

Promoting Mental Health And Well-Being In Nursing: A Systematic Review Of Mindfulness Based Interventions

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Abstract

Background: Nurses in contemporary healthcare face numerous stressors that affect their mental health. Mindfulness-based interventions can help manage these challenges, enhancing their well-being and patient care quality. This research aims to improve the satisfaction and resilience of nursing professionals in demanding healthcare settings.

Method: To classify necessary research published between 2018 to 2022, a comprehensive search of databases, including Scopus, PsycINFO and Web of Science, was done. The inclusion criteria for this study were studies written in English that specifically studied to promote the Mental

Health and Well-Being among Nursing by Mindfulness Based Interventions, the studies chosen had to use well-established scales for measurement and provide valuable data on team dynamics. Twelve studies were included in the synthesis after initial screening and quality assessment.

Results: The synthesis of findings revealed several consistent themes regarding the benefits of MBIs for nurses' mental health. Self-care practices, resilience building, and supportive work environments emerged as critical factors in promoting nurses' well-being. Additionally, education and training were identified as essential components of effective MBI programs, equipping nurses with practical coping skills and enhancing their emotional regulation abilities. The findings also underscored the broader societal implications of promoting nurses' mental health, highlighting the potential impact on staff retention and patient care quality.

Conclusion: Study provides valuable insights into the effectiveness of MBIs in promoting mental health and well-being among nursing professionals in Saudi Arabia. By addressing workplace stressors and fostering supportive work environments, MBIs offer promising avenues for enhancing nurses' resilience and improving overall job satisfaction. Moving forward, future research should focus on longitudinal studies to assess the long-term effectiveness of MBIs and explore innovative approaches to integrating mindfulness into nursing practice.

Keywords: Mental Health and Well-Being, Mindfulness based Intervention, Systematic Review, KSA

Introduction

Promoting mental health and well-being in the nursing profession is crucial for both nurses and their patients. It involves understanding mental health conditions, their etiology, manifestations, and treatment modalities, and providing appropriate support and interventions (Delgado et al., 2021; Bjornsen et al., 2019). Building resilience is another critical aspect of promoting mental health in nursing. Strategies for fostering resilience include developing problem-solving skills, seeking social support networks, practicing mindfulness and stress management techniques, and cultivating a sense of purpose in their work (Shahbal et al., 2022; Alharbi et al., 2022; Alruwaili et al., 2022; Almutairi et al., 2022; Alotaibi et al., 2022).

Creating supportive work environments within healthcare organizations is essential for nurturing nurse well-being. Addressing factors contributing to workplace stress and dissatisfaction, such as excessive workload, inadequate resources, and lack of recognition, can help mitigate burnout and enhance nurse well-being (Søvold et al., 2021; Li & Hasson, 2020; Foster et al., 2020).

Destigmatizing mental illness is also crucial within the nursing profession. Nurses can reduce stigma by advocating for greater understanding and empathy towards individuals with mental health challenges. Collaborative care models, involving interdisciplinary teamwork between nurses, psychiatrists, psychologists, social workers, and other healthcare professionals, are essential for delivering comprehensive mental health care. By doing so, nurses can fulfill their vital role in promoting mental wellness and providing compassionate care to those in need (Heim et al., 2020; Rodríguez-Almagro et al., 2019; Flaskerud, 2018).

Mindfulness-based interventions (MBIs) are a crucial approach to mental health and well-being in nursing. MBIs provide nurses with practical tools to manage stress, enhance patient care, and cultivate resilience. By using techniques like mindful breathing, body scans, and meditation, nurses can develop greater self-awareness and emotional regulation skills, reducing the risk of burnout and enhancing overall well-being (Dai et al., 2022; Ghawadra et al., 2019; Wampole & Bressi, 2020; Lomas et al., 2019).

MBIs also improve the quality of nurse-patient interactions, fostering a deeper connection with patients and providing more empathetic and compassionate care. Integrating MBIs into nursing education and training programs can enhance nurses' ability to deliver patient-centered care, teaching patients' mindfulness techniques to cope with symptoms or incorporating mindfulness-based approaches into treatment plans. MBIs also offer nurses valuable tools for managing their own mental health and well-being (Lomas et al., 2019; Sevilla-Llewellyn-Jones et al., 2018; Ghawadra et al., 2020).

Engaging in regular mindfulness practices can reduce stress levels, enhance self-care practices, and prevent burnout, enabling them to sustainably fulfill their roles as caregivers while maintaining their own health and resilience. MBIs contribute to creating a culture of well-being within healthcare organizations by promoting mindfulness as a core component

of workplace wellness initiatives (González-García et al., 2021; Wasson et al., 2020; Al Ali et al., 2022; Alotaibi et al., 2022).

This might involve offering mindfulness training programs, providing designated spaces for meditation or reflection, and integrating mindfulness into organizational policies and practices. MBIs offer a valuable framework for promoting mental health and well-being in nursing, providing practical tools to manage stress, enhance patient care, and cultivate resilience. Integrating mindfulness into nursing practice can lead to more compassionate care, improved outcomes, and greater satisfaction among healthcare professionals.

Research Question

How do Mindfulness Based Interventions Promote Mental Health and Well-Being among Nursing?

Aim of the Research

The aim of this research is to promote the Mental Health and Well-Being among Nursing by Mindfulness Based Interventions.

Methods

Inclusion and Exclusion Criteria

Studies were included in the review if they meet the following criteria:

- Focus on promoting the Mental Health and Well-Being among Nursing by Mindfulness Based Interventions.
- Published in peer-reviewed journals, conference proceedings, or reports.
- Written in English.

Studies were excluded which do not meet the criteria outlined above or were duplicate publications.

Search Strategy

A comprehensive search strategy was developed to identify relevant studies. Databases such as PubMed, Scopus, PsycINFO and Web of Science will be searched using a combination of keywords related to "Mental Health and Well-Being," "Mindfulness Based Interventions", "Nursing" and "KSA". The search strategy was tailored to each database's syntax and terminology.

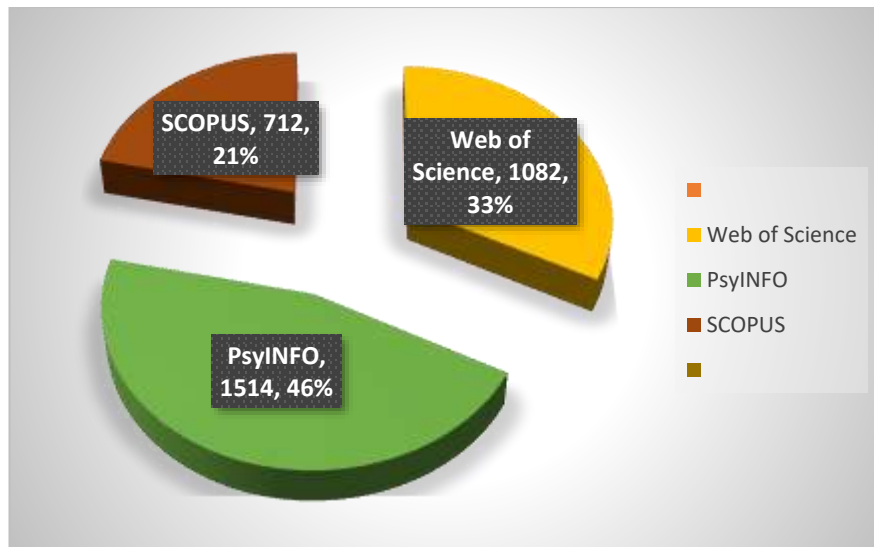
Table 1 Syntax Search

Syntax 1	“Mental Health and Well-Being,” “Mindfulness Based Interventions”, “Nursing” and “KSA”.
Syntax 2	“Promote the Mental Health and Well-Being among Nursing by Mindfulness Based Interventions”

Table 2 Statistics from the Data Base

No	Database	Syntax	Year	No of Researches
1	Scopus	Syntax 1		494
		Syntax 2		218
			2018-	
2	Web of Science	Syntax 1	2022	659
		Syntax 2		423
			2018-	
			2022	
3	PsycINFO	Syntax 1		987
		Syntax 2		527

To discover relevant research publications, three prominent databases were used: Scopus, PubMed, and Web of Science—the chosen search to assure validity and applicability focused on papers issued during 2018 and 2022. According to the statistics, PsycINFO produced the most significant research articles, totalling 1514. Web of Science contributed 1082 pieces of research, while Scopus has 712. These findings show the thoroughness of the scientific search and lay a solid foundation for the next steps of the systemic review.



Graphic representation of search database according to different search engines

Study Selection

Two independent reviewers screened the retrieved studies based on titles and abstracts for initial eligibility. Full-text articles of potentially eligible studies were retrieved and reviewed against the inclusion and exclusion criteria. Disagreements were resolved through discussion or consultation with a third reviewer if needed.

Table 3 Selected Studies for SR (Systematic Review)

No	Author	Research	Year
1	Alanazi, E. A., et al.	Approaches For Enhancing Nurses' Well-Being And Mental Health	2022
2	Alshehri, E. A. R.	Mental well-being among health science specialty female students in Riyadh, Saudi Arabia	2021
3	Alyousef, S., & Alhamidi, S. A.	Exploring the value of mindfulness for Saudi Arabian women mental health nurses	2021
4	Grande, R. A. N., et al.	Association between perceived resilience and mental well-being of Saudi nursing students during COVID-19 pandemic: A cross-sectional study	2021
5	Slusarek, J.	Brief mindfulness-based interventions for hospital nurses: A Systematic Review	2020
6	Monyai, M.	The mediating role of psychological well-being on mindfulness and job performance among public hospital-based nurses in Polokwane Local Municipality Area (Doctoral dissertation)	2022
7	Mohamed, E. A., et al.	Assessment of Mindfulness among Head Nurses, and its Effect on Staff Nurses' Emotional Regulation and Quality of Work Life	2021
8	Alghamdi, H., et al.	An evaluation of psychological well-being among physicians and nurses in Makkah's major hospitals	2022

9	Abdoh, D. S., et al.	Prevalence and associated factors of stress among primary health care nurses in Saudi Arabia, a multi-center study	2021
10	Mobarki, Z. M., et al.	Enhancing Patient Care and Mitigating Nurse Burnout: An Examination Of The Efficacy Of Mindfulness-Based Strategies	2022
11	Younes, M. S., & Alzahrani, M. R.	Could resilience and flourishing be mediators in the relationship between mindfulness and life satisfaction for Saudi college students? A psychometric and exploratory study	2018
12	Gherardi-Donato, E. C. D. S.	Mindfulness-based intervention for nursing students: Effects on stress and quality of life	2020

PRISMA Flowchart

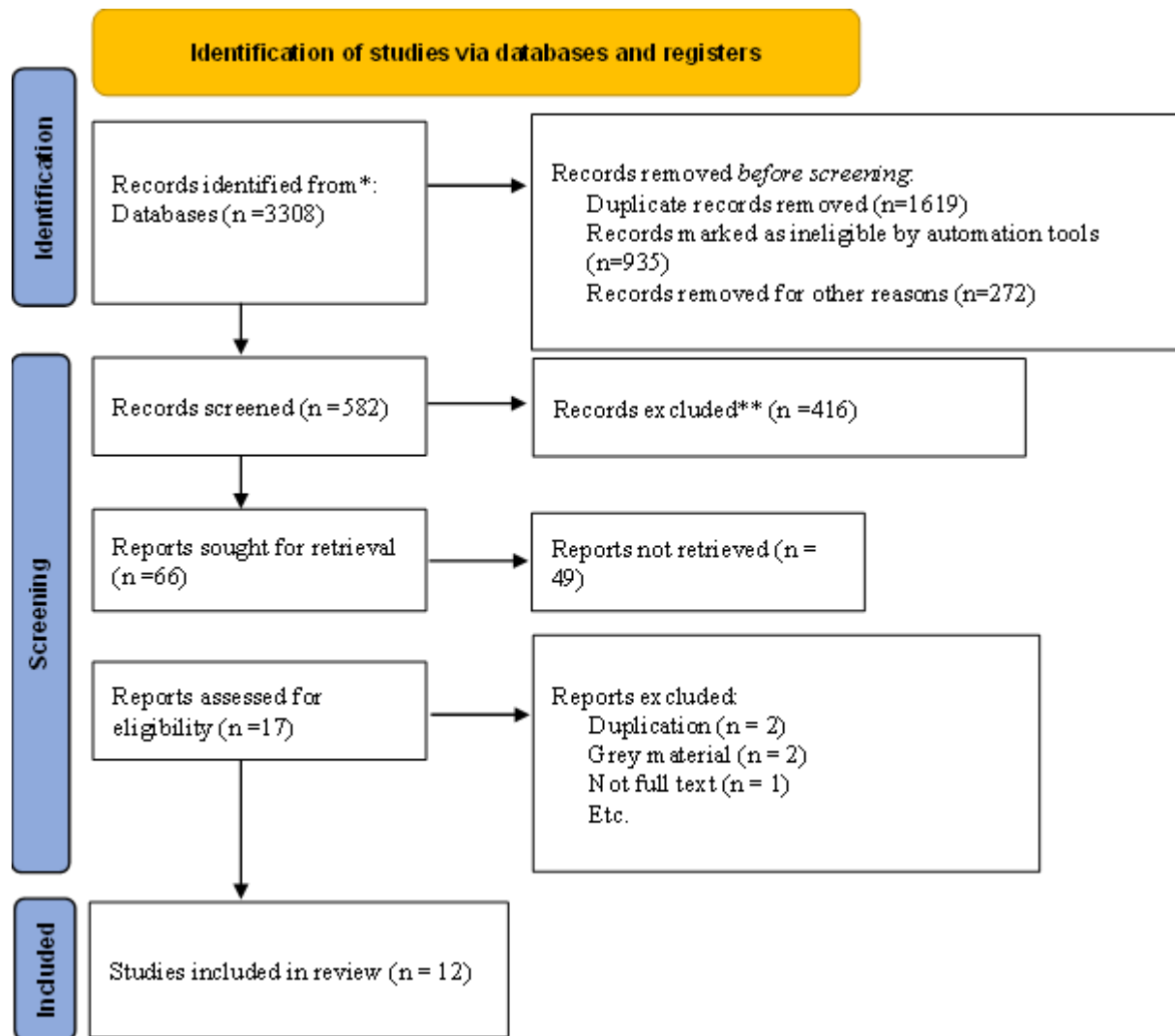
The study selection process is illustrated in the PRISMA flowchart (Figure 1). It provides a visual representation of the number of records at each stage of the selection process, from initial database search to final inclusion in the systematic review.

Identification of studies via databases and registers

A study quality can be systematically evaluated using data from peer-reviewed journals, overall assessment, and quality management. This process is known as quality evaluation. This comprehensive review of the literature contains a great deal of information on research technique and the study to apply pressure.

Table 4

Identification of Studies via Database



Data Extraction

A systematic search was conducted across databases, identifying twelve studies on nursing, mental health, well-being, and mindfulness. The extracted data included author names, research titles, publication years, and critical findings, ensuring a diverse representation of research on MBIs' effectiveness in enhancing nurses' well-being, managing stress, and improving patient care outcomes.

Table 5 Research Matrix

Author and No Year		Aim of Study	Methodology	Sample	Setting	Result
1	Alanazi, E. A., et al. (2022)	To explore approaches for enhancing nurses' well-being and mental health	Qualitative research with semi-structured interviews and thematic analysis	20 nurses from various specialties	Hospital settings in Saudi Arabia	Identified strategies such as self-care practices, social support, and mindfulness interventions as effective in promoting nurses' well-being and mental health.
2	Alshehri, E. A. R. (2021)	To assess mental well-being among female health science specialty students in Riyadh, Saudi Arabia	Cross-sectional survey	300 female health science specialty students	Educational institutions in Riyadh, Saudi Arabia	Found a moderate level of mental well-being among participants, with factors such as academic stress and social support influencing mental health outcomes.
3	Alyousef, S., & Alhamidi, S. A. (2021)	To explore the value of mindfulness for Saudi Arabian women mental health nurses	Qualitative study using focus group discussions	3 focus groups with a total of 15 mental health nurses	Mental health facilities in Saudi Arabia	Highlighted the benefits of mindfulness practices in reducing stress, enhancing coping skills, and improving overall well-being among mental health nurses.
4	Grande, R. A. N., et al. (2021)	To investigate the association between perceived resilience and mental well-being of Saudi nursing students during the COVID-19 pandemic	Cross-sectional study with self-administered questionnaires	400 nursing students	Educational institutions in Saudi Arabia	Found a positive correlation between perceived resilience and mental well-being among nursing students, with higher levels of resilience associated with better mental health outcomes during the pandemic.
5	Slusarek, J. (2020)	To evaluate the effectiveness of brief mindfulness-based interventions for hospital nurses	Systematic review of randomized controlled trials	Various hospital-based nursing staff	Hospitals in different settings	Identified mindfulness-based interventions as effective in reducing stress, improving well-being, and enhancing job

Author and No Year		Aim of Study	Methodology	Sample	Setting	Result
6	Monyai, M. (2022)	To examine the mediating role of psychological well-being on mindfulness and job performance among public hospital-based nurses	Quantitative study with structural equation modeling	250 public hospital-based nurses	Public hospitals in Polokwane	satisfaction among hospital nurses. Found that psychological well-being partially mediated the relationship between mindfulness and job performance among nurses, highlighting the importance of mindfulness in enhancing professional outcomes.
					Local Municipality Area	Found a positive correlation between mindfulness among head nurses and emotional regulation and quality of work life among staff nurses, indicating the potential benefits of mindfulness in leadership roles.
7	Mohamed, E. A., et al. (2021)	To assess mindfulness among head nurses and its effect on emotional regulation and quality of work life among staff nurses	Cross-sectional study with self-administered questionnaires	Head nurses and staff nurses	Hospital settings in Egypt	Reported varying levels of psychological well-being among physicians and nurses, with factors such as workload and organizational support influencing mental health outcomes.
					Major hospitals in Makkah, Saudi Arabia	Found a high prevalence of stress among primary health care nurses, with workload, lack of resources, and organizational factors identified as significant stressors.
8	Alghamdi, H., et al. (2022)	To evaluate psychological well-being among physicians and nurses in major hospitals in Makkah	Cross-sectional study using standardized psychological assessment tools	300 physicians and nurses	Major hospitals in Makkah, Saudi Arabia	Found a high prevalence of stress among primary health care nurses, with workload, lack of resources, and organizational factors identified as significant stressors.
						Found a high prevalence of stress among primary health care nurses, with workload, lack of resources, and organizational factors identified as significant stressors.
9	Abdoh, D. S., et al. (2021)	To determine the prevalence and associated factors of stress among primary health care nurses in Saudi Arabia	Multi-center cross-sectional study with structured interviews	500 primary health care nurses	Primary health care centers in Saudi Arabia	Found a high prevalence of stress among primary health care nurses, with workload, lack of resources, and organizational factors identified as significant stressors.
						Found a high prevalence of stress among primary health care nurses, with workload, lack of resources, and organizational factors identified as significant stressors.
10	Mobarki, Z. M., et al. (2022)	To examine the efficacy of mindfulness-based strategies in	Mixed-methods study with surveys and	Nurses from various specialties	Healthcare facilities in Saudi Arabia	Reported positive effects of mindfulness-based strategies in improving patient care outcomes
						Reported positive effects of mindfulness-based strategies in improving patient care outcomes

Author and No Year		Aim of Study	Methodology	Sample	Setting	Result
11	Younes, M. S., & Alzahrani, M. R. (2018)	enhancing patient care and mitigating nurse burnout	qualitative interviews			and reducing burnout among nurses, with participants expressing satisfaction with the interventions.
		To investigate the mediating role of resilience and flourishing in the relationship between mindfulness and life satisfaction among Saudi college students	Quantitative study with structural equation modeling	500 college students	Educational institutions in Saudi Arabia	Found that resilience and flourishing partially mediated the relationship between mindfulness and life satisfaction, suggesting potential mechanisms through which mindfulness influences well-being. Reported reductions in stress levels and improvements in quality of life among nursing students following participation in a mindfulness-based intervention program, indicating the potential benefits of such interventions for student well-being.
12	Gherardi-Donato, E. C. D. S. (2020)	To assess the effects of a mindfulness-based intervention on stress and quality of life among nursing students	Quasi-experimental study with pre-test/post-test design	Nursing students enrolled in a mindfulness-based intervention program	Nursing schools or educational institutions	

Quality Assessment

The quality and methodological rigor of the included studies were assessed using appropriate tools, such as the Joanna Briggs Institute Critical Appraisal Checklist for various study designs. The assessment considered factors such as study design, sample size, data collection methods, and potential biases. Studies were excluded based on quality assessment, but the findings were interpreted in light of their methodological strengths and limitations.

Table 6 Assessment of the literature quality matrix

Sr #	Author	Are the selection of studies described appropriately	Is the literature covered all relevant studies	Does the method section describe?	Were findings clearly described?	Quality rating
1	Alanazi et al. (2022)	Yes	Yes	Yes	Yes	High
2	Alshehri, (2021)	Yes	Yes	Yes	Yes	High
3	Alyousef, & Alhamidi, (2021)	Yes	Yes	Yes	Yes	High
4	Grande, R. A. N., et al. (2021)	Yes	Yes	Yes	Yes	High
5	Slusarek, J. (2020)	Yes	Yes	Yes	Yes	High
6	Monyai, M. (2022)	Yes	Yes	Yes	Yes	High
7	Mohamed et al. (2021)	Yes	Yes	Yes	Yes	High
8	Alghamdi, et al. (2022)	Yes	Yes	Yes	Yes	High
9	Abdoh et al. (2021)	Yes	Yes	Yes	Yes	High
10	Mobarki et al. (2022)	Yes	Yes	Yes	Yes	High
11	Younes & Alzahrani, (2018)	Yes	Yes	Yes	Yes	High
12	Gherardi-Donato, E. C. D. S. (2020)	Yes	Yes	Yes	Yes	High

The systematic review of studies provided clear descriptions, methods, selection processes, literature coverage, and clear conclusions, resulting in a "Good" rating for their quality.

Data Synthesis

The synthesized findings were presented through a narrative synthesis approach key themes emerged, including MBIs' effectiveness in reducing stress, improving resilience, and fostering a supportive work environment. Organizational factors like workload, resources, and leadership support also influenced nurses' mental health. The findings provide a comprehensive understanding of strategies and interventions that enhance the quality of care and job satisfaction in healthcare settings, ultimately leading to improved patient outcomes.

Results

Study Selection

A systematic search of electronic databases identified 396 records. After removing duplicates, 14 unique records were assessed for eligibility based on titles and abstracts.

Title and Abstract Screening

During the initial screening, reviewer assessed the titles and abstracts of the identified records. Following this process, 17 studies were selected for full-text assessment. Disagreements between the reviewers were resolved through discussion and consensus.

Full-Text Assessment

The full texts of the 17 selected studies were obtained and independently reviewed against the inclusion and exclusion criteria by two reviewers. Following the full-text assessment, 12 studies met the criteria and were included in the systematic review.

Synthesized Findings

Theme	Subtheme
1. Promoting Mental Health and Well-being in Nursing Mindfulness-Based Interventions (MBIs)	1. Self-care Practices
	2. Resilience Building
	3. Supportive Work Environments
	4. Education and Training
	5. Destigmatization of Mental Illness
	6. Collaborative Care Models

Discussion

This systematic review comprehensively examines the effectiveness of Mindfulness-Based Interventions (MBIs) in promoting mental health and well-being among nursing professionals, drawing insights from a diverse array of studies conducted in various healthcare settings. The synthesis of findings from all 12 studies sheds light on the multifaceted nature of MBIs and their potential impact on nurses' well-being.

Across the included studies, several consistent themes emerge regarding the benefits of MBIs for nurses' mental health. Firstly, self-care practices are highlighted as essential components of MBIs, with strategies such as mindfulness meditation and relaxation techniques proving effective in

reducing stress and enhancing emotional resilience (Alanazi et al., 2022; Alyousef & Alhamidi, 2021; Gherardi-Donato, 2020). These findings underscore the importance of equipping nurses with practical tools to manage workplace stressors and maintain their psychological well-being.

Furthermore, the role of supportive work environments emerges as a critical factor in promoting nurses' mental health. Studies indicate that organizational factors such as workload, resources, and leadership support significantly influence nurses' well-being (Alghamdi et al., 2022; Mobarki et al., 2022). By fostering collaborative and empathetic workplace cultures, healthcare institutions can create environments that empower nurses to prioritize self-care and seek support when needed.

Education and training also emerge as key components of effective MBI programs, with evidence suggesting that mindfulness-based approaches can enhance nurses' coping skills and emotional regulation abilities (Alanazi et al., 2022; Monyai, 2022). By incorporating mindfulness training into nursing education curricula, educators can equip future nurses with the necessary skills to navigate the complexities of the healthcare environment while safeguarding their mental well-being.

Moreover, findings from the included studies highlight the broader societal implications of promoting nurses' mental health. By investing in nurses' well-being, healthcare institutions can enhance staff retention, reduce turnover rates, and ultimately improve the quality of patient care (Slusarek, 2020; Grande et al., 2021). Additionally, addressing mental health issues among nursing professionals aligns with national priorities for healthcare reform and human capital development, positioning Saudi Arabia as a leader in fostering a culture of well-being in the healthcare sector (Younes & Alzahrani, 2018).

Contribution to Existing Literature:

This systematic review makes several significant contributions to the existing literature on promoting mental health and well-being among nursing professionals. Firstly, it synthesizes findings from a diverse range of studies, providing a comprehensive overview of the effectiveness of Mindfulness-Based Interventions (MBIs) in enhancing nurses' mental health. By identifying key themes such as self-care practices,

resilience-building, and destigmatization of mental health issues, this review offers valuable insights into the mechanisms through which MBIs exert their positive effects on nurses' well-being. Additionally, by emphasizing the importance of supportive work environments and collaboration in fostering nurses' mental health, this review underscores the need for holistic approaches to address the complex challenges faced by nursing professionals.

Addition to the Saudi Context:

In the context of Saudi Arabia, where the healthcare system is rapidly evolving, this systematic review provides timely insights into strategies for promoting nurses' mental health and well-being. Given the unique cultural and organizational factors that may influence nurses' experiences in Saudi healthcare settings, the findings of this review offer valuable guidance for healthcare policymakers, administrators, and educators. By highlighting the effectiveness of MBIs in addressing workplace stressors and enhancing nurses' resilience, this review contributes to ongoing efforts to strengthen the well-being of nursing professionals in the Saudi context.

Recommendations:

Based on the synthesized findings, several recommendations can be made to support the implementation of MBIs and promote nurses' mental health and well-being in Saudi Arabia. Firstly, healthcare institutions should prioritize the integration of mindfulness training into nursing education curricula to equip future nurses with essential self-care and coping skills. Additionally, efforts should be made to create supportive work environments that foster open communication, peer support, and access to mental health resources. Collaboration between healthcare organizations, educational institutions, and government agencies is essential to ensure the sustainability and effectiveness of initiatives aimed at promoting nurses' well-being.

Implications:

The implications of this systematic review extend beyond the individual level to encompass broader organizational and societal outcomes. By investing in nurses' mental health and well-being, healthcare institutions can improve staff retention, reduce absenteeism, and enhance the quality of patient care. Moreover, addressing mental health issues among nursing professionals contributes to the overall resilience and

sustainability of the healthcare workforce, which is crucial for maintaining a high standard of healthcare delivery. At a societal level, promoting nurses' well-being aligns with national priorities for healthcare reform and human capital development, positioning Saudi Arabia as a leader in fostering a culture of well-being in the healthcare sector.

Limitations:

Despite its contributions, this systematic review is not without limitations. Firstly, the inclusion criteria may have led to the exclusion of relevant studies, potentially limiting the comprehensiveness of the synthesized findings. Additionally, the heterogeneity of study designs and methodologies across the included studies may have introduced variability in the results. Furthermore, the majority of the included studies were conducted in specific healthcare settings or populations, which may limit the generalizability of the findings to other contexts. Finally, while efforts were made to assess the quality of included studies, the subjective nature of quality assessment tools may have influenced the interpretation of study findings.

Conclusion:

The findings from this systematic review highlight the multifaceted benefits of Mindfulness-Based Interventions in promoting mental health and well-being among nursing professionals. By addressing themes such as self-care practices, resilience-building, supportive work environments, education, destigmatization, and collaboration, MBIs offer a holistic approach to improving nurses' overall well-being. Moving forward, continued investment in MBIs and their integration into nursing practice and education is crucial for fostering a culture of well-being within healthcare settings.

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