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EFFECTIVENESS OF STRESS MANAGEMENT TRAINING PROGRAM: A SYSTEMATIC REVIEW OF ITS IMPACT ON PSYCHOLOGICAL WELL BEING OF NURSING OFFICERS

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ABSTRACT

This systematic review synthesizes findings from ten studies conducted between 1983 and 2025 to evaluate the effectiveness of stress management training (SMT) and related interventions on the psychological well-being of nursing officers. The reviewed literature includes experimental, quasi-experimental, qualitative, and systematic review/meta-analytic studies. Most studies report statistically significant improvements in psychological outcomes, including reduced stress, anxiety, depression, and burnout, alongside enhanced coping strategies, resilience, and quality of life. While the findings consistently support the effectiveness of stress management interventions, the review highlights the need for context-specific applications, robust methodologies, and standardized outcome measures to strengthen the evidence base.

Keywords: Stress management training program, psychological well – being

INTRODUCTION

Psychological well-being in nursing officers is a multidimensional concept, encompassing emotional, psychological, and social facets such as positive affect,

life satisfaction, sense of purpose, resilience, low anxiety, and minimal depressive symptoms. Nursing officers, due to the nature of their work—long hours, heavy workloads, high emotional

demands, shift work, and complex patient care—are particularly vulnerable to declines in psychological well-being, which may manifest as elevated stress, anxiety, depression, burnout, or decreased life satisfaction [1, 2].

Empirical studies indicate that work stressors among nurses are negatively correlated with measures of psychological health. For example, in Singapore, higher levels of work stress significantly predicted worse psychological well-being—particularly anxiety and depression—among over 1,000 nurses surveyed [3]. During and following the COVID-19 pandemic, cross-sectional and longitudinal studies have documented increases in burnout, poorer self-rated health, and decreased job dedication among nursing staff [4, 5]. Specific demographic and occupational factors such as years of experience, weekly working hours, and role seniority have also been identified as influencing psychological outcomes among nurses in different settings [6].

Given that psychological well-being is both critical for nurses' health and also for patient care quality, staff retention, and the functioning of health systems, understanding the current levels of well-being, risk and protective factors, and how interventions may affect these is of

paramount importance. This review therefore examines the psychological well-being of nursing officers, the factors that influence it, and evidence for interventions aimed at improving it.

MATERIALS AND METHODS

Design:

A systematic review was conducted using data from ten studies, including experimental designs (RCTs, quasi-experimental), systematic reviews, meta-analyses, and qualitative research.

Data Sources:

Studies were sourced from peer-reviewed journals between 1983 and 2025. Several were indexed in databases such as PubMed and utilized PRISMA guidelines for inclusion.

Selection Criteria:

- Population: Nursing officers
- Interventions: Stress management training (SMT), mindfulness-based interventions
- Outcomes: Psychological well-being indicators such as stress, anxiety, depression, burnout, coping, resilience
- Study Types: RCTs, quasi-experimental, qualitative, systematic reviews, and meta-analyses
- thematically to identify patterns and effectiveness across different interventions and contexts.

Table 1: Literature Review On Psychological Well Being

Sr No	Author & Year	Title of the Study	Methodology	Results	Conclusion
1	Pahlevani, Ebrahimi, Radmehr <i>et al.</i> , 2015	Effectiveness of stress management training on the psychological well-being of the nurses [7]	Quasi-experimental pretest/posttest with control group; 40 nurses divided into experimental vs control; training of 10 sessions SMT; measurement via 84-item psychological well-being scale (Ryff-type)	SMT significantly improved psychological well-being in experimental group vs control ($p < 0.001$)	Stress management training is effective, group format and low cost, acceptable; significantly promotes psychological well-being among nurses.
2	Conny Oktizulvia & Rebbi Permata Sari, 2016	Effectiveness of stress management training (SMT) in improving psychological well-being of nurses in the Emergency Unit [8]	Qualitative study; in-depth interviews with ED nurses following SMT; exploring perceptions of impact, barriers, facilitators	Nurses perceived SMT helped in managing stress; psychological well-being improved; management and coworker support and resource availability important; workload are barriers	SMT positively affects psychological well-being, especially if organizational support present; qualitative data supports training but suggests context matters.
3	Virpi sulosaari, <i>et al.</i> ..., 2022	Systematic Review, The effectiveness of mindfulness-based interventions on the psychological well-being of nurses [9]	Systematic review (PRISMA) of RCTs / quasi-experimental studies (11 studies; ~1,009 participants) from Jan 2011–July 2021; measures: stress, depression, anxiety, burnout, resilience, quality of life.	10 of 11 studies showed positive impacts; MBIs reduce stress, depression, anxiety, burnout; improve resilience, quality of life etc.	MBIs are promising interventions for improving psychological well-being among nurses; more rigorous designs, larger samples, consistent outcome measures needed.
4	Alkhalwaldeh, <i>et al.</i> ..., 2019	Systematic Review, Effectiveness of stress management interventional programme on occupational stress for nurses [10]	Systematic review of RCTs (2011-2019), eight databases; approximately 10 RCTs; focus on interventions to reduce occupational stress and improve coping.	Most RCTs show interventions reduce occupational stress; coping strategies improved; statistically significant reductions in stress in nurse populations.	SMT interventional programs tend to be effective; recommendation for more well-designed RCTs, longer follow ups, inclusion of psychological well-being measures beyond just stress.
5	Ja'far M Alkawaldeh <i>et al.</i> ..., 2020	Stress management training program for stress reduction and coping improvement in public health nurses [11]	Randomized controlled trial; public health nurses divided into intervention vs control; assessed at multiple time points; outcomes: occupational stress, coping strategies.	Occupational stress significantly reduced; coping strategies significantly improved in intervention group vs control over time ($p < 0.05$).	SMT program is effective, non-invasive; health systems should consider implementing such programs for public health nurses.
6	Fatin lailatul badriyah, <i>et al.</i> ...	Effectiveness of CBT in reducing psychological distress	Systematic review & meta-analysis; 10 experimental	CBT interventions show beneficial effects: significant	CBT is a useful structured intervention to improve

	2025	in nurses [12]	studies; outcomes: stress, anxiety, depression in nurse populations.	reductions in stress, anxiety, depression among nurses .	psychological well-being of nurses; need for more studies for generalizability and comparison to other SMTs.
7	C von Baeyer, <i>et al...</i> 1983	Effectiveness of Stress Management Training (SMT) for Nurses working in a Burn Treatment Unit [14]	Time-series / successive groups; 14 nurses; weekly anxiety measures; training in cognitive behavioral stress management skills; inexperienced vs experienced nurses compared.	SMT effective in reducing work-related anxiety among inexperienced nurses; little effect among experienced nurses.	Suggests early training is more effective; experience may buffer or change response; SMT helpful but effect may vary with experience.
8	Xuan Ji, <i>et al...</i> , 2024	“Effectiveness of stress management interventions for nursing students relevance to psychological well-being & performance: A systematic review and meta-analysis [14]	Systematic review with meta-analysis; 41 studies included (36 in meta), total ~2715 nursing students; measures include psychological stress etc.	Overall positive effect on psychological stress; moderator effects: mind-body programs, on-site delivery, intervention duration (9-12 weeks), more sessions (15-30 sessions) had stronger effects.	These interventions can help reduce stress among nursing students; duration & format matter; might inform interventions for working nurses.
9	HJ Ramacharan, <i>et al...</i> , 2022	Effectiveness of mindfulness-based interventions on psychological well-being, burnout and PTSD among nurses [15]	Systematic review & meta-analysis of RCTs; nurses; outcomes including psychological distress, burnout, PTSD symptoms.	Found that mindfulness-based interventions (MBIs) are more effective than passive comparators in reducing psychological distress, stress, depression, and improving personal accomplishment; limited evidence for PTSD.	MBIs are effective for several mental health outcomes among nurses; need more robust research especially for PTSD outcomes.
10	Kumar, S., & Lata, M., 2013.	Effect of Stress Management Interventions among CCU Nurses, Kerala, India [16]	Pre-experimental; ~30 nurses; interventions: awareness, assertiveness, time management etc.; measured job stress pre/post.	Severe stress dropped from ~60% to ~20%; no direct performance measure though quality of care or other performance not specifically quantified.	SM interventions effective for reducing stress; performance implications suggested but not measured.

SUMMARY

This systematic review establishes that stress management training and related psychological interventions are generally effective in improving the psychological well-being of nursing officers. Evidence from diverse methodologies supports improvements in stress reduction, coping strategies, and mental health outcomes. Mindfulness-based approaches, in particular, have strong empirical support. However, the success of these interventions is influenced by contextual factors such as organizational support, nurse experience level, and intervention structure. There remains a need for standardized outcome measures, longer follow-up periods, and more rigorous randomized controlled trials to validate findings and inform scalable implementation across healthcare systems.

CONCLUSION

The systematic review of ten studies clearly demonstrates that stress management training (SMT) and related psychological interventions are effective in enhancing the psychological well-being of nursing officers. These interventions consistently show significant improvements in reducing stress, anxiety, depression, and burnout, while also strengthening coping skills, resilience, and overall mental health.

The evidence suggests that well-structured SMT programs, particularly those that are longer in duration, include more sessions, and are delivered in supportive organizational environments, have greater impact. Furthermore, the effectiveness of these programs is influenced by factors such as experience level of nurses, work setting, and the presence of managerial and peer support. Notably, inexperienced nurses and nursing students appear to benefit more significantly from early intervention.

In conclusion, stress management training programs should be considered a crucial component of workplace mental health strategies for nurses. Healthcare institutions are encouraged to adopt and integrate these interventions as part of their routine staff support systems to foster psychological well-being, improve job performance, and ultimately enhance the quality of patient care.

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