criticism is unique compared to others. Guillaumie et al.'s (11) review mostly focused on nurses but also included nursing students. The collection of papers included the time period from 1980 to 2014 and included both qualitative and quantitative investigations. Furthermore, any trials that used relaxation methods such as reiki, hypnosis, therapeutic touch, meditation, and mindfulness were included. These additional elements may have affected the evaluation of the effect of mindfulness on nurses. Similarly, Ghawadra et al. (35) conducted a comprehensive analysis that specifically examined psychological concerns within the nursing profession.

Nevertheless, their analysis was restricted to studies that used MBSR (mindfulness-based stress reduction) as a tactic, and the research publications included in the study were published between 2002 and 2018.

In addition, despite the inclusion of studies by Suleiman-Martos et al. (35) that examined nurses and classified mindfulness training as an intervention, the major emphasis remained on weariness. Other systematic studies (34,44) have examined the effectiveness of mindfulness among healthcare practitioners. Nevertheless, it is crucial to recognize that the stressors and degrees of stress encountered by healthcare workers might differ, which could impact the results of the systematic reviews. The scope of this systematic study was exclusively focused on nurses, excluding any other healthcare workers (45). This study is the first thorough examination of the effectiveness of mindfulness-related measures in promoting psychological well-being among nurses.

The majority of the previous research included in this review showed a reasonable degree of strength and reliability. However, some technical limitations were discovered. It is important to emphasize that the research included in the analysis had rather small sample sizes. In five of these investigations, the majority of participants were female (39-43). The results of two studies (2,38) may have been affected in terms of their generalizability and representativeness due to the sole inclusion of female subjects. Soysa and Wilcomb (46) concluded, based on their research with 2014 students, that men had higher levels of well-being compared to girls. In addition, Katz and Toner (47) discovered in their examination of the efficacy of mindfulness-based interventions for drug addiction disorders, categorized by gender, that females exhibit a higher inclination towards engaging in mindfulness-related behaviors and experience better advantages from these therapeutic approaches. To thoroughly examine the efficacy of mindfulness-related programs, it is necessary to do more research using a large sample size and designs that ensure an equal representation of both genders.

The current review highlighted that although some studies used reliable outcome measures, there was a lack of consistency and significant variation among the studies that examined different aspects of psychological well-being, such as burnout, anxiety, stress, and depression. The outcome measures not only varied significantly in terms of the actual results, but also in terms of the metrics used to assess them. While acknowledging the inherent biases in the self-reports of evaluations included in the research, it is important to emphasize that there are no viable alternatives available for many populations (48). In contrast, the

recent analysis found that in four research papers (37,40,43), there was no mention of the reliability or validity of the measures. The validity and reliability of a measuring instrument are crucial measures of its quality (48). Therefore, it is difficult to determine if the tools used in these studies were successful in measuring the anticipated effects of the treatments. It is ideal to conduct high-quality intervention studies that use widely acknowledged and validated measures to evaluate the psychological well-being of nurses.

While just one research reported no increase in the well-being of nurses, 10 studies revealed significant improvements in this aspect. The mindfulness intervention strategies, despite some slight procedural differences, all had the same goal of teaching participants how to cultivate a heightened awareness of their emotions and viewpoints, and to modify the relationship between the two (49). The research done by Watanabe et al. (2) produced inconclusive results despite using a mindfulness-based stress reduction technique as its intervention. This difference might perhaps be ascribed to the underlying basis of the cognitive behavioral paradigm, upon which therapies connected to mindfulness were built. This paradigm helps people understand the connection between emotional responses and troubling experiences—an alternate method of thinking that may have led to an inconsequential result (2). In addition, while most of the research included in the analysis showed positive outcomes, one study produced equivocal findings on work satisfaction, while another found a little impact on job satisfaction (20,43). Only two studies have examined occupational satisfaction. Job satisfaction is a complex concept that consists of many different factors that require a deep understanding. As a result, the duration of the interventions used in these studies, which were 12 weeks and 8 weeks respectively, may not have been long enough to significantly improve job satisfaction. Future research should prioritize investigating the long-term impacts of mindfulness-related interventions on job satisfaction among nurses. Additionally, it is important to further explore organizational factors such as the work environment, managerial leadership style, professional commitment, and organizational commitment.

5. Conclusion

This research closes by highlighting the effectiveness of mindfulness-based therapies in reducing nurse tiredness and improving the quality of patient care. The findings indicate that mindfulness-based treatments (MBIs) have a positive impact on the psychological well-being of nurses by reducing stress, relieving tiredness, and fostering self-compassion and mindfulness. These

treatments provide nurses with effective tools to handle the challenging demands of their profession and improve their overall work satisfaction. Our study findings suggest that MBIs have the potential to enhance the overall well-being of nurses. Prior studies on mindfulness have shown that it yields advantageous outcomes for the mental and emotional well-being of both academic and nonclinical populations. While no negative effects were recorded in any of the research, it is possible that individuals may experience a deterioration of symptoms due to their mindfulness training. Further research should include the measurement, makeup, and effects of MBIs. Mindfulness-Based Interventions (MBIs) need longitudinal research to determine their cost-effectiveness, the enduring nature of mindfulness practice, and its potential impact on other well-being-related activities. Furthermore, further investigation using stringent methodologies, such as randomized controlled trials, continuous evaluations of results, and bigger sample sizes, is imperative in this domain.

It is recommended that future studies use more rigorous designs, such as randomized controlled trials, to examine the effectiveness of Mindfulness-Based Interventions (MBIs) in different healthcare settings. Longitudinal research may provide useful insights into the long-lasting benefits of mindfulness techniques in relation to nurse tiredness and patient care. Moreover, it is crucial to examine the specific components and dose of mindfulness-based therapies that provide the most significant results in order to develop tailored programs for nurses. Comparative studies can determine the most effective stress reduction therapies by comparing the effectiveness of Mindfulness-Based therapies (MBIs) with other approaches. Moreover, a thorough analysis of the impact of Mindfulness-Based Interventions (MBIs) on specific patient outcomes, such as patient satisfaction and safety, may provide a comprehensive understanding of the benefits that mindfulness provides to healthcare professionals and their patients. Overall, the findings of this study support the inclusion of mindfulness-based therapies in nursing practice as an advantageous approach to reduce tiredness, improve well-being, and increase patient care. Further examination and implementation of these strategies may enhance the creation of healthier work conditions for nurses and improve overall healthcare outcomes.

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