

Examining the Relationship Between Work–Life Balance, Workload, and Job Stress Among Female Nurses in Paser District Community Health Services

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ABSTRACT: This study examines the influence of work–life balance and workload on occupational stress among female nurses in public health centers (Puskesmas) of Paser Regency. The study involved all 34 female nurses employed at Pasir Belengkong, Suliran Baru, and Suatang Baru Puskesmas. Data were collected using structured questionnaires assessing work–life balance, workload, and occupational stress, and analyzed through multiple linear regression. The findings show that nurses reported a good level of work–life balance, yet faced relatively high workloads. Their occupational stress was at a moderately high level, reflecting notable pressure in daily practice. Regression results indicate that work–life balance and workload jointly have a significant effect on occupational stress. However, when examined separately, work–life balance was not significantly associated with stress, whereas workload showed a significant positive effect. These results highlight workload as the primary determinant of occupational stress, despite the nurses' ability to sustain work–life balance. The study offers practical implications for Puskesmas management to develop targeted interventions and policies aimed at reducing workload, promoting nurse well-being, and ensuring the sustainability of quality healthcare services.

KEYWORDS: Work–Life Balance, Workload, Occupational Stress, Nursing, Public Health Centers (Puskesmas)

I. INTRODUCTION

The successful implementation of the Strategic Plan of the Ministry of Health of the Republic of Indonesia is strongly influenced by the organization and management of human resources in carrying out the core functions of community health centers (Puskesmas) (Sulaeman, 2019). Consistent with the Ministry of Health Decree No. 857/2009 and Regulation No. 43/2019, the health service subsystem positions Puskesmas as the frontline of primary healthcare delivery. As technical implementing units, Puskesmas play a strategic role in improving the quality of healthcare services, which requires effective human resource management and performance optimization.

Human resources are a critical determinant of organizational success. Regardless of an organization's type or purpose, human involvement is central to its vision, mission, and operations. As such, Puskesmas rely heavily on healthcare personnel to ensure service quality and organizational sustainability. According to Regulation of the Minister of Health No. 43/2019, Puskesmas provide both individual and community-based primary healthcare services, prioritizing safety, patient well-being, and workplace security. However, healthcare personnel are vulnerable to high stress levels, while regulations specifically addressing mental health protection remain limited.

Work-related mental health is shaped by workplace conditions and organizational behavior management. Work–life balance (WLB) has been identified by the World Health Organization (WHO) as a key factor influencing occupational stress. Research by Sharma et al. (2018) demonstrated that WLB significantly correlates with individual demographics and stress levels, affecting job performance, particularly among women in management roles. Employees with better WLB report greater job satisfaction, reduced stress, and higher productivity (Mendis & Weerakkody, 2017; Deery et al., 2018). Conversely, poor WLB contributes to psychological strain, family conflict, and physical health problems (Sirgy & Lee, 2018).

Workload is another critical determinant of occupational stress. High workloads and repetitive tasks have been shown to contribute to burnout and decreased performance (Togia in Iwan, 2016; Trisna & Ilyas, 2017). According to Nurdin (2018), workload refers to the quantity of tasks and responsibilities assigned within a specific timeframe and workforce capacity. Excessive workload has been consistently linked to reduced job satisfaction, lower performance, and increased health risks (Rindorindo et al., 2019; Irawati & Carrollina, 2017). To address this, the Ministry of Health has introduced the Workload

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Indicators of Staffing Need (WISN) method (MoH Regulation No. 81/2004) to align staffing levels with actual service demands, aiming to prevent overload and support employees' WLB.

Occupational stress emerges when work demands exceed an individual's capacity or resources, leading to both psychological and physiological imbalance (Antonious, 2020). Stress is influenced by multiple factors, including age, income, job tenure, workload, and WLB (Astuti, 2015; WHO, 2016). Prolonged stress negatively impacts employee performance, patient safety, and organizational outcomes (Monica & Putra, 2017; Difayoga & Yuniawan, 2015). Nurses, in particular, are at high risk of stress-related disorders due to their demanding roles. Reports by the International Labour Organization (ILO, 2016) and the National Institute of Occupational Safety and Health (NIOSH) indicate that healthcare is one of the sectors with the highest prevalence of occupational stress, with nurses ranking among the most affected (Herqutanto et al., 2017; Tran et al., 2017; Cheung & Yip, 2015). This condition worsened during the COVID-19 pandemic, where fear of infection and heavy workloads intensified stress levels among nurses worldwide (Crowe et al., 2020; Sampaio et al., 2021).

Furthermore, female nurses often face additional stressors due to multiple roles as healthcare professionals, wives, and mothers. Balancing professional and domestic responsibilities can create significant WLB challenges, which, when combined with high workloads, heighten the risk of occupational stress (Amalia et al., 2018). Interviews with nurses at Pasir Belengkong, Suliliran Baru, and Suatang Baru Puskesmas revealed recurring stress symptoms, including headaches, fatigue, emotional strain, and the tendency to take work home, indicating unmet WLB and excessive workloads. These conditions reflect broader organizational and individual challenges that merit empirical investigation.

Based on these considerations, this study aims to analyze the influence of work–life balance and workload on occupational stress among female nurses at Puskesmas in Paser Regency.

II. LITERATURE REVIEW

A. Work-Life Balance

Work-life balance (WLB) is defined as an individual's perception that work and non-work activities are compatible and mutually supportive of personal growth and current life priorities (Gagnano et al., 2020). It reflects the ability to manage boundaries between professional and personal roles, ensuring adequate time allocation for both. WLB is closely associated with job satisfaction, life satisfaction, stress, and psychological well-being (Greenhaus & Allen, 2011, in Landolfi et al., 2020).

The Organization for Economic Cooperation and Development (OECD) describes WLB as a state of equilibrium between personal life and professional responsibilities, highlighting the importance of recognizing employees' personal lives to retain high-performing workers (Bally, 2007, in Kim & Windsor, 2015). Assessment of WLB generally focuses on whether work schedules allow sufficient time for self-care and family interaction (Shanafelt et al., 2015).

European Agency for Safety and Health at Work (EU-OSHA) conceptualizes WLB through three dimensions: time balance, involvement balance, and satisfaction balance. Complementary perspectives extend these dimensions into four indicators: intrusion of work into personal life, intrusion of personal life into work, personal life enhancement by work, and work enhancement by personal life (Rincy & Panchanatham, 2010). Together, these perspectives suggest that WLB is not only about time allocation but also about psychological engagement and satisfaction across different life domains.

B. Workload

Workload refers to the amount of work that must be completed within a specified period. It is defined in Indonesian regulations as the volume of work expected from an employee or organizational unit relative to available resources (PER.17/MEN/XI/2010; Ministry of Health Regulation No. 43/2017). In scholarly terms, workload encompasses both quantitative and qualitative aspects, reflecting the number of tasks, the time required, and the match between job demands and individual capacity (Fajriani & Septiari, 2015; Koesomowidjojo, 2017).

Workload can be excessive or insufficient. Excessive workload often leads to physical and psychological fatigue, whereas insufficient workload may result in boredom, disengagement, and reduced productivity (Irawati & Carrollina, 2017; Nabawi, 2019). Negative impacts also include declining work quality, increased absenteeism, and diminished organizational outcomes.

The NASA Task Load Index (NASA-TLX) identifies six dimensions of workload: mental demand, physical demand, temporal demand, performance, effort, and frustration (Kokoroko, 2019). These dimensions illustrate workload as a multidimensional construct that encompasses cognitive, physical, emotional, and evaluative aspects of job performance.

C. Occupational Stress

Occupational stress is a condition arising when job demands exceed an individual's resources or coping abilities. It is characterized as an adaptive response to internal or external stressors that are perceived as threatening, either psychologically or physically (Lumban Gaol & Musradinur, 2016). According to the World Health Organization (WHO), occupational stress reflects the imbalance between work demands and individual capacities.

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Sources of occupational stress include workload, work content, time pressure, poor role clarity, limited autonomy, weak interpersonal relationships, and organizational culture. Work-life imbalance is also recognized as a significant contributor to stress, particularly when job demands conflict with family responsibilities (Purnawati, 2014; WHO, 2017).

Indicators of occupational stress include physical and sleep disturbances, behavioral changes, cognitive and emotional difficulties, and disruptions to personal habits (Paul & Gogoi, 2017). These manifestations demonstrate how occupational stress not only affects performance but also undermines overall well-being.

D. Influence of Work-Life Balance on Occupational Stress

Work-life balance is widely recognized as a determinant of occupational stress. Effective balance between professional and personal roles provides a source of energy and emotional stability, while imbalance often generates conflict and stress (Fisher et al., 2003; Delecta, 2011). Research demonstrates that poor WLB is significantly associated with higher stress levels, while good WLB is linked to reduced stress and greater well-being (Weerasinghe & Dilhara, 2018; Mendis & Weerakkody, 2017).

For working women, particularly those with family responsibilities, WLB plays a critical role in mitigating stress. Studies show that women who successfully balance dual roles tend to experience positive emotions, greater satisfaction, and lower stress levels (Huda et al., 2020; Khoiriyah, 2020). Conversely, work-family conflict resulting from poor WLB contributes directly to stress and decreased performance (Khuong & Yen, 2016).

E. Influence of Workload on Occupational Stress

Workload has been consistently identified as a key stressor in the workplace. Excessive quantitative workload (too many tasks) or qualitative workload (tasks beyond one's capacity) is associated with increased occupational stress (Dhaniala, 2010; Gunov et al., 2011). High workload has been shown to decrease employee performance, increase fatigue, and elevate stress levels among healthcare workers (Mustika Suci, 2018; Lan et al., 2018; Johan et al., 2017).

Studies on nurses highlight that heavy workload correlates strongly with occupational stress, leading to physical exhaustion, reduced sleep quality, and emotional strain (Hatmawan, 2015; Pongantung et al., 2018; Ibrahim et al., 2016). This relationship emphasizes the importance of effective workload management as a strategy to reduce stress and enhance both employee well-being and organizational performance.

F. Influence of Work-Life Balance and Workload on Occupational Stress

Work-life balance and workload together exert significant influence on occupational stress. While WLB contributes to psychological well-being and life satisfaction, workload represents a direct stressor that can undermine both individual performance and organizational outcomes (Arifin et al., 2016; Mangkunegara, 2013). Excessive workload coupled with poor WLB increases the likelihood of stress, while balanced conditions promote resilience and productivity (Robbins & Judge, 2015; Ganapathi, 2016).

For female nurses, who often face dual responsibilities at work and at home, the interaction of workload and WLB is particularly critical. Nurses represent a predominantly female profession in Indonesia (71%), and many are expected to balance professional duties with domestic roles (PPNI, 2017). When workload becomes excessive and WLB is not maintained, stress levels rise significantly, compromising both personal well-being and healthcare service quality (Herqutanto et al., 2017; Septiana, 2020; Merry et al., 2018).

In summary, WLB serves as a protective factor against occupational stress, while workload acts as a primary driver of stress. Understanding their combined impact is crucial for designing effective interventions to support nurses' well-being and sustain healthcare quality.

III. METHODOLOGY

This study employed a quantitative approach with a descriptive–verificative design to examine the influence of work–life balance and workload on occupational stress among female nurses at three public health centers (Puskesmas) in Paser Regency, namely Pasir Belengkong, Suliliran Baru, and Suatang Baru. The research population consisted of all 34 female nurses working at these facilities, and because of the relatively small number, the entire population was included as the study sample using a saturated sampling technique. Data collection was conducted through questionnaires, interviews, observations, and documentation. The questionnaire used a Likert scale and consisted of 42 items for work–life balance, 10 items for workload, and 19 items for occupational stress.

Instrument testing included validity and reliability analyses. The validity test was carried out using item–total correlations with a minimum r -value of 0.3044, and all items were found valid. Reliability was measured using Cronbach's Alpha, yielding values of 0.859 for work–life balance, 0.943 for workload, and 0.897 for occupational stress, all indicating high reliability. The collected data were then processed using the Successive Interval Method to transform ordinal data into interval scale data for further analysis.

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Data analysis consisted of descriptive and verificative techniques. The descriptive analysis was used to illustrate the distribution of work–life balance, workload, and occupational stress among the respondents. The verificative analysis applied multiple linear regression to test the simultaneous and partial effects of work–life balance and workload on occupational stress, with the regression equation formulated as $Y=a+b_1X_1+b_2X_2+e$. Prior to regression analysis, classical assumption tests namely normality, multicollinearity, heteroscedasticity, and autocorrelation, were performed to ensure model validity.

Through this methodological framework, the study sought to provide empirical evidence on the determinants of occupational stress among female nurses in primary health centers, with the expectation that the findings would contribute to human resource management strategies in healthcare institutions.

IV. RESULTS AND DISCUSSION

A. Work-Life Balance among Female Nurses in Puskesmas, Paser Regency

The results of the questionnaire distributed to 34 female nurses working at Puskesmas in Paser Regency provide an overview of how they perceive and experience work-life balance in the context of their professional and personal responsibilities. Each response was assessed using a five-point Likert scale, allowing for the measurement of different levels of agreement regarding statements on work, family, and the interaction between the two domains. The concept of work-life balance, as defined in this study, refers to the extent to which nurses are able to maintain harmony between their professional roles as healthcare providers and their personal roles as wives, mothers, or family members. According to Lockwood, cited in Diah and Al-Musadeq (2018), work-life balance exists when individuals can successfully manage dual roles in both spheres of life, achieving satisfaction and minimizing conflict.

The findings revealed that the overall work-life balance of nurses at Puskesmas in Paser Regency can be categorized as good, although variation exists across different dimensions. In terms of the intrusion of personal life into work, the majority of respondents indicated that personal or family-related issues did not significantly interfere with their ability to complete work tasks. Occasional distractions, such as fatigue from household duties or concerns about family matters, were acknowledged, but these did not reach a level that hindered the overall performance of the nurses. This suggests that despite their multiple responsibilities, the nurses were able to establish boundaries that protected their professional obligations.

Conversely, the intrusion of work into personal life was reported at a somewhat higher level. Many nurses admitted that the demands of their profession occasionally disrupted their family activities or personal routines. Extended working hours, sudden assignments, and the psychological burden of caring for patients often spilled over into their private lives. Nevertheless, most respondents expressed that while work sometimes created pressures at home, they still managed to fulfill essential family roles, reflecting a capacity to adapt and negotiate between professional and domestic expectations.

A positive pattern emerged in the dimensions of work enhancement by personal life and personal life enhancement by work. Nurses frequently emphasized the role of family support, encouragement from spouses, and emotional stability at home as factors that improved their ability to perform effectively in the workplace. A stable personal life was perceived as a source of motivation, energy, and resilience in dealing with the stresses of healthcare work. At the same time, professional experiences such as successful patient care, recognition from colleagues, and a sense of accomplishment contributed positively to their personal lives, fostering confidence and strengthening family relationships. This reciprocal influence highlights the interdependence of work and personal life, demonstrating that the two domains can serve as sources of enrichment rather than conflict.

Taken together, these findings indicate that the female nurses working at Puskesmas in Paser Regency are generally able to maintain a satisfactory balance between their work and personal lives, although the pressure of workload occasionally challenges this equilibrium. Their ability to minimize personal interference at work, manage professional spillover into family life, and draw mutual benefits from both domains suggests a strong level of resilience and adaptability. However, the evidence also underscores the importance of institutional support, such as workload management and flexible scheduling, to ensure that nurses can sustain this balance over the long term without experiencing excessive strain.

B. Workload of Female Nurses in Puskesmas, Paser Regency

The workload variable in this study was measured through six dimensions using a total of ten questions, covering mental demands, physical demands, time-related demands, performance, effort, and frustration. Each dimension was assessed through specific items in the questionnaire and further interpreted through tabulation, percentage analysis, and continuum diagrams. The findings across the three Puskesmas, namely Pasir Belengkong, Suatang Baru, and Suliliran Baru, generally indicate that female nurses experience workload at a moderately high level, with several dimensions showing higher intensity depending on contextual and institutional factors.

The mental demand dimension illustrates the extent to which cognitive and perceptual activities, such as thinking, decision-making, calculating, remembering, and problem-solving, are required in daily work. Across the three Puskesmas, this dimension was rated in the “quite high” category, with Suatang Baru showing the highest percentage at 65.55%. This reflects the complexity

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of tasks and the cognitive burden borne by nurses, especially during the pandemic when many of them were responsible for more than one program simultaneously. Limited staff numbers in Suatang Baru, which employs only nine female nurses, further increased the mental workload, as individual nurses often had to carry multiple programs in addition to routine services, thereby intensifying decision-making responsibilities and overall cognitive strain.

The physical demand dimension, also rated “quite high,” captures the level of physical activity required, including lifting, pushing, controlling, and rapid movements. Percentages ranged from 56.36% to 57.77%, with Suatang Baru again reporting the highest score. Field observations revealed that physical workload intensified during emergency situations, such as when transporting patients or carrying equipment during outreach services. Suatang Baru, located far from urban centers with challenging terrain and limited healthcare alternatives, demands higher levels of physical exertion from nurses who frequently provide wound care, general examinations, and administrative reporting while simultaneously handling urgent cases in the emergency unit.

Time-related demands also emerged as a significant contributor to workload. Nurses across all three Puskesmas reported feeling considerable time pressure, with Pasir Belengkong recording the highest percentage (64.54%). Respondents emphasized the strain of meeting strict deadlines for program reports, often requiring them to work beyond regular hours. Observations confirmed that reporting and monthly meetings demanded strict compliance, as both the Puskesmas leadership and the district health office required timely submissions, sometimes even before activities were fully completed. This contributed to nurses’ perceptions of being under constant time pressure and frequently fatigued.

The performance dimension, which reflects the extent to which nurses meet or exceed their work targets, also fell into the “quite high” category, with scores ranging from 63.63% to 71.11%. Although generally satisfied with their achievements, nurses expressed a strong sense of responsibility to maximize program outcomes. In Suatang Baru, where staff shortages were most severe, nurses reported particular pride in fulfilling program targets despite limited resources and high demands. This sense of achievement was often accompanied by job satisfaction, although it sometimes required substantial effort and sacrifice.

Closely related to performance is the effort dimension, which reflects the mental and physical energy expended to achieve work objectives. Respondents across the three Puskesmas perceived their level of effort to be “quite high,” with Suatang Baru again showing the highest percentage (68.89%). Observations highlighted that nurses in this Puskesmas faced unique challenges, such as long travel distances for outreach services, difficult transportation routes, and the need to educate communities with strong traditional beliefs and relatively low levels of health literacy. These conditions required nurses to invest additional physical and cognitive effort to achieve satisfactory program outcomes.

The frustration dimension provides insight into the emotional strain experienced by nurses, including feelings of insecurity, hopelessness, stress, and irritability. Results indicated moderately high levels of frustration, with Pasir Belengkong recording the highest percentage (63.63%). Observations confirmed that interpersonal conflicts occasionally emerged among staff, particularly in Pasir Belengkong, which has a larger and more diverse nursing workforce compared to the other centers. The variation in age, experience, and personal backgrounds sometimes led to misunderstandings and heightened tension among colleagues, especially in stressful working conditions.

Taken together, these findings suggest that female nurses in Puskesmas across Paser Regency experience workload at a consistently “quite high” level across all six dimensions. Mental and physical demands, time pressures, and emotional frustration appear to be compounded by structural factors such as staffing limitations, geographical challenges, and administrative requirements. At the same time, nurses demonstrated resilience and commitment, as reflected in their strong performance and willingness to exert considerable effort to achieve program targets. These insights underscore the need for managerial interventions aimed at redistributing workloads, improving staffing ratios, and providing psychosocial support to ensure both the well-being of nurses and the sustainability of healthcare service delivery in the region.

C. Occupational Stress among Female Nurses in Puskesmas, Paser Regency

Occupational stress is defined as a condition experienced by individuals as a result of high pressures and demands from their environment, which may negatively affect their well-being (Mulyadi, 2015; Monica & Putra, 2017). In this study, occupational stress was measured through four dimensions: physical and sleep-related symptoms (7 items), behavioral symptoms (5 items), cognitive and emotional symptoms (4 items), and personal habit changes (3 items). The responses of female nurses working at three Puskesmas in Paser Regency, namely Pasir Belengkong, Suliliran Baru, and Suatang Baru, indicate that stress was consistently experienced at a “moderately high” level across all dimensions, although certain patterns varied between institutions.

The dimension of physical and sleep-related symptoms revealed that many nurses experienced difficulties such as muscle tension, headaches, fatigue, stomach cramps, and sleep disturbances. The percentage scores ranged from 60.63% at Suatang Baru to 67.85% at Suliliran Baru, both in the “moderately high” category. At Pasir Belengkong, the most common symptom was difficulty relaxing, while in Suatang Baru the predominant complaint was frequent severe headaches, with several nurses reporting that they often brought analgesic medication to work. In Suliliran Baru, reduced physical energy was the most widely reported

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symptom, with respondents acknowledging persistent exhaustion during stressful periods, even without engaging in heavy physical activity. These findings suggest that stress manifests strongly through somatic complaints, which may reduce nurses' resilience and impair recovery.

Behavioral symptoms also appeared prominently, with overall scores categorized as “moderately high” at Pasir Belengkong (68.72%) and Suliliran Baru (64.57%), but “high” at Suatang Baru (71.11%). The most reported behaviors included preferring solitude after work, continuing to work during lunch breaks, and persisting with work duties despite illness. In Pasir Belengkong, the strongest tendency was to withdraw socially after dinner, reflecting a need to recover from the day's stress. In Suliliran Baru, nurses most often reported continuing to work while unwell, a behavior influenced by strict attendance policies and requirements for medical certificates. Suatang Baru recorded the highest behavioral stress score, with many nurses reporting that they frequently skipped lunch breaks to complete their workload, choosing to eat only after finishing tasks. Observations supported this, as several nurses were seen working through lunch while waiting for food orders with colleagues. Such behaviors highlight how stress disrupts normal rest and socialization patterns, potentially reinforcing fatigue and reducing well-being.

Cognitive and emotional symptoms were also prevalent, with percentages ranging from 58.57% in Suliliran Baru to 60.56% in Suatang Baru, indicating a consistently “moderately high” level. The most common issues were forgetfulness, suppressed anger, difficulty accepting criticism, and heightened anxiety. Forgetfulness was the most prominent symptom across all three centers, with nurses frequently losing focus during conversations or misplacing personal items. This suggests that stress significantly affects concentration and memory, which may, in turn, impact the quality of patient care. Emotional strain was also observed, with some nurses expressing frustration and unease when faced with minor challenges, further indicating stress-related cognitive overload.

The final dimension, personal habit changes, also indicated a “moderately high” level of stress, with percentages ranging from 58.51% in Suatang Baru to 62.42% in Pasir Belengkong, the latter being the highest among the three Puskesmas. The most common complaints were reduced time for hobbies, limited opportunity to read newspapers or stay updated with current events, and increased driving speed to save time. In Pasir Belengkong and Suatang Baru, lack of time for reading was the most widely agreed upon, reflecting the heavy workload and limited leisure opportunities. At Suliliran Baru, the most common response was difficulty finding time for hobbies, with many nurses reporting that domestic responsibilities after work consumed what little energy remained, leaving them too fatigued to engage in leisure activities. These lifestyle disruptions indicate that stress extends beyond the workplace, influencing how nurses structure their personal time and limiting opportunities for relaxation and recovery.

Overall, the findings demonstrate that occupational stress among female nurses in Puskesmas across Paser Regency is present at a moderately high level across all dimensions. Stress is expressed not only through physical and psychological symptoms but also through altered behaviors and personal lifestyle changes. The evidence suggests that workload demands, institutional policies, and contextual challenges contribute significantly to these stress outcomes. Interventions to manage stress, such as structured rest periods, counseling, and organizational support, are therefore critical to safeguard both the well-being of nurses and the quality of healthcare services provided to the community.

D. The Influence of Work-Life Balance on Occupational Stress

The partial test results show that work-life balance does not have a significant effect on job stress among female nurses working at community health centers in Paser Regency. The regression coefficient was recorded at 0.410 with a significance value of 0.106, which is greater than the 0.05 threshold. This indicates that, statistically, the variable of work-life balance does not play a meaningful role in reducing or increasing stress levels. Based on the t-test, the calculated t-value of 1.657 is smaller than the critical value of 2.024, confirming that the null hypothesis is accepted and there is no significant relationship between the two variables.

This finding contradicts several earlier studies, such as those by Boas and Estell, as well as Weerasinghe and Dilhara, which revealed that an imbalance between work and personal life tends to increase occupational stress. Previous research often emphasized that work-family conflict can lead to heightened stress levels when professional demands clash with personal responsibilities. For instance, Goswami highlighted that both interpersonal and intrapersonal conflicts contribute significantly to workplace stress. On the other hand, this study aligns with research by NoorHidayat and colleagues, who found that while work-life balance can positively influence stress levels, the effect is not always statistically significant.

The absence of a significant relationship in this study may be explained by contextual factors, particularly the situation during the COVID-19 pandemic. During this period, nurses in Paser Regency health centers were given alternating schedules that included periods of working from home. This arrangement allowed them more flexibility and time to manage household responsibilities while continuing professional duties. Reduced patient visits and temporary closures of some health centers due to infections among staff also contributed to a lighter workload. This context provided nurses with a unique opportunity to balance personal and professional roles more effectively, which in turn may have lessened the influence of work-life balance on perceived stress levels.

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These findings suggest that the relationship between work-life balance and job stress may not always be straightforward but is shaped by situational and environmental factors. Flexible working arrangements, family support, and reduced workloads appear to buffer the potential negative effects of work demands. This indicates that the implementation of policies such as remote working and equitable scheduling during crises can help female nurses manage dual roles more effectively. Thus, although work-life balance did not emerge as a statistically significant factor in this study, it still holds practical importance in shaping how nurses experience and cope with workplace stress.

E. The Influence of Workload on Occupational Stress

The t-test was conducted to examine the partial effect of workload on job stress among nurses working in community health centers in Paser Regency. Using SPSS 20.0, the statistical results showed a regression coefficient of 0.458 with a significance value of 0.045, which is smaller than the 0.05 threshold. This indicates that workload exerts a positive and significant influence on job stress. The calculated t-value of 2.075 was higher than the t-table value of 2.024, leading to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. These results confirm that the greater the workload of nurses, the higher the level of stress they experience, while lighter workloads are associated with lower stress levels.

This outcome is consistent with earlier studies that have emphasized workload as a primary determinant of stress in healthcare professions. Mustika Suci found a strong positive relationship between workload and stress, showing that respondents with heavier workloads reported greater stress levels compared to those with moderate workloads. Similarly, Lan and colleagues reported that an increased workload can cause psychological discomfort, particularly work-related stress, while Johan et al. observed that a majority of nurses acknowledged excessive workload as the main factor behind their occupational stress.

The specific context of the COVID-19 pandemic further reinforced this relationship in the present study. When nurses were unable to work due to illness or quarantine, their tasks were redistributed among the remaining staff, which significantly raised the workload for those still on duty. This redistribution not only increased the volume of work but also intensified the time pressures nurses faced. Such conditions made stress more apparent during the pandemic compared to normal working situations.

In addition to the statistical findings, interviews with nurses revealed that stress often arose from having to manage large volumes of tasks under time constraints. Their responsibilities were extensive, covering direct patient care in general clinics, immunizations, chronic disease programs, and mental health services, alongside administrative duties. The need to handle multiple tasks simultaneously demanded high levels of concentration, and many nurses reported experiencing physical symptoms of stress, such as headaches, during patient interactions. These findings align with the understanding that workload stress can be compounded by the fear of errors, strict deadlines, supervisory expectations, and interpersonal challenges in the workplace.

Overall, the evidence shows that workload plays a central role in determining occupational stress among nurses in Paser Regency. Stress arises not only from the quantity of tasks but also from the intensity and complexity of responsibilities, especially under extraordinary circumstances like the pandemic. This highlights the need for effective workload management strategies in community health centers to ensure that nurses can perform their duties without compromising their well-being.

F. The Influence of Work-Life Balance and Workload on Occupational Stress

The F-test was conducted to examine whether the independent variables, work-life balance and workload, simultaneously influence job stress among nurses at community health centers in Paser Regency. Based on the SPSS 20.0 output, the calculated F-value was 34.787, which is significantly greater than the F-table value of 3.25 at the 5% error level. The significance value of 0.000 also indicates a strong rejection of the null hypothesis, confirming that both work-life balance and workload have a simultaneous and significant effect on job stress. This means that when work-life balance is maintained and workload is managed properly, nurses are less likely to experience high stress levels, while imbalance in these aspects leads to increased stress.

The findings emphasize the crucial role of balancing professional and personal responsibilities in the nursing profession. Female nurses in particular face dual roles at work and within their families, and the inability to manage these competing demands can result in stress and reduced productivity. The quality of nurses' professional lives is closely tied to their ability to achieve work-life balance, as it contributes not only to their job satisfaction but also to their ability to perform effectively in healthcare services. This supports the notion that organizational policies and workplace practices must encourage a supportive environment that allows nurses to fulfill both their professional and personal roles.

Practical implications drawn from this research suggest the need for health center management to actively implement strategies that improve work-life balance. Nurses reported that when they are able to achieve harmony between their professional duties and personal lives, they feel less burdened by their workload and are more capable of managing job-related stress. This aligns with studies showing that work-life balance improves job satisfaction and performance while reducing the negative effects of work-related pressure. Conversely, when nurses are unable to achieve this balance, the resulting strain can manifest as stress, diminished motivation, and lower job performance.

The simultaneous effect of workload and work-life balance on stress also highlights the vulnerability of female nurses to role conflict. Heavy administrative and clinical duties, combined with responsibilities at home, can create overlapping demands that

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exacerbate stress levels. Several nurses indicated that tight reporting deadlines and excessive workloads often forced them to take work home, further blurring the boundary between professional and personal life. Prior research has also shown that both excessive workload and poor work-life balance independently contribute to stress, but when combined, the impact becomes more severe. This underscores the importance of organizational interventions, such as fair workload distribution, flexible scheduling, and support for role management, to safeguard the well-being of nurses and maintain the quality of healthcare services in Paser Regency.

V. CONCLUSIONS

Based on the findings and discussion, several conclusions can be drawn. Female nurses at Puskesmas Pasir Belengkong, Suliran Baru, and Suatang Baru in Paser Regency demonstrated a generally good level of work-life balance, particularly in dimensions reflecting the interaction between personal and professional roles. However, the intrusion of work into personal life emerged as the most influential factor, often disrupting nurses' family and personal time due to administrative demands, heavy schedules, and the need to bring work home. Meanwhile, the workload of nurses was categorized as relatively high, especially in terms of fast-paced and physically demanding tasks, although some mental and perceptual demands were still manageable. Occupational stress among nurses was also at a moderately high level, with the main concern being limited time for personal hobbies, while physical tension and taking work home appeared less severe.

The statistical analysis revealed that work-life balance did not significantly affect stress levels, indicating that even though nurses were able to maintain a relatively good balance, it did not directly mitigate their occupational stress. In contrast, workload was found to have a significant positive influence on stress, with increasing demands in physical effort, time pressure, administrative duties, and interpersonal conflicts directly heightening stress levels. When examined simultaneously, both workload and work-life balance significantly affected occupational stress, with workload acting as the dominant factor. High workload combined with disruptions in work-life balance intensified stress, showing that the combined effect was stronger than either factor alone.

From these conclusions, several practical recommendations arise. Future research should be conducted under normal, non-pandemic conditions to distinguish whether stress levels among nurses are primarily driven by crisis contexts or by routine job demands. Leadership also plays a crucial role, and the support of Puskesmas heads in managing workloads, communication, and psychological support is essential in mitigating stress. At the policy level, the Health Office should ensure a more equitable distribution of healthcare personnel across Puskesmas and improve workforce planning to prevent excessive workloads. This includes implementing fair shift systems, patient redistribution, and optimizing task allocation.

Although work-life balance did not show a direct effect on stress, its maintenance remains important, and programs such as flexible scheduling, structured leave, and family-supportive facilities should be preserved. To address occupational stress more effectively, regular training in stress management, access to psychological counseling, and relaxation or recreational programs should be provided. Finally, since workload and work-life balance together significantly affect stress, a holistic occupational health policy is needed. Such a policy should integrate physical workload management, emotional support, and a positive social work environment to sustain the well-being of nurses and ensure the consistent quality of healthcare services for the community.

REFERENCES

- 1) Andriyana, A. S., & Supriansyah, S. (2021). Konsep Work Life Balance Terhadap Produktivitas Pegawai yang Menerapkan Work From Home Pada Masa Pandemi Covid-19 (Studi Literatur). *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 5(1), 1–11.
- 2) Ayu, D. S., & Krisnani, H. (2018). Pengaruh Lingkungan Kerja Sehingga Menghasilkan Suatu Hubungan Yang Erat Antar Petugas K3I Unpad. *Focus : Jurnal Pekerjaan Sosial*, 1(2), 16.
- 3) Boas, A., & EstelleMorin. (2018). Mental Health, Work-related Stress and Work-Life Balance in Public Universities: A Comparison between Brazilian and Canadian Professors. *Journal of Education, Society and Behavioural Science*, 25(3), 1–13.
- 4) Deery, M., Jago, L., Harris, C., & Liburd, J. (2018). Work Life Balance for Sustainable Tourism Development. In *Collaboration for Sustainable Tourism Development* (pp. 2007–2009).
- 5) Deivasigamani, J., & Dr. Shankar. (2017). Dimension of Work Life Balance in Software Companies. 05(02), 303–307.
- 6) Difayoga, R., & Yuniawan, A. (2015). Pengaruh Stres Kerja , Kepuasan Kerja , Dan Lingkungan Kerja Terhadap Kinerja Perawat (Studi pada RS Panti Wilasa Citarum Semarang). 4(2010), 1–10.
- 7) Fajriani, A., & Septiari, D. (2015). Pengaruh Beban Pekerjaan terhadap Kinerja Karyawan : Efek Mediasi Burnout. *Jurnal Akuntansi, Ekonomi Dan Manajemen Bisnis*, 3(1), 74–79.
- 8) Goswami, D. T. G. (2015). Job Stress and Its Effect on Employee. *Indian Journal of Commerce & Management Studies*, 6(2), 51–56.

Examining the Relationship Between Work–Life Balance, Workload, and Job Stress Among Female Nurses in Paser District Community Health Services

- 9) H., Harsono, H., Damayanti, M., & Setiawati, E. P. (2017). Stres Kerja pada Perawat di Rumah Sakit dan Fasilitas Pelayanan Kesehatan Primer. 5(1), 12–17.
- 10) Hafiza, S., & Mawarpury, M. (2019). Kesejahteraan Subjektif pada Pemulung: Tinjauan Sosiodemografi. Gadjah Mada Journal of Psychology (GamaJoP), 5(2), 139.
- 11) Haryanti, H., Aini, F., & Purwaningsih, P. (2013). Hubungan Antara Beban Kerja Dengan Stres Kerja Perawat Di Instalasi Gawat Darurat Rsud Kabupaten Semarang. Jurnal Manajemen Keperawatan, 1(1), 111590.
- 12) Hatmawan, A. A. (2015). Pengaruh Konflik Kerja, Beban Kerja Serta Lingkungan Kerja Terhadap Stres Pegawai Pt. Pln (Persero) Area Madiun Rayon Magetan. Assets: Jurnal Akuntansi Dan Pendidikan, 4(1), 91.
- 13) Ibrahim, H., Amansyah, M., & Yahya, G. N. (2016). Faktor - Faktor yang Berhubungan dengan Stres Kerja pada Pekerja Factory 2 PT . Maruki Internasional Indonesia Makassar. Al-Sihah :Public Health Science Journal, 8(1), 60–68.
- 14) Irawati, R., & Carrollina, D. A. (2017). Analisis Pengaruh Beban Kerja Terhadap Kinerja Karyawan Operator Pada Pt Giken Precision Indonesia. Inovbiz: Jurnal Inovasi Bisnis, 5(1), 51. <https://doi.org/10.35314/inovbiz.v5i1.171>
- 15) Isaacs, D. (2016). Work-life balance. Journal of Paediatrics and Child Health, 52(1), 5–6.
- 16) Kalpna, D., & Malhotra, M. (2019). Relationship of work-life balance with occupational stress among female personnel of Central Industrial Security Force (CISF), India. International Research Journal of Engineering and Technology (IRJET), 6(7), 1380–1387.
- 17) Kementerian Kesehatan. (2015). Profil Kesehatan Indonesia 2014. In Kementerian Kesehatan Republik Indonesia (Vol. 51, Issue 6).
- 18) Kementerian Kesehatan RI. (2017). Situasi Tenaga Keperawatan Indonesia. In Pusat Data dan Informasi Kementerian Kesehatan RI (pp. 1–12).
- 19) Khuong, M. N., & Yen, V. H. (2016). Investigate the Effects of Job Stress on Employee Job Performance — A Case Study at Dong Xuyen Industrial Zone, Vietnam. International Journal of Trade, Economics and Finance, 7(2), 31–37.
- 20) Kim, M., & Windsor, C. (2015). Resilience and work-life balance in first-line nurse manager. Asian Nursing Research, 9(1), 21–27.
- 21) Lan, Y., Lin, Y., Yan, Y.-H., & Tang, Y.-P. (2018). Relationship Between Work Stress, Workload, and Quality of Life Among Rehabilitation Professionals. International Journal of Healthcare and Medical Sciences, 4(6), 105–110.
- 22) Lubis, A. R., & Majid, M. S. A. (2015). Pada Kinerja Badan Layanan Umum Daerah Rumah Sakit Jiwa (Blud Rsj) Aceh. 4(1), 144–153.
- 23) Lubis, M. . S. (2015). Pengaruh Iklim Organisasi Dan Komitmen Organisasi Terhadap Pembentukan Organizational Citizenship Behavior (Ocb) Karyawan Dalam Rangka Peningkatan Kinerja. E-Jurnal Apresiasi Ekonomi, 3(2), 75–84.
- 24) Lumban Gaol, N. T. (2016). Teori Stres: Stimulus, Respons, dan Transaksional. Buletin Psikologi, 24(1), 1.
- 25) Mayangsari, M. D., Amalia, D., Psikologi, P. S., Kedokteran, F., & Mangkurat, U. L. (n.d.). Keseimbangan kerja-kehidupan pada wanita karir.
- 26) Mazo, G. N. (2015). Stress: Its Causes, Effects, And The Coping Mechanisms Among Bachelor Of Science In Social Work Students In A Philippine University. International Journal for Innovation Education and Research, 3(8), 175–184.
- 27) Mekel, P., & Rumengan, L. (2015). Analisis Lingkungan Kerja Terhadap Kinerja Pegawai Pada Fakultas Ekonomi Dan Bisnis Unsrat Manado. Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 3(1), 890–899.
- 28) Mendis, M. D. V. S., & Weerakkody, W. A. S. (2018). The impact of work life balance on employee performance with reference to telecommunication industry in Sri Lanka: a mediation model. Kelaniya Journal of Human Resource Management, 12(1), 72.
- 29) Monica, T., & Putra, M. (2017). Pengaruh Stres Kerja, Komitmen Organisasional, Dan Kepuasan Kerja Terhadap Turnover Intention. E-Jurnal Manajemen Universitas Udayana, 6(3), 255090.
- 30) Munjal, S., Chowman, S. S., & Baliyan, A. K. (2015). Work Life Balance - Interference between Work & Personal Obligations. Journal of Maharaja Agrasen College of Higher Education, 2(1), 1–15.
- 31) Musradinur. (2016). Stres Dan cara Mengatasinya Dalam Perspektif Psikologi. Jurnal Edukasi, 2, 183–200.
- 32) Mustika Suci, I. S. (2018). Analisis Hubungan Faktor Individu Dan Beban Kerja Mental Dengan Stres Kerja. The Indonesian Journal of Occupational Safety and Health, 7(2), 220.
- 33) Nabawi, R. (2019). Pengaruh Lingkungan Kerja, Kepuasan Kerja dan Beban Kerja Terhadap Kinerja Pegawai. Maneggio: Jurnal Ilmiah Magister Manajemen, 2(2), 170–183.
- 34) Nirmalasari, I. (2018). Analisis Pengaruh Work Life Balance terhadap Komitmen Organisasi melalui Kepuasan Kerja Perawat Sebagai Mediator. Jurnal Publikasi Ilmiah, 1–15.
- 35) Panduan Praktis Mengolah Data Kuesioner Menggunakan SPSS. (2019). (n.p.): Elex Media Komputindo.
- 36) Paul, T., & Gogoi, B. (2017). Exploring And Identifying Stress Indicators Of Telecom Professionals. March, 0–10.

Examining the Relationship Between Work–Life Balance, Workload, and Job Stress Among Female Nurses in Paser District Community Health Services

- 37) Pelaksana, P., Ruang, D. I., Inap, R., & Sakit, R. (2019). Faktor-Faktor Yang Berhubungan Dengan Stres Kerja Perawat Pelaksana Di Ruang Rawat Inap Rumah Sakit Umum Bethesda Gmim Tomohon. *Kesmas*, 8(3), 1–18.
- 38) Pongantung, M., Kapantouw, N. H., & Kawatu, P. A. T. (2018). Hubungan antara beban kerja dan stres kerja dengan kelelahan kerja pada perawat rumah sakit gmim kalooran amurang. *Jurnal Kesehatan Masyarakat*, 7(5), 1–7.
- 39) Purnawati, S. (2014). Program Manajemen Stres Kerja di Perusahaan: sebuah Petunjuk untuk Menerapkannya. *Buletin Psikologi*, 22(1), 36.
- 40) Putri, S. A. (2021). Faktor-Faktor Yang Mempengaruhi Work-Life Balance Pada Wanita Buruh Tani. *Jurnal Psikologi Malahayati*, 3(1), 28–38.
- 41) Qu, H., & Roy, X. (2012). Employees ' work – family con f l ict moderating life and job satisfaction ☆. *Journal of Business Research*, 65(1), 22–28.
- 42) Ramadhania, N., & Parwati, N. (2015). Pengukuran Beban Kerja Psikologis Karyawan Call Center Menggunakan Metode NASA-TLX (Task Load Index) Pada PT. XYZ. *Prosiding Semnastek*, November, 2–8.
- 43) Reilly, N. P., Sirgy, M. J., & Gorman, C. A. (2012). Work and quality of life: Ethical practices in organizations. In *Work and Quality of Life: Ethical Practices in Organizations*.
- 44) Rincy, V.M., Panchanatham, N. (2010). Development of a Psychometric Instrument To Measure Work Life Balance. *Continental Journal of Social Sciences*, 3, 50–58.
- 45) Rindorindo, R. P., Murni, S., Trang, I., Kerja, P. B., Kerja, S., Kepuasan, D. A. N., Terhadap, K., Manajemen, J., & Ekonomi, F. (2019). Pengaruh Beban Kerja, Stres Kerja Dan Kepuasan Kerja Terhadap Kinerja Karyawan Hotel Gran Puri. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 7(4), 5953–5962.
- 46) Sari, R. I. P. (2017). Pengukuran Beban Kerja Karyawan Menggunakan Metode NASA-TLX Di PT. Tranka Kabel. *Sosio-E-Kons*, 9(3), 223–231.
- 47) Septiana, V. (2020). Hubungan Quality of Nursing Work Life Dengan Stres Kerja Di Ruang Rawat Inap Rsu Hga Depok. 26(2016).
- 48) Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sinsky, C., Satele, D., Sloan, J., & West, C. P. (2015). Changes in Burnout and Satisfaction with Work-Life Balance in Physicians and the General US Working Population between 2011 and 2014. *Mayo Clinic Proceedings*, 90(12), 1600–1613.
- 49) Sharma, D. U., & Rao, R. K. (2018). ISSUES IN WORK LIFE BALANCE AND ITS IMPACT ON EMPLOYEES: A LITERATURE REVIEW. In Print) *International Research Journal of Management Science & Technology* (Vol. 9, Issue 4)
- 50) Sigar, J., Sambul, S., & Asaloei, S. (2018). Pengaruh Pengawasan Terhadap Disiplin Kerja Karyawan Pada Hotel Sintesa Peninsula Manado. *Jurnal Administrasi Bisnis*, 6(003), 269383.
- 51) Sirgy, M. J., & Lee, D. J. (2018). Work-Life Balance: an Integrative Review. *Applied Research in Quality of Life*, 13(1), 229–254.
- 52) Surahman, Rachmat, M., & Supardi, S. (2016). *Metodologi Penelitian*.
- 53) Utaminingsias, W., Ishartono, I., & Hidayat, E. N. (2015). Coping Stres Karyawan Dalam Menghadapi Stres Kerja. *Share : Social Work Journal*, 5(1), 190–200.
- 54) Weerasinghe, T. D., & Dilhara, M. G. D. (2018). Effect of Work Stress on Work Life Balance: Moderating Role of Work-Life Support Organizational Culture in Sri Lanka Customs Department. *Kalyani: Journal of the University of Kelaniya*, 32(1–2), 46.
- 55) Whiston, S. C., & Cinamon, R. G. (2015). The work-family interface: Integrating research and career counseling practice. *Career Development Quarterly*, 63(1), 44–56.
- 56) Widianti, A., Johnson, A., & Waard, D. De. (2010). Pengukuran Beban Kerja Mental Dalam Searching Task Dengan Metode Rating Scale Mental Effort (Rsme). *J@ti Undip: Jurnal Teknik Industri*, 5(1), 1–6.



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