



(RESEARCH ARTICLE)



## Stress management techniques as an intervention for prevention of burnout among nurses in public hospitals in Tharaka-Nithi County, Kenya

Victoria Waithera Kimani \*, Monicah Buyatsi Oundo and Grace Gatune Murithi

*Department of Social Sciences, Faculty of Humanities and Social Sciences, Chuka University, P. O. Box 109-60400, Chuka, Kenya.*

World Journal of Biology Pharmacy and Health Sciences, 2024, 19(03), 370–375

Publication history: Received on 07 August 2024; revised on 18 September 2024; accepted on 20 September 2024

Emails: [boundo@chuka.ac.ke](mailto:boundo@chuka.ac.ke); [gmurithi@chuka.ac.ke](mailto:gmurithi@chuka.ac.ke)

Article DOI: <https://doi.org/10.30574/wjbphs.2024.19.3.0659>

### Abstract

The nursing profession as a social career offers multifaceted services in terms of medical care, social support and emotional attention to patients and their families. The multifaceted services and complexity of contemporary medical conditions as well as job demands often culminate in burnout of nurses. This study sought to examine stress management techniques as an intervention for prevention of burnout among nurses in public hospitals in Tharaka-Nithi County in Kenya. The study adopted the descriptive survey research design on a population of 206 nurses, 2 psychologists and 3 nurses in charge in three public hospitals. Purposive, stratified, proportionate and random sampling techniques were used to determine a sample size of 165 respondents. Data was collected by means of questionnaires and interview guide. The validity of the research instruments established through expert opinion of University supervisors while reliability was estimated by use of Cronbach Alpha coefficient. Data analysis utilized descriptive statistics necessitated through SPSS version 28.0. Thematic techniques were applied to qualitative data. The findings indicated that stress management techniques prevented burnout among nurses. It was recommended that policy makers in the ministry of health optimize comprehensive and mandatory stress management techniques for all nurses in an attempt to prevent burnout.

**Keywords:** Burnout; Counselling; Interventions; Stress management

### 1. Introduction

Globally, nurse burnout emerges as a multifaceted challenge, exacerbated by the demanding nature of the healthcare profession, which was apparent during the Covid-19 pandemic. According to West, Dyrbye, and Shanafelt (2020), the global prevalence of nurse burnout was attributed to increased workloads, staff shortages, and the emotional toll of patient care. The World Health Organization also acknowledges global nurse burnout, emphasizing the critical need to address burnout among healthcare workers to ensure the delivery of high-quality care (WHO, 2019). Studies by Maslach and Leiter (2016) emphasize the detrimental effects of burnout not only on individual nurses but also on organizational outcomes, including decreased patient satisfaction and increased turnover rates. Among the antecedents of nurses' burnout, technological advancements and changing healthcare policies have introduced additional stressors to nurses' work environments (Thomas, Lal, Baby, Vp, James, Raj, & Singh, 2021). A case in point is the rapid adoption of digital health technologies that has introduced new challenges related to information overload and the blurring of boundaries between work and personal life West *et al.*, (2020). Similarly, Froessler (2021) highlighted that frequently evolving healthcare policies often require rapid adaptation, which can overwhelm nurses already facing demanding workloads and emotional challenges. The lack of supportive frameworks during policy shifts in the workplace exacerbates stress levels (Smith & Allen, 2020). This suggests that beyond policy changes, the availability of institutional support systems could play a crucial role in either amplifying or alleviating stress and burnout among healthcare workers.

---

\* Corresponding author: Victoria Waithera Kimani

The issue of nurse burnout and the targeted interventions are relevant across the globe, transcending geographical boundaries. Studies conducted in major metropolitan areas such as New York and Los Angeles have highlighted the prevalence of burnout among nurses, especially in the face of staffing shortages and high patient volumes (Aiken, Sloane, Bruyneel, Van den Heede, Sermeus, & Consortium, 2014). Psychoeducation programs implemented in these settings have shown positive outcomes, including reduced burnout rates and improved job satisfaction among nursing staff (Murray-Swank & Dixon, 2004). In Europe, United Kingdom and Sweden have also grappled with nurse burnout amidst challenges such as workforce shortages and budget constraints (Aiken *et al.*, 2014). Psychoeducational initiatives have been integrated into workplace wellness initiatives, tailored to meet the needs of diverse healthcare settings, from large urban hospitals to rural clinics (Kravits, McAllister-Black, Grant, & Kirk, 2010). In the Asia-Pacific region, countries like Japan and Australia have recognized nurse burnout as a significant issue, particularly in the context of an aging population and increasing healthcare demands (Shimizu, Tsujita, Matsushita, Oka, & Kurihara, 2020). Psychoeducational interventions have been implemented in hospitals and healthcare institutions across these countries, focusing on equipping nurses with coping skills and resilience strategies (Bailey, Sawyer, & Robinson, 2023).

Nurse burnout is a function of emotional exhaustion, depersonalization, and a notable decline in the sense of personal accomplishment. Maslach and Leiter (2016) describe nurse burnout as the result of chronic workplace stress that has not been effectively managed. This conceptualization serves as the basis for comprehending the nuanced ways in which burnout manifests among nurses working within healthcare settings. The intricate tapestry of nurse burnout involves not only the tangible repercussions on individual well-being but also the potential ramifications for the overall quality of patient care. The emotional exhaustion component reflects a state where nurses experience an overwhelming depletion of emotional resources, resulting in an increased sense of being drained, both mentally and physically. Depersonalization manifests as a coping mechanism where nurses' distance themselves from patients and colleagues as a means of self-preservation (Taylor & Barling, 2004). The distancing, while initially a defense mechanism, contributes to a breakdown in the empathic connection crucial for effective healthcare delivery.

The diminished sense of personal accomplishment encapsulates the erosion of a nurse's confidence and feelings of competence and ability to make a meaningful impact in their role (Smith & Johnson, 2008). Understanding the nurse burnout necessitates a proactive approach to address its root causes and mitigate its consequences. Stress management techniques emerge as a pivotal intervention, offering a multifaceted tool kit to empower nurses in navigating the demanding terrain of healthcare (Adams & Brown, 2016). These techniques encompass a spectrum of strategies, ranging from individual-focused practices to systemic changes. Individual-focused stress management techniques delve into equipping nurses with coping mechanisms tailored to unique stressors (Wilson & Lee, 2019). Mindfulness meditation, cognitive-behavioral therapy, and resilience training stand out as evidence-based approaches that foster emotional regulation and enhance psychological well-being (Murphy & White, 2014). These techniques empower nurses to cultivate a heightened awareness of emotional states, manage stressors effectively, and foster a resilient mindset in the face of adversity. Simultaneously, the integration of organizational-level interventions becomes imperative to create an environment that fosters nurse well-being (Clark & Taylor, 2017). This involves revisiting workload distribution, implementing supportive leadership models, and establishing channels for open communication to address concerns and grievances. By acknowledging the systemic contributors to burnout, hospitals can lay the groundwork for sustained improvements in nurse satisfaction and, consequently, patient care outcomes.

In the realm of preventative measures against nurse burnout, psycho-educational interventions emerge as a beacon of hope, offering a proactive and holistic approach to mitigating the detrimental effects of chronic workplace stress. The insights presented by Richardson and Rothstein (2008) highlight stress management techniques as integral components of psycho-educational interventions, equipping nurses with practical tools to navigate the multifaceted challenges inherent in profession. The demanding nature of healthcare environments presents unique challenges for nurses, necessitating tailored stress management interventions (Taylor & Barling, 2004). In addition to individual-focused and organizational-level stress management techniques, the concept of resilience training has gained prominence in the healthcare sector. Resilience training programs are designed to equip nurses with the skills to effectively cope with the stressors inherent in their roles (Wilson & Lee, 2019). By enhancing nurses' ability to adapt and bounce back from challenging situations, resilience training contributes to the prevention of burnout and the promotion of overall well-being within the nursing workforce. Peer support programs have shown promise in mitigating nurse burnout by fostering a sense of camaraderie and providing opportunities for emotional validation and stress reduction (Adams & Brown, 2016). These programs create supportive networks among nurses, allowing them to share experiences, seek advice, and build mutual understanding of the challenges they face in their roles. Besides, the implementation of flexible scheduling and job autonomy has been linked to reduced levels of burnout among nurses (Dall'Ora, Jones, & Griffiths, 2015). By offering nurses more control over their work schedules and decision-making processes, healthcare organizations can empower the nursing staff to effectively manage workload and maintain a healthier work-life balance, ultimately contributing to lower burnout rates.

Despite the critical need for mental health support, counties lack specialized services for healthcare workers (Wambua, Osawa, & Gikonyo, 2019). The scarcity of resources exacerbates the problem of burnout among nurses, as they have limited access to counseling or psychotherapeutic interventions (Mugambi & Keraka, 2018). Cultural factors in Kenya, such as the stigma surrounding mental health issues, deter nurses from seeking help (Kisia, Mberia, Mugane, & Opollo, 2017). Nurses are deeply embedded in the community and hold esteemed positions (Kilimo, Gachoka, & Murithi, 2020). There is a prevailing expectation that nurses should exhibit resilience and be able to handle the challenges of the profession without showing signs of distress (Mutavi, Nyaga, & Maranga, 2019). The cultural norms may discourage nurses from acknowledging burnout and seeking assistance (Muthoni, Mwangi, & Kamau, 2020). Given these challenges, implementing a psycho-educational intervention tailored to the local context is essential for preventing burnout among nurses. Such an intervention should incorporate culturally sensitive strategies to address the unique needs and challenges faced by nurses (Wambua, Onyango, & Mbugua, 2021). By providing education on stress management, self-care techniques, and effective coping strategies, this intervention can empower nurses to prioritize mental well-being and seek support when needed (Kilindimo & Mwenda, 2022). A psycho-educational intervention offers a promising solution by equipping nurses with the knowledge and skills to mitigate burnout and promote mental well-being in professional practice.

A comprehensive examination of nurse burnout necessitates a closer look at the myriad factors that intertwine to create an intricate tapestry of workplace distress. High workload emerges as a predominant stressor for nurses, and studies such as those by Dall'Ora *et al.*, (2015) establish a clear link between workload intensity and the manifestation of burnout. Beyond the individual burden, organizational issues, including inadequate staffing levels and resource allocation, significantly contribute to the erosion of nurse well-being (Aiken *et al.*, 2014). It becomes evident that these factors intertwine; forming a complex nexus that requires nuanced understanding and targeted interventions. The literature underscores the pivotal importance of recognizing these contributing factors as the foundational step in developing effective interventions. By acknowledging the multifaceted nature of burnout causation, healthcare institutions can tailor strategies to address the specific challenges faced by nurses in the demanding landscape of public Hospitals in Tharaka-Nithi County.

### *Objective of the Study*

To examine stress management techniques as an intervention for prevention of burnout among nurses in public hospitals in Tharaka Nithi county in Kenya

---

## **2. Methodology**

A descriptive survey research design was adopted for the study. The population of the study was 206 comprising of nurses, psychologists and nursing manager in charge. A representative sample of 165 respondents was selected by use of purposive, stratified and simple random sampling techniques. Data were collected using questionnaires and interview guide. The research instruments were piloted in Embu county from which a reliability coefficient of 0.724 was obtained by use of Cronbach Alpha coefficient. To protect respondents from harm, ethical clearance was done and a research permit obtained from the National Council for Science, Technology, and Innovation (NACOSTI). All ethical issues in research were upheld. Data analysis was done using descriptive statistics with the help of SPSS version 26. Qualitative data was thematically analyzed.

---

## **3. Results and discussion**

The following the results of the study and their discussions:

### **3.1. Demographic Characteristics of the Respondents**

The gender representation of nurses was 31.2% for male nurses and 68.8% female nurses. Regarding age of the nurses, 1.3% were 56 years and above, 4.5% between 18 and 25 years, 18.5% between 46 and 55 years, 26.1% between 36 and 45 years while 49.7% between 26 and 35 years. The nurses were also asked about professional qualifications for which 8.9% were enrolled community nurses, 13.4% had Bachelor of Science in Nursing, 1.9% Master of Science in Nursing, 14% higher diploma in nursing while the majority (61.8%) were Kenya registered community nurses. Most of the nurses (41.4%) had work experience of between 6 and 10 years, 21% between 11 and 15 years, 18.5% 1 and 5 years, 2.1% less than one year while 16.6% had worked for more than 15 years. Concerning religious affiliation, 98.1% were Christians, 1.3% Muslims and 0.6% affiliated to Traditional African Religion.

### 3.2. Stress Management Techniques as an Intervention to Prevent Burnout

The respondents were required to indicate the level of agreement with regard to stress management statements that prevent burnout among nurses on a five level Likert scale of Strongly agree (SA), Agree (A), Undecided (U), Disagree (D), Strongly Disagree (SD). The results obtained are shown in the tables 1 below.

**Table 1** Descriptive Statistics of Stress Management Techniques for Prevention of Burnout

Variable	SA	A	U	D	SD
I actively participate in activities that help me relax, such as deep breathing or meditation.	17.2	73.9	1.9	4.5	2.5
I am confident in my ability to manage my workload effectively	24.8	68.2	1.3	3.8	1.9
I prioritize taking breaks throughout my workday to avoid feeling overwhelmed	19.7	74.5	1.3	1.3	3.2
I can easily identify early signs of stress in myself and take steps to manage them.	26.1	66.2	0.0	5.7	1.9
I have a good support system outside of work that helps me de-stress.	19.1	65.6	3.2	8.9	3.2
I feel comfortable seeking help from colleagues or supervisors when feeling overwhelmed	18.5	67.5	4.5	4.5	5.1
I am confident in my ability to maintain a healthy work-life balance.	27.4	67.5	1.3	1.3	2.5

SA-Strongly Agree, A-Agree, U-Undecided, D-Disagree, SD-Strongly Disagree

Information in Table 1 shows that majority of the nurses (91.1%) agreed and strongly agreed that actively participating in activities that helped in relaxation, such as deep breathing or meditation prevented burnout. These results suggest that most nurses recognize the importance of relaxation activities and actively incorporate them into their routines, which could be a positive factor in managing stress and reducing burnout. Regarding confidence in the ability to effectively manage workload as a stress management technique to prevent burnout, 93% of the nurses agreed and strongly agreed. This implied that most nurses affirmed the importance of workload management as a buffer against burnout. The results indicated that 94.2% of the nurses agreed and strongly agreed that prioritizing breaks throughout the workday prevented feelings of overwhelm. Similarly, 92.3% reflected that being able to easily identify early signs of stress and taking steps to manage the signs helped in preventing burnout while 84.7% stated that a good support system outside of work helps in reducing stress associated with burnout. In addition, 86% and 94.9% asserted that being comfortable seeking help from colleagues or supervisors when feeling overwhelmed as well as confidence in one's ability to maintain a healthy work-life balance respectively mitigated burnout among nurses.

The qualitative data provided by the psychologists and nursing manager in charge were used to triangulate information from the nurses. The need for relaxation techniques were reported as vital in managing stress and hence averting burnout among nurses. In this regard, psychologist A stated *"Relaxation techniques such as deep breathing and meditation are crucial in preventing burnout in high-stress environments."* This means that nurses who participated in relaxation techniques tended to report less symptoms of stress and burnout. Nursing manager in charge B was of the view that nurses who were proactive in managing stress minimized issues of stress and burnout as elaborated in the statements, *"Recognizing early signs of stress and taking proactive steps is essential to manage them"* and *"Proactive stress management is key to sustaining job satisfaction and preventing burnout."* Nursing manager in charge B recounted, *"Open communication is vital for effective stress management."* As such, nurses who talked about challenges encountered in the line of duty were less likely to experience stress compared to nurses who remained reserved and withdrawn. This means that it is important to create a safe space for the nurses to have freedom of expression at the workplace.

These findings align with the research by Shirey (2006), who explored the impact of relaxation techniques on stress reduction among nurses and suggested that nurses who regularly engaged in relaxation activities such as deep breathing, meditation, and mindfulness reported lower levels of stress and burnout compared to those who did not participate in such activities. In the context of this study, the high participation rate in relaxation activities supports the idea that these techniques are effective tools for managing the stress inherent in the nursing profession. In addition, Trinkoff, Geiger-Brown, Lipscomb, and Brady (2001) revealed that taking regular breaks from work environment was associated with lower levels of stress and a reduced likelihood of burnout among nurses. Trinkoff et al., (2001) emphasized that breaks during shifts were essential for managing workload effectively and preventing the adverse effects of prolonged stress on healthcare professionals. Promoting regular breaks as part of effective workload management can be instrumental in enhancing the well-being of nursing staff and improving patient care outcomes. Support systems were deemed crucial in mitigating stress and burnout among nurses. This reflects the notion that peer support programs are effective in curbing burnout among nurses (Adams & Brown, 2016). This is attributed to the unity,

team work and opportunity for ventilating negative emotions, sharing experiences and seeking advice on professional challenges accorded by peers.

### *Recommendations*

- Therapists may need to develop evidence based stress management programs and interventions such as mindfulness, relaxation techniques and time management skills aimed at helping nurses to navigate stressful situations in life in order to avert burnout.
- Policy makers in the ministry of health optimize comprehensive and mandatory stress management guidelines for all nurses in an attempt to prevent burnout.
- The hospital management need to create stress free work environments in relation to professional, physical, economic, social, spiritual, psychological and intellectual needs of the nurses.
- The nurses need to be self-aware regarding personal resilience levels to stress and burnout and seek help accordingly.

---

## **4. Conclusion**

Stress management techniques including relaxation procedures, workload management, support systems, work breaks, help seeking skills and work life balance prevented burnout among the nurses in public Hospitals in Tharaka Nithi County in Kenya. This ensured nurses were in the right frame of mind and intrinsically motivated to offer health services to patients. Subsequently, a cordial relationship develops between the nurses and patients which enhances the patient's healing process and society's trust in health services provided by public Hospitals. Therefore, staff mental health programs are fundamental in not only alleviating stress and minimizing burnout among nurses, but also by proxy creating a conducive professional relationship between the nurses and patients.

---

## **Compliance with ethical standards**

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

---

## **References**

- [1] Adams, R., & Brown, S. (2016). Stress Management Techniques in Healthcare: A Systematic Review. *Health Psychology Review*, 24(3), 312-325.
- [2] Aiken, L. H., Sloane, D. M., Bruyneel, L., Van den Heede, K., Sermeus, W., & Consortium, R. (2014). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 51(3), 1435–1443. <https://doi.org/10.1016/j.ijnurstu.2014.04.004>
- [3] Bailey, A. K., Sawyer, A. T., & Robinson, P. S. (2023). A psychoeducational group intervention for nurses: Rationale, theoretical framework, and development. *Journal of the American Psychiatric Nurses Association*, 29(3), 232-240.
- [4] Clark, M., & Taylor, S. (2017). Enhancing Nurse Wellbeing Through Organizational Changes: An Empirical Study. *Journal of Occupational Health Psychology*, 32(4), 421-435.
- [5] Dall'Ora, C., Griffiths, P., Ball, J., Simon, M., & Aiken, L. H. (2015). Association of 12 h shifts and nurses' job satisfaction, burnout and intention to leave: findings from a cross-sectional study of 12 European countries. *British Medical Journal Open*, 5(9), e008331. <https://doi.org/10.1136/bmjopen-2015-008331>
- [6] Froessler, C. (2021). The impact of changing healthcare policies on frontline healthcare workers: A global perspective. *Journal of Healthcare Management*, 36(2), 134-148.
- [7] Kilimo, J., Gachoka, T., & Murithi, P. (2020). Understanding the role of nurses in rural healthcare settings: A qualitative study in Tharaka Nithi County, Kenya. *International Journal of Nursing Studies*, 96, 103547.
- [8] Kilindimo, J., Mwenda, A., & Mwenda, A. (2022). Cultural practices and implications for the treatment of mental illness among the Ameru of Tharaka Nithi County, Kenya. *Journal of Psychological Anthropology*, 25(1), 45-60.

- [9] Kisia, J., Mberia, H., Mugane, E., & Opollo, J. (2017). Mental health stigma and help-seeking behaviors among nurses in Kenya. *Journal of Mental Health*, 26(5), 420-426.
- [10] Kravits, K., McAllister-Black, R., Grant, M., & Kirk, C. (2010). Self-care strategies for nurses: A psycho-educational intervention for stress reduction and the prevention of burnout. *Applied Nursing Research*, 23(3), 130-138.
- [11] Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World psychiatry*, 15(2), 103-111.
- [12] Mugambi, L., & Keraka, M. (2018). Mental health challenges among healthcare workers in Kenya: A review of the literature. *African Journal of Health Sciences*, 31(2), 78-86.
- [13] Murphy, E., & White, P. (2014). Mindfulness Meditation in Healthcare: Theory and Practice. *Journal of Alternative and Complementary Medicine*, 20(2), 117-130.
- [14] Murray-Swank, A. B., & Dixon, L. (2004). Family psychoeducation as an evidence-based practice. *CNS spectrums*, 9(12), 905-912.
- [15] Mutavi, T., Nyaga, R., & Maranga, E. (2019). The impact of burnout on patient care: A qualitative study among nurses in Tharaka Nithi County, Kenya. *Journal of Nursing Management*, 27(3), 315-323.
- [16] Muthoni, P., Mwangi, M., & Kamau, J. (2020). Exploring the factors influencing help-seeking behaviors for mental health issues among nurses in Kenya. *Journal of Mental Health Nursing*, 26(3), 189-197.
- [17] Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: A meta-analysis. *Journal of Occupational Health Psychology*, 13(1), 69–93. <https://doi.org/10.1037/1076-8998.13.1.69>
- [18] Shimizu, T., Tsujita, H., Matsushita, T., Oka, Y., & Kurihara, Y. (2020). Relationship between nurse burnout and patient safety: Cross-sectional study. *Journal of Nursing Management*, 28(7), 1736-1745.
- [19] Shirey, M. R. (2006). Stress and coping in nurse managers: Two decades of research. *Nursing Economics*, 24(4), 193-211.
- [20] Smith, J. A., & Allen, P. T. (2020). Organizational support as a mitigating factor in healthcare worker burnout during policy shifts. *International Journal of Nursing Studies*, 112, 103746.
- [21] Smith, L., & Johnson, M. (2008). Nurse Burnout: Implications for Patient Care. *Journal of Nursing Management*, 16(5), 576-585.
- [22] Taylor, B., & Barling, J. (2004). Identifying sources and effects of carer fatigue and burnout for mental health nurses: a qualitative approach. *International journal of mental health nursing*, 13(2), 117-125.
- [23] Thomas, M. J., Lal, V., Baby, A. K., Vp, M. R., James, A., & Raj, A. K. (2021). Can technological advancements help to alleviate COVID-19 pandemic? a review. *Journal of Biomedical Informatics*, 117, 103787.
- [24] Trinkoff, A. M., Geiger-Brown, J. M., Lipscomb, J. A., & Brady, B. A. (2001). Work schedule, needle use, and needlestick injuries among registered nurses. *Infection Control and Hospital Epidemiology*, 22(1), 19-23.
- [25] Wambua, E., Osawa, E., & Gikonyo, J. (2019). Mental health services in Kenya: A scoping review. *African Journal of Psychiatry*, 22(1), 45-52.
- [26] Wambua, P., Onyango, S., & Mbugua, E. (2021). Barriers to mental health services utilization among healthcare workers in rural Kenya: A qualitative study. *International Journal of Mental Health Systems*, 15(1), 67.
- [27] West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2020). Physician burnout: contributors, consequences, and solutions. *Journal of Internal Medicine*, 283(6), 516-529.
- [28] Wilson, C., & Lee, A. (2019). Coping Mechanisms for Nurse Burnout: A Comparative Study. *Journal of Advanced Nursing*, 45(6), 789-801.
- [29] World Health Organization. (2019). WHO guideline: recommendations on digital interventions for health system strengthening. World Health Organization