

INFLUENCE OF MENTAL HEALTH SUPPORT, WORK-LIFE BALANCE, INTERPERSONAL RELATIONSHIPS, AND WORKLOAD ON BURNOUT AMONG NURSES IN A TEACHING HOSPITAL

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ABSTRACT

Nurses as one of the main primary caregivers experience burnout as a result of high workload, shortage of staff, lack of proper rest periods between shifts, etc. Previous studies on burnout focus more on organisational variables with scant attention on personal factors. This study therefore, examined the influence of mental health support, work-life balance, interpersonal relationships and workload on burnout among nurses in University College Hospital, Ibadan, Nigeria. Data were collected from a sample of 350 nurses using a cross-sectional survey design. The results revealed a significant difference between the burnout of nurses who received high mental health support ($M = 2.79$, $SD = 0.39$) and those who received low mental health support ($M = 3.47$, $SD = 0.32$), $t(348) = 17.91$, $p < .01$; had low work-life balance ($M = 2.88$, $SD = 0.44$) and high work-life balance ($M = 3.45$, $SD = 0.36$), $t(348) = -13.32$, $p < .01$; had high interpersonal relationships within their teams ($M = 2.71$, $SD = 0.29$) and nurses who experienced low interpersonal relationships ($M = 3.51$, $SD = 0.28$), $t(348) = -25.69$, $p < .01$; who experienced high workload ($M = 3.48$, $SD = 0.32$) and those who experienced low workload ($M = 2.73$, $SD = 0.31$), $t(348) = 21.65$, $p < .01$. Mental health support, work-life balance, interpersonal relationships, and workload jointly predicted burnout ($R^2 = 0.64$, $F(4, 345) = 149.44$, $p < .05$). Mental health support ($\beta = .47$, $t = 7.26$, $p < .05$), work-life balance ($\beta = -.11$, $t = -2.75$, $p < .05$), and workload ($\beta = .30$, $t = 6.53$, $p < .05$) independently predicted burnout among nurses, while interpersonal relationships ($\beta = -.029$, $t = -.45$, $p > .05$) did not. Mental health support, work-life balance, interpersonal relationships, and workload influenced burnout among nurses at the University College Hospital. Management of the hospital should develop mental health support programmes, promote work-life balance, foster positive interpersonal relationships, and reduce nurses' workload.

Keywords: Mental health support, Work-life balance, Interpersonal Relationships, Workload, Burnout

INTRODUCTION

Burnout is an individual response to chronic work stress that develops progressively and can eventually become chronic, causing health alterations (Montero-Marín, 2016). From a psychological view point, burnout causes damage at a cognitive, emotional, and attitudinal level, which transforms into negative behaviour towards colleagues, customers, and the work itself (Maslach, 2006). However, it is not a personal problem, but a consequence of certain characteristics of the work activity (Bouza, et al., 2020).

Nursing is a highly demanding profession. Burnout is a condition that is characterized by chronic stress and exhaustion. Healthcare providers may feel physically, mentally, and emotionally drained for certain reasons, such as the demanding nature of their work, high turnover, and increased workload. Nurses are very important in the healthcare profession since they are often the primary source of information and comfort to their patients. Burnout in nurses can severely impact the individual and quality of patient care. Many suffer from chronic fatigue, insomnia, headaches, and digestive issues. According to Shanafelt et al. (2009), syndromes of burnout that are identified but left unattended can lead to unintended consequences like interrupted work, reduced productivity, job dissatisfaction, low quality of patient care, strained personal relationships, and elevated levels of anxiety and depression.

Burnout among nurses is a critical issue, particularly in teaching hospitals, where the demands of patient care, education, and administrative duties intersect. Despite the growing recognition of



burnout's detrimental effects on both nurses and patient care, there is a need for a more detailed understanding of the factors that contribute to this phenomenon in the context of teaching hospitals. Given the unique challenges faced by nurses in these settings, including high patient turnover, educational responsibilities, and the need for continuous professional development, it is critical to explore how these factors interact and influence burnout. The lack of comprehensive research on the combined effect of mental health support, work-life balance, interpersonal relationships, and workload leaves a gap in understanding how to effectively mitigate burnout in this specific context. Thus, this study aims to investigate the influence of mental health support, work-life balance, interpersonal relationships, and workload on burnout among nurses in a teaching hospital. Understanding the interplay of these factors is crucial for developing targeted interventions that can mitigate burnout and improve the well-being of nurses, ultimately enhancing the quality of care provided in teaching hospitals.

Mental health support is an important factor in shaping nurses' susceptibility against burnout (Mealer et al., 2017). The demanding nature of the nursing profession often places them at the edge of emotional challenges, hence requiring mental health resources in reducing the risk of burnout (Johnson et al., 2018). Proper support mechanisms can ensure that nurses can cope with the stress levels that accompany their job, thereby improving their adaptability and overall mental well-being. On the other hand, the absence of an appropriate mental health support programme would favour increasing level of burnout, which may lead to a situation whereby nurses will not cope with the stress level that accompanies their job if adequate resources are not sufficient. A meta-analysis by Westermann et al. (2014) concluded that while individual-focused interventions like CBT are effective in the short term, organisational interventions that address work environment factors tend to have a more sustainable impact. For example, interventions that reduce workload, improve team communication, and provide adequate resources have been shown to significantly reduce burnout levels (Awa, Plaumann, & Walter, 2010).

Another critically important factor contributing to nurse burnout is work-life balance. A positive work-life balance is crucial, as it has been consistently associated with reduced burnout levels amongst nurses. Factors like changes in working schedules, flexibility, and organizational rules significantly impact nurses' ability to maintain balance. When personal and professional life are in equilibrium, it improves nurses' well-being and job satisfaction, contributing to a healthier workplace culture. Inflexible work-life dynamics, irregular schedules, and organizational constraints lead to high stress and exhaustion levels (Lashinger et al., 2016). Inability to maintain an adequate work-life balance increases nurses' susceptibility to burnout. Studies show that nurses with better work-life balance report higher job satisfaction and lower stress and burnout levels (McGowan et al., 2021). Furthermore, Giorgi et al. (2022) found that poor work-life balance increases burnout risk, particularly emotional exhaustion. The study highlighted that irregular working hours and excessive workload significantly contribute to nurses' inability to balance professional and personal lives, leading to increased stress and burnout.

A healthy interpersonal relationship is a protective factor against burnout. Effective communication and supportive colleagues contribute to a favourable social environment leading positively to the emotional resilience of nurses, thereby reducing the negative impact of stress (Halbesleben & Rathert, 2008). Lack of adequate interpersonal relationships, including communication or supporting one another can increase the level of stress and leads to burnout. To shape the emotional landscape of nurses, the quality of these relationships will be of great importance and will play a major role in determining the job satisfaction and resilience to burnout of the nurses. Positive relationships with colleagues provide social support, which can alleviate the effects of stress and reduce the likelihood of burnout (Bakhamis et al., 2019). Conversely,



poor relationships, characterized by conflict, lack of communication, and lack of support, can exacerbate stress and contribute to burnout (Laschinger & Fida, 2014).

Workload is another major factor that can influence burnout in nurses and addressing it can lead to an improvement in their overall well-being. Adequate staffing and manageable workload positively affect the mental health of nurses, which in turn lowers the risk of burnout (Van Bogaert et al., 2014). In nursing, high workload can deplete emotional and physical resources, leading to burnout. Studies have consistently found that workload is one of the most significant job demands that contribute to nurses burnout (Van der Heijden et al., 2019). Numerous studies have shown a strong positive correlation between workload and emotional exhaustion among nurses. For instance, a cross-sectional study by Garrosa et al. (2011) found that high workload was directly associated with higher levels of emotional exhaustion in a sample of Spanish nurses. Similarly, a longitudinal study in the UK by Dall'Ora et al. (2020) reported that nurses who consistently experienced high workloads were more likely to report emotional exhaustion over time.

The transactional model of stress and coping, proposed by Lazarus and Folkman (1984), provides insight into how individuals perceive and cope with stressful events or situations, which is a crucial factor in understanding burnout experienced by nurses in their profession. The model explores how individuals evaluate stressors as either demanding or threatening, influencing their behavioral and emotional outcomes, as well as coping strategies. The transactional model consists of three key steps: primary appraisal, secondary appraisal, and coping strategies.

Another well-known theoretical framework for understanding the relationship between working conditions and employee well-being, particularly in relation to burnout, is the Job Demands-Resources (JD-R) model, developed by psychologists Arnold Bakker and Evangelia Demerouti (2007). This model has been applied in diverse professional situations, including healthcare. According to the JD-R model, burnout results from a mismatch between the individual and job demands. A fit between the individual and job demands is necessary to prevent burnout. Core principles of the JD-R model include job demands and job resources.

In nursing, job resources may include support from colleagues and supervisors, training opportunities, and autonomy in decision-making. Sufficient job resources act as buffers against the negative effects of job demands, promoting well-being and preventing burnout. High emotional demands are often associated with this dimension of burnout, leading to extreme workloads and resource shortages, which cause depersonalization. As a coping mechanism, nurses may distance themselves from patients, resulting in negative attitudes and loss of empathy. Resources, such as recognition and opportunities for professional development, impact nurses' sense of self-efficacy. Without resources, decreased job satisfaction and feelings of ineffectiveness may occur.

These assumptions informed the following hypotheses:

- i. There will be a significant difference in burnout between participants with low mental health support and those with high mental health support.
- ii. Nurses who have a high work-life balance will report significantly lower level of burnout compared to nurses with low work-life balance.
- iii. Nurses who have high interpersonal relationships within their teams will report significantly lower levels of burnout compared to nurses who experience low interpersonal relationships.
- iv. Nurses with high workload will report significantly higher level of burnout than nurses who experience low workload.

- v. Mental health support, work-life balance, interpersonal relationships, and workload will independently and jointly predict burnout among nurses.

METHODS

Design

The study design was a cross-sectional survey. This is because respondents with different characteristics were sampled at one point in time. The independent variables were mental health support, work-life balance, interpersonal relationships, and workload. The dependent was burnout.

Setting

The University College Hospital (UCH) is a premier teaching hospital affiliated with the University of Ibadan and a leading healthcare provider in West Africa. It is located in Ibadan, Oyo State, Nigeria and was established in 1957 to provide primary, secondary, and tertiary healthcare services to patients. There are 65 departments and clinics in the hospital and an 850-bed capacity. The UCH is equipped with modern medical facilities and technology and offers training and education for healthcare professionals. The hospital is renowned for its expertise in various medical specialties, including cardiology, neurology, oncology, and paediatrics and serves as a referral centre for complex medical cases in Nigeria and neighbouring countries. The UCH Ibadan is a centre of excellence in healthcare delivery, education, and research, committed to providing high-quality patient care and training the next generation of healthcare professionals. The site for this study comprised of different units (Obstetrics and Gynaecology, Paediatrics, Accident and Emergency (A & E), Medical, Surgical, Intensive Care, Operating Theatre, Radiology, etc.) in the UCH. These units were chosen because there are a larger number of nurses working there compared to other units.

Participants

The study involved 350 nurses conveniently sampled from the population of those employed by University College Hospital (UCH), Ibadan, Oyo State, Nigeria. The respondents' ages ranged from 22 to 57 years, with a mean of 37.61 years (SD = 9.48). Additionally, most participants (67.43%) were Christians, while 32.57% of the surveyed participants were Muslims. Furthermore, more than half of the respondents (62.3%) worked eight hours a day, whereas only a few (17.1%) reported working fewer hours. The distribution of participants across units was as follows: 25% in the medical unit, 25% in paediatrics, 24% in the surgery unit, 11% in Accident and Emergency (A&E), and 3% in the ophthalmic unit. Their educational status varied: less than 1% of participants held a diploma, while most (79.14%) held bachelor's degrees in nursing. Moreover, the majority (69.14%) of the participants surveyed were married, whereas 29.14% of the surveyed participants were single at the time of the survey.

Measures

The research instrument utilized in this study comprised of a questionnaire with five sections (A to E). Each section serves a distinct purpose in gathering data relevant to the research objectives.

Section A

This section provides the demographic variables such as Age, Gender, Marital Status, Religion, Educational Level, Years of Experience, Work Hours, and Specialty/Area of Work.



Section B - Workload Scale

This scale, developed by Spector and Jex (1998), is a 5-item measure designed to assess the quantity of work in a job, as opposed to the difficulty of the work itself. Respondents were asked to indicate how often each statement occurs, with five response choices ranging from 'less than once per month or never' (coded 1) to 'several times per day' (coded 5). High scores represent a high level of workload, with a possible range of 5 to 25. Spector and Jex (1998) reported an average internal consistency (coefficient alpha) of 0.82 across 15 studies. In this study, the scale demonstrated internal consistency of $\alpha = 0.68$.

Section C - Burnout Scale

Burnout was assessed using the Oldenburg Burnout Inventory (OLBI) (2001). This self-report measure evaluates the severity of work-related burnout. It comprises 16 questions asking respondents to indicate their level of agreement with statements related to professional burnout. The OLBI scoring is calculated by summing item scores on each subscale. The disengagement and exhaustion subscales consist of eight items each: four negatively worded and four positively worded items. Negatively worded items are reverse-scored. The OLBI uses a 5-point Likert-type scale, ranging from 1 (strongly agree) to 5 (strongly disagree). The OLBI demonstrated good internal consistency (Cronbach's α ranging from 0.75 for engagement to 0.70 for disengagement). In this study, the scale showed an internal consistency of $\alpha = 0.66$.

Section D - Mental Health Support and Interpersonal Relationship Scale

The Nurse Well-being Scale (NWS), developed by the Mayo Clinic, is a comprehensive mental health support scale designed specifically for collecting data from a population of nurses. This scale aims to assess various aspects of mental health and well-being among nurses, providing valuable insights into their overall emotional state, stress levels, and potential areas of improvement. By utilizing the NWS, organizations can identify key issues affecting nurses' mental health and develop targeted interventions to support their well-being. The NWS consists of five subscales; however, three subscales (emotional wellbeing, work-related stress, and safe-care practices) were adopted for use in the study to measure mental health support, and one subscale (social support) was adapted to measure interpersonal relationships. A total of four subscales, consisting of 12 questions, were used in the study. The NWS employs a Likert scale format, ranging from 1 (never) to 5 (always), to assess the above dimensions of mental health support. Each question contributes to a cumulative score, with higher scores indicating a greater need for mental health support and better interpersonal relationships. The construct validity of the scale was also very good, based on exploratory factor analysis. Reliability (internal consistency) was assessed using Cronbach's alpha coefficient, which ranged from 0.66 to 0.91. In this study, the scale showed an internal consistency of $\alpha = 0.52$.

Section E - Work-Life Balance Scale

Work-life balance was measured using a 15-item scale adapted by Hayman (2005). The scale consisted of items designed to assess three dimensions of work-life balance: work interference with personal life (WIPL, 7 items), personal life interference with work (PLIW, 4 items), and work/personal life enhancement (WPLE, 4 items). For the WPLE dimension, scoring ranged from 1 to 5 (Strongly Disagree – 1, Disagree – 2, Neither Agree nor Disagree – 3, Agree – 4, Strongly Agree – 5), as the items were positively worded. High scores indicated high work/personal life enhancement. Scoring for the WIPL (except item 7, which was reverse-scored) and PLIW dimensions was done in reverse (5, 4, 3, 2, 1), as the items were negatively worded. High scores

indicated lower interference, and lower levels of interference were interpreted as higher levels of work-life balance. Higher levels of work/personal life enhancement are considered associated with higher levels of work-life balance. The overall work-life balance score was computed by adding the scores on the three dimensions. The scale's reliability, estimated using Cronbach's alpha coefficient, was .91 for WIPL, .82 for PLIW, and .67 for WPLE. The scale was tested for reliability in an Indian population, and Cronbach's alpha was found to be .87. In this study, the scale showed an internal consistency of $\alpha = 0.73$.

Procedure

Data were collected by administering copies of the questionnaire to participants using the convenience sampling technique. The target population consisted of registered nurses and nurse practitioners with at least one year of clinical experience. Nurses on extended leave or with less than one year of clinical experience were excluded from the study. Ethical approval for this study was granted by the UI/UCH Ethical Committee (IRB research approval number: UI/EC/24/0019), ensuring compliance with ethical standards in research. Additionally, permission was obtained from the office of the Chairman Medical Advisory Committee (CMAC), UCH, as well as from the management within the clinical nursing department, and from all units and wards where the research was conducted, ensuring strict adherence to institutional protocols. Potential participants were given the study questionnaire during working hours and informed about the research aim. They were encouraged to participate and told that participation was voluntary, not compulsory, and that they could withdraw at any point. Respondents were assured that the information supplied would be held in confidence and that the research was purely for academic purposes. A total of 400 questionnaires were distributed, but 350 were received and analyzed. Data collection took the researchers four weeks to complete.

RESULTS

Table 1: Summary Table of Zero-order Correlation Showing association between Mental Health Support, Work-Life Balance, Interpersonal Relationships, Workload and Burnout

	1	2	3	4	5	Mean	SD
Mental Health Support	-	-.55**	-.85**	.68**	.75**	29.61	8.69
Work-life Balance		-	.55**	-.46**	-.52**	48.22	9.18
Interpersonal Relationships			-	-.66**	-.69**	9.43	3.07
Workload				-	.68**	20.76	4.22
Burnout					-	50.82	7.83

**correlation is significant at the 0.01 level (2 tailed)

The results in Table 1 show a significant positive relationship between mental health support and burnout ($r = 0.75, p < 0.05$), indicating that as nurses receive consistent mental health support (low scores), the likelihood of burnout decreases. Conversely, a significant negative relationship exists between work-life balance and burnout ($r = -0.52, p < 0.05$), meaning that higher work-life balance among nurses is associated with a lower likelihood of burnout. Additionally, a significant negative relationship was found between interpersonal relationships and burnout ($r = -0.69, p <$

0.05), suggesting that as nurses' interpersonal relationships improve, the likelihood of burnout decreases. In contrast, a significant positive relationship exists between workload and burnout ($r = 0.68, p < 0.05$), indicating that as nurses' workload increases, the likelihood of burnout also increases.

Hypothesis one stated that nurses who received high mental health support (MHS) interventions will report lower levels of burnout compared to nurses with low mental health support. The summary of the t test for independent groups used to test the hypothesis is presented in Table 2.

Table 2: Summary of t-test Showing the Difference between Nurses with High Mental Health Support (MHS) and Nurses with Low MHS on Burnout

Nurses MHS Level		<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Low	198	3.47	0.32	17.91	348	< .01
High	152	2.79	0.39			

Results from Table 2 showed that there was a significant difference between the burnout of nurses with high mental health support ($M = 2.79, SD = 0.39$), and nurses with low mental health support ($M = 3.47, SD = 0.32$), $t(348) = 17.91, p < .01$. These findings suggest that nurses with high mental health support experienced lower burnout compared to nurses with low mental health support. Therefore, hypothesis one was accepted.

The second hypothesis stated that nurses who had a high work-life balance (WLB) will report lower level of burnout compared to nurses with low work-life balance. The summary of the t test for independent groups used to test this hypothesis is presented in Table 3.

Table 3: Summary of t-test Showing the Difference in Burnout between Nurses with Low Work-Life Balance (WLB) and Nurses with High work-life Balance

Nurses WLB Level		<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
High	168	2.88	0.44	-13.22	348	< .01
Low	182	3.45	0.36			

Results in Table 3 revealed that there was a significant difference between the burnout of nurses who had high work-life balance ($M = 2.88, SD = 0.44$) and nurses who reported low work-life balance ($M = 3.45, SD = 0.36$), $t(348) = -13.32, p < .01$. These findings suggest that nurses with high work-life balance experienced less burnout compared to nurses who reported low work-life balance. Therefore, hypothesis two was accepted.

The third hypothesis stated that nurses who had positive (high score) interpersonal relationships within their teams will report lower level of burnout compared to nurses who experienced negative (low score) in interpersonal relationships. The summary of the t test for independent groups used to test this hypothesis is presented in Table 4.

Table 4: Summary of t-test Showing the Difference in Burnout between Nurses who had Positive Interpersonal Relationships (IR) and Nurses who had Negative Interpersonal Relationships

Nurses IR Level	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
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Positive	148	2.71	0.29	-25.69	348	< .01
Negative	202	3.51	0.28			

Results in Table 4 indicated that there was a significant difference between the burnout of nurses who had positive interpersonal relationships within their teams ($M = 2.71, SD = 0.29$) and nurses who had negative interpersonal relationships ($M = 3.51, SD = 0.28$), $t(348) = -25.69, p < .01$. These findings suggest that nurses who had positive interpersonal relationships within their teams reported lower levels of burnout compared to nurses who had negative interpersonal relationships. Therefore, hypothesis three was accepted.

The fourth hypothesis stated that nurses who experienced low workload will report lower levels of burnout compared to nurses who experienced high workload demands. The summary of the t test for independent groups used to test this hypothesis is presented in Table 5.

Table 5: Summary of t-test Showing the Difference in Burnout between Nurses who experienced Low Workload and Nurses who Experienced High Workload Demands

Nurses	Workload Level	M	SD	t	df	p
High	208	3.48	0.32	21.65	348	< .01
Low	142	2.73	0.31			

Results in Table 5 showed that there was a significant difference between the burnout of nurses who reported high workload ($M = 3.48, SD = 0.32$) and nurses who reported low workload ($M = 2.73, SD = 0.31$), $t(348) = 21.65, p < .01$. These findings suggest that nurses who experienced low workload reported lower level of burnout compared to nurses who experienced high workload demands. Therefore, hypothesis four was accepted.

The fifth hypothesis stated that nurse’s burnout will independently and jointly be predicted by mental health support, work-life balance, interpersonal relationships, and workload. The summary of the multiple regression analysis used to test this hypothesis is presented in Table 6.

Table 6: Summary of Multiple Regression Analysis showing the independent and joint prediction of burnout by mental health support, work-life balance, interpersonal relationships, and workload

Predictors	β	t	p	R	R ²	F	p
Mental Health Support	.47	7.26	<.05				
Work-Life Balance	-.11	-2.75	<.05				
Interpersonal Relationships	-.03	-0.45	>.05	.80	.64	149.44	<.05
Workload	.30	6.53	<.05				

The results from Table 6 showed that mental health support ($\beta = .47, t = 7.26, p < .05$), work-life balance ($\beta = -.11, t = -2.75, p < .05$), and workload ($\beta = .30, t = 6.53, p < .05$) significantly independently predicted burnout among nurses, while interpersonal relationships ($\beta = -.03, t = -.045, p > .05$) did not. Mental health support, work-life balance, interpersonal relationships, and



workload significantly jointly predicted burnout ($R^2 = 0.64$, $F(4, 345) = 149.44$, $p < .05$). The four variables jointly contributed 64% of the variance observed in burnout.

DISCUSSION

This study examined the influence of mental health support, work-life balance, interpersonal relationships, and workload on burnout among nurses in the University College Hospital (UCH), Ibadan. Four hypotheses were tested using the t test for independent groups statistics. The first hypothesis, which stated that nurses who receive high mental health support will report lower levels of burnout compared to those with low mental health support, was confirmed. The study's findings supported this assumption, demonstrating that nurses who received high mental health support reported significantly lower levels of burnout. This aligns with earlier research emphasizing the role of organizational support in reducing burnout (Morse et al., 2012). However, the effectiveness of these interventions can vary based on organizational culture and implementation strategies (Finney et al., 2013). Nevertheless, studies like those by Panagioti et al. (2017) and West et al. (2016) support the notion that robust mental health support can significantly reduce burnout. The finding also lends credence to the findings of Mealer et al. (2017), which reported the importance of mental health support in shaping nurses' susceptibility to burnout."

The second hypothesis investigated the impact of work-life balance on burnout. Results showed that nurses who achieved a satisfactory work-life balance experienced lower levels of burnout. This may be because a balanced work-life serves as a buffer against stress, which ultimately prevents or reduces burnout. This finding aligns with the Job Demands-Resources (JD-R) Theory, suggesting that adequate rest periods and effective workload management are key to reducing stress and promoting job satisfaction (West et al., 2016). Longitudinal studies by van der Heijden et al. (2008) demonstrated that improvements in work-life balance directly correlated with decreased burnout levels. This finding corroborates the study by McGowan et al. (2021), which reported that nurses who maintain a better work-life balance report higher job satisfaction and lower levels of stress and burnout. Similarly, a study by Giorgi et al. (2022) found that nurses with poor work-life balance were more likely to experience burnout, particularly emotional exhaustion. However, some studies indicate that other factors, such as individual coping strategies and organizational support, can mitigate the impact of work-life imbalance on burnout (Khamisa et al., 2015). This highlights the complexity of work-life balance and underscores the need for flexible scheduling and supportive organizational policies (Obina et al., 2024).

The third hypothesis predicted that positive (high score) interpersonal relationships within teams could lower burnout levels. The finding implies that positive interpersonal relationships reduced burnout. Research by Hall et al. (2016) highlights the significance of effective communication and mutual support within teams. A supportive workplace culture enhances resilience and contributes to job satisfaction. However, negative relationships within teams can lead to isolation and emotional exhaustion (Lashinger et al., 2015). Individual characteristics, such as personality traits and coping mechanisms, can also influence the effect of interpersonal relationships on burnout (Adriaenssens et al., 2015). The result in this study supports the finding of Bakhamis et al. (2019) that reported positive relationships with colleagues provide social support, alleviating the effects of stress and reducing the likelihood of burnout. According to Lashinger and Fida (2014), poor



relationships, characterized by conflict, lack of communication, and lack of support, exacerbate stress and contribute to burnout.

The fourth hypothesis focused on the relationship between workload and burnout. Nurses with low workloads experienced lower levels of burnout, reinforcing the idea that excessive workload is a key driver of nurse burnout (Carayon et al., 2006). A meta-analysis by Aiken et al. (2002) identified excessive workload as a notable predictor of burnout in various healthcare settings. Okwaraji and Aguwa (2014) found that nurses who reported heavy workloads were at a higher risk of experiencing burnout. This finding is in line with the findings of Garrosa et al. (2011), who found that high workload was directly associated with higher levels of emotional exhaustion in a sample of Spanish nurses. Similarly, a longitudinal study by Dall'Ora et al. (2020) in the UK reported that nurses who consistently experienced high workloads were more likely to report emotional exhaustion over time. However, the relationship between workload and burnout may be more complex, with factors like staffing levels and resource availability influencing nurses' perception of workload (Squires et al., 2014).

The fifth hypothesis posited that mental health support, work-life balance, interpersonal relationships, and workload would significantly and independently predict burnout among nurses. The multiple regression analysis revealed that mental health support, work-life balance, and workload emerged as independent significant predictors of burnout, underscoring their critical roles in nurses' well-being. These factors, including interpersonal relationships, collectively predicted burnout, explaining a significant proportion of its variance. This highlights the multifaceted nature of burnout and emphasizes the need for comprehensive interventions addressing various contributing factors (West et al., 2018). For instance, Shanafelt et al. (2012) demonstrated that interventions targeting multiple domains, such as organizational culture, workload, and individual well-being, were the most effective in reducing burnout among physicians. This suggests that interventions addressing multiple aspects of the work environment and individual well-being are crucial for effectively mitigating burnout among healthcare professionals.

Conclusion

Based on the research findings, it was observed that nurses who consistently received mental health support had significantly lower levels of burnout compared to those who did not receive such support. Nurses with satisfactory work-life balance demonstrated less burnout than those who failed to achieve it. Additionally, nurses with positive interpersonal relationships with their teams had lower levels of burnout than those who experienced negative relationships. Nurses who perceived their workload demands as manageable had lower burnout levels than those facing very high demands. Therefore, mental health support, work-life balance, interpersonal relationships, and workload collectively predicted burnout among nurses. These results suggest that the variance in burnout was attributable to these factors, which impacted the general health and well-being of nurses. Notably, mental health support, work-life balance, and workload were significant independent predictors of burnout, while interpersonal relationships was not. These findings emphasize the importance of mental health support, work-life balance, and workload management in mitigating nurse burnout.

Implications and Recommendations



Based on the results, several important recommendations emerge for healthcare organizations, nursing practice, and policy development. Healthcare institutions should continue to promote and implement tailored mental health support programs for nurses, including counseling services, stress management workshops, and peer support groups. These initiatives are crucial in providing essential resources to enable nurses to cope with the demands of their profession and improve their overall well-being. Furthermore, nursing practice should incorporate measures that promote work-life balance, such as flexible scheduling, adequate time between shifts, and effective workload management practices, to prevent burnout among nurses. Healthcare institutions should conduct work studies to enhance these aspects of nurse work environments, creating a supportive environment that reduces nurse burnout and improves patient care outcomes.

Furthermore, the entire practice of nursing should prioritize improving the work environment to foster strong interpersonal relations among team members. Management should cultivate a culture that promotes team cohesion and conflict resolution to prevent burnout. Additionally, healthcare administrators should regularly assess nurse staffing levels to ensure workloads are manageable. By optimizing workflow processes and maintaining appropriate nurse-patient ratios, healthcare organizations can create a healthier work environment and reduce burnout. Finally, by providing relevant skills and resources for stress management and self-care, management can promote long-term well-being, mitigate the risk of burnout, and enhance nurse job satisfaction and retention, ultimately leading to improved patient care quality. These recommendations will inform health policies and practices aimed at reducing nurses' burnout, and consequently, patient care quality. Addressing the root causes of nurse burnout and fostering a supportive work environment will enable management to support nurses' personal and professional growth.

REFERENCES

- Awa, W. L., Plaumann, M., & Walter, U. (2010). Burnout prevention: A review of intervention programs. *Patient Education and Counseling*, 78(2), 184-190. <https://doi.org/10.1016/j.pec.2009.04.008>
- Bakhamis, L., Paul, D. P., Smith, H., & Coustasse, A. (2019). Still an epidemic: The burnout syndrome in hospital registered nurses. *The Health Care Manager*, 38(1), 3-10. <https://doi.org/10.1097/HCM.000000000000243>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources Model: State of the Art. *Journal of Managerial Psychology*, 22, 309-328.



- Bouza E., Gil-Monte P.R., Palomo E., Cortell-Alcocer M., Del Rosario G., González J., Gracia D., Martínez Moreno A., Melero Moreno C., Molero García J.M., et al. (2020). Síndrome de quemarse por el trabajo (burnout) en los médicos de España. *Rev. Clínica Española*, 220, 359–363. doi: 10.1016/j.rce.2020.02.002.
- Carayon, P., Alvarado, C. J. and Hundt, A. S., (2006). Work system design in healthcare. In *Handbook of Human Factors and Ergonomics in Healthcare and Patient Safety*, P. Carayon (Ed.), (Mahwah, New Jersey: Lawrence Erlbaum Associates).
- Dall’Ora, C., Ball, J., Recio-Saucedo, A., & Griffiths, P. (2020). Characteristics of shift work and their impact on employee performance and wellbeing: A literature review. *International Journal of Nursing Studies*, 83, 91-103.
- Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: a systematic review. *BMC Public Health*, 13, 82. <https://doi.org/10.1186/1471-2458-13-82>
- Garrosa, E., Moreno-Jiménez, B., Rodríguez-Muñoz, A., & Rodríguez-Carvajal, R. (2011). Role stress and personal resources in nursing: A cross-sectional study of burnout and engagement. *International Journal of Nursing Studies*, 48(4), 479-489.
- Giorgi, G., Mancuso, S., Perez, F. J., & Mucci, N. (2022). Work-life balance, burnout, and job satisfaction in the nursing profession: A quantitative analysis. *International Journal of Environmental Research and Public Health*, 19(2), 654. <https://doi.org/10.3390/ijerph19020654>
- Halbesleben, J. R., & Rathert, C. (2008). Linking physician burnout and patient outcomes: exploring the dyadic relationship between physicians and patients. *Health Care Management Review*, 33(1), 29–39. <https://doi.org/10.1097/01.HMR.0000304493.87898.72>
- Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O’Connor, D. B. (2016). Healthcare Staff Wellbeing, Burnout, and Patient Safety: A Systematic Review. *PloS one*, 11(7), e0159015.
- Hayman, Jeremy. (2005). Psychometric Assessment of an Instrument Designed to Measure Work Life Balance. *Research and Practice in Human Resource Management*. 13.
- Khamisa, N., Oldenburg, B., Peltzer, K., & Ilic, D. (2015). Work related stress, burnout, job satisfaction and general health of nurses. *International Journal of Environmental Research and Public Health*, 12(1), 652-666.
- Laschinger, H. K. S., & Fida, R. (2014). New nurses burnout and workplace wellbeing: The influence of authentic leadership and psychological capital. *Burnout Research*, 1(1), 19-28. <https://doi.org/10.1016/j.burn.2014.03.002>
- Laschinger, H. K., Borgogni, L., Consiglio, C., & Read, E. (2015). The effects of authentic leadership, six areas of worklife, and occupational coping self-efficacy on new graduate nurses' burnout and mental health: A cross-sectional study. *International Journal of Nursing Studies*, 52(6), 1080–1089.
- Laschinger, H. K., Cummings, G., Leiter, M., Wong, C., MacPhee, M., Ritchie, J., Wolff, A., Regan, S., Rhéaume-Brüning, A., Jeffs, L., Young-Ritchie, C., Grinspun, D., Gurnham, M, Foster, B., Huckstep, S., Ruffolo, M., Shamian, J., Burkoski, V., Wood, K., & Read, E. (2016). Starting Out: A time-lagged study of new graduate nurses' transition to practice. *International journal of Nursing Studies*, 57, 82–95.
- Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.
- Maslach C. (2006). Understanding job burnout. In: Rossi A. M., Perrewé P. L., Sauter S. L., editors. *Stress and Quality of Working Life: Current Perspectives in Occupational Health*. Information Age Publishing; Charlotte, NC, USA, 37–52.
- Maslach, C. (1976). Burn-Out. *Human Behaviour*, 5, 16-22.
- Mayo Clinic. (2024). <https://www.mywellbeingindex.org/versions/nurse-well-being-index>

- McGowan, B., Humble, F., McGowan, C., & Reid, B. (2021). The role of work-life balance in the prevention of burnout among nurses. *Journal of Advanced Nursing*, 77(5), 2317-2329. <https://doi.org/10.1111/jan.14742>
- Mealer, M., Jones, J., & Meek, P. (2017). Factors affecting resilience and development of posttraumatic stress disorder in critical care nurses. *American journal of critical care: an official publication, American Association of Critical-Care Nurses*, 26(3), 184–192.
- Montero-Marín, J. (2016). The burnout syndrome and its various clinical manifestations: A proposal for intervention. *Anest. Analg. Reanim.* 29 (1),1–16
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: a review of the problem and its remediation. *Administration and policy in mental health*, 39(5), 341–352.
- Obina, W. F., Ndibazza, J., Kabanda, R., Musana, J., & Nanyingi, M. (2024). Factors associated with perceived work-life balance among health workers in Gulu District, Northern Uganda: a health facility-based cross-sectional study. *BMC Public Health*, 24(1), 278.
- Okwaraji, F. E., & Aguwa, E. N. (2014). Burnout and psychological distress among nurses in a Nigerian tertiary health institution. *African health Sciences*, 14(1), 237–245.
- Panagioti, M., Panagopoulou, E., Bower, P., Lewith, G., Kontopantelis, E., Chew-Graham, C., Dawson, S., van Marwijk, H., Geraghty, K., & Esmail, A. (2017). Controlled Interventions to Reduce Burnout in Physicians: A Systematic Review and Meta-analysis. *JAMA Internal Medicine*, 177(2), 195–205.
- Shanafelt, T. D., West, C. P., Sloan, J. A., Novotny, P. J., Poland, G. A., Menaker, R., Rummans, T. A., & Dyrbye, L. N. (2009). Career fit and burnout among academic faculty. *Archives of internal medicine*, 169(10), 990–995.
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D., West, C. P., Sloan, J., & Oreskovich, M. R. (2012). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of internal medicine*, 172(18), 1377–1385.
- Spector, P. E., & Jex, S. M. (1998). Development of Four Self-Report Measures of Job Stressors and Strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory. *Journal of Occupational Health Psychology*, 3, 356-367.
- Squires, A., Finlayson, C., Gerchow, L., Cimiotti, J. P., Matthews, A., Schwendimann, R., Griffiths, P., Busse, R., Heinen, M., Brzostek, T., Moreno-Casbas, M. T., Aiken, L. H., & Sermeus, W. (2014). Methodological considerations when translating "burnout". *Burnout Research*, 1(2), 59–68.
- Van Bogaert, P., van Heusden, D., Timmermans, O., & Franck, E. (2014). Nurse work engagement impacts job outcome and nurse-assessed quality of care: model testing with nurse practice environment and nurse work characteristics as predictors. *Frontiers in Psychology*, 5, 1261.
- van der Heijden, B. I., Demerouti, E., Bakker, A. B., & NEXT Study Group coordinated by Hans-Martin Hasselhorn (2008). Work-home interference among nurses: reciprocal relationships with job demands and health. *Journal Of Advanced Nursing*, 62(5), 572–584.
- van der Heijden, B. I. J. M., Mulder, R. H., König, C., & Anselmann, V. (2019). Toward a mediation model for nurses' well-being and psychological distress effects of quality of leadership and social support. *Journal of Nursing Management*, 27(4), 699-707.
- West, C. P., Dyrbye, L. N., & Shanafelt, T. D. (2018). Physician burnout: contributors, consequences and solutions. *Journal of internal medicine*, 283(6), 516–529.
- Westermann, C., Kozak, A., Harling, M., & Nienhaus, A. (2014). Burnout intervention studies for inpatient elderly care nursing staff: Systematic literature review. *International Journal of Nursing Studies*, 51(1), 63-75. <https://doi.org/10.1016/j.ijnurstu.2012.12.001>