

The Relationship Between Burnout And Workload Among Nurses At Hospital X Surabaya

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Abstract

Burnout is a serious problem among healthcare professionals, such as nurses and doctors. It is associated with a number of adverse outcomes in health care. As many as 37.8% experienced medium to high levels of burnout. The study explores some of the factors that cause burnout syndrome and strategies to manage it as a preventive measure against its incidence among nurses at Hospital X Surabaya. The method used in writing this article is descriptive analytics, involving the collection of secondary data obtained from the Department of Nursing. Factors such as length of employment, education and position, and workload can affect burnout levels among nurses at Hospital X. Management strategies that can be applied to prevent burnout include stress management, organizational interventions (e.g., creating a comfortable atmosphere, rewarding and recognizing employee contributions), workload management, and fostering job control to enable employees to freely manage the workload they receive.

Keywords: burnout syndrome, workload, burnout management, healthcare, nurse.

INTRODUCTION

Hospitals are one of the health service facilities that have a very strategic role in an effort to accelerate the improvement of the health status of the Indonesian people. This strategic role is obtained because hospitals are health facilities that are dense with technology, work, capital, problems and professions. According to Law Number 17 of 2023, a hospital is a Health Service Facility that provides individual health services in a complete manner through promotive, preventive, curative, rehabilitative, and/or palliative health services by providing inpatient, outpatient, and emergency services.

Burnout syndrome in the nursing profession has become the focus of research in various countries. In Andalusia, Spain, a study of 674 nurses (80% of the total sample) found that most had burnout syndrome (Cañadas-De la Fuente et al., 2015). Meanwhile, research in Indonesia by Saparwati (2020) showed that 50.8% of nurses at Ungaran Hospital experienced burnout syndrome. Burnout at the country level seems to be positively related to workload. If the demands of the job are high, a person can experience burnout, even psychologically alienating themselves from their work (McCormack, 2018).

Burnout is a serious problem among health professionals, such as nurses and doctors (Chowdhury et al., 2023; Lee et al., 2015; Oyekunle, 2022). Burnout is associated with a number of adverse consequential outcomes in health care, such as increased absenteeism, sick leave, job change, increased risk of psychopathology and physical complications, and poorer quality of health care delivery. Stress on nurses arises due to the increasingly complex tasks in providing holistic and professional nursing services, both to patients, patients' families, and in dealing with conflicts with other health workers (Saparwati & Apriatmoko, 2020). Burnout syndrome is a prolonged stress condition triggered by boredom with monotonous routines and great pressure of demands, resulting in a decrease in physical and mental energy (Jahari, 2019;

Komsatun et al., 2021; Ridwan et al., 2022; Suka Anjasmara et al., 2025; Winoto & Perkasa, 2024).

RS X is one of the type B hospitals in the city of Surabaya, which has a total of 201 nurses. Based on secondary data collection, namely the results of a questionnaire survey conducted by the Department of Nursing in January - June 2024 concerning Burnout Syndrome and Workload Perception in Nurses at Hospital X, the burnout rate in nurses in the low category was 62.2%, while as much as 37.8% was in the medium and high categories. The high load of patients with a limited number of human resources causes some nurses to admit that they are sometimes exhausted both physically and mentally.

The increasing prevalence of burnout among healthcare professionals, particularly nurses, has emerged as a critical issue in hospital management and patient care quality. Burnout not only affects the well-being of healthcare workers but also leads to lower work productivity, higher absenteeism, and poor patient care. This study is urgent as it addresses the growing concern of nurse burnout at Hospital X in Surabaya, providing essential data that can inform intervention strategies aimed at improving healthcare delivery. Given that nurses are essential to the healthcare system, it is critical to understand the factors contributing to burnout and to implement effective management strategies to prevent long-term adverse outcomes for both the workforce and patients.

This research presents a unique focus on burnout in nurses at Hospital X, combining both workload perception and burnout syndrome in the context of a major hospital in Surabaya. While previous studies have focused on burnout in various healthcare settings globally, this study brings fresh insights into the specific dynamics of burnout among Indonesian nurses, considering factors such as work experience, education, and role within the hospital. The novelty of this study lies in its localized approach, offering a detailed analysis of burnout and workload among Indonesian healthcare workers, a topic that remains under-explored in the Indonesian context. Moreover, the inclusion of Job Control as a potential moderator for burnout provides new directions for hospital management interventions and organizational policy development.

The purpose of writing this article is to find out several factors that cause burnout in nurses at Hospital X, as well as how to manage burnout as a preventive measure against the incidence of burnout in nurses at Hospital X. For practitioners, it is hoped that the writing of this article can be the basis for further research.

METHOD

This article was written using a descriptive analytical method. By collecting secondary data, namely data from the burnout syndrome questionnaire and the perception of nurses' workload, for the period of January – June 2024 from the Department of Nursing. From the data obtained, an analysis will be carried out based on several previous literature and research.

RESULTS AND DISCUSSION

There are two types of questionnaires distributed by the Nursing Department, namely burnout syndrome and workload perception. Based on the results of the Syndroma Burnout questionnaire survey on nurses at Hospital X, which was conducted in the period January – June 2024, the following results were obtained:

Table 1. Table of Distribution of Respondent characteristics by Level Burnout Syndrome in Nurses at Hospital X for the Period of January – June 2024

No	Characteristic	Low Burnout		Medium Burnout		High Burnout		Total	
		n	%	n	%	n	%	n	%
1	Gender								
	Man	15	51,7	13	44,8	1	3,4	29	100,0
	Woman	110	64,0	15	32,0	7	4,1	172	100,0
2	Age								
	≤ 35 years old	53	62,4	29	34,0	3	4,0	85	100,0
	> 35 Years Old	72	62,1	39	34,0	5	4,0	116	100,0
3	Marital Status								
	Marry	113	62,4	61	33,7	7	3,9	181	100,0
	Unmarried	12	60,0	7	35,0	1	5,0	20	100,0
4	Tenure								
	< 5 Years	5	45,5	5	45,5	1	9,1	11	100,0
	5-10 Th	54	71,1	19	25,0	3	3,9	76	100,0
	10-15 Th	36	73,5	12	24,5	1	2,0	49	100,0
	> 15 Years	30	46,2	32	49,2	3	4,6	65	100,0
5	Education								
	D3	96	67,6	41	28,9	5	3,5	142	100,0
	S1	29	49,2	27	45,8	3	5,1	59	100,0
6	Position								
	PIC	6	40,0	7	46,7	2	13,3	15	100,0
	Shift Coordinator	10	40,0	14	56,0	1	4,0	25	100,0
	Executive	109	67,7	47	29,2	5	3,1	161	100,0
	Total	125	62,2	68	33,8	8	4,0	201	100,0

Source: Data from *Nursing, Nurse Burnout Questionnaire* Survey at Hospital X January - June 2024

Based on table 1. above, it was found that 62.2% of nurses at Hospital X experienced low burnout rates, and as many as 37.8% experienced moderate and severe burnout levels. From the results of the correlation test that has been carried out by the Nursing Department, it was found that the factors of length of service, education and position can affect the occurrence of burnout at Hospital X (p value = 0.000). Burnout syndrome is evaluated in three components, namely depersonalization, emotional exhaustion, and professional achievement (Alexander, et al., 2015; Thursday, 2015). The following is the data from the survey results of the syndrome burnout questionnaire based on these 3 components:

Table 2. Questionnaire Result Data Burnout Syndrome in Nurses in Outpatient Hospital X for the Period January – June 2024

No	Component	Low Burnout		Medium Burnout		High Burnout		Total	
		n	%	n	%	n	%	N	%
1	Emotional Exhaustion	86	42,8	86	42,8	29	14,4	201	100,0
2	Depersonalization	131	65,2	61	30,3	9	4,5	201	100,0
3	Decreased Performance	144	71,6	46	22,9	11	5,5	201	100,0

Source: Data from *Nursing, Nurse Burnout Questionnaire* Survey at Hospital X January – June 2024

Based on table 2, it can be concluded that as many as 57.2% of nurses at Hospital X feel moderate and high levels of emotional fatigue when experiencing burnout. Meanwhile, the depersonalization and decline in achievement, the majority still feel at a low level. This emotional fatigue is the most common component felt by the nurses at Hospital X when experiencing burnout, compared to other components. The next questionnaire is a questionnaire on the perception of workload in nurses in outpatient hospitals X. The following is the distribution data on workload perception with burnout syndrome in nurses in outpatient hospitals X:

Table 3. Distribution Table Burnout Syndrome on the Perception of Workload in Nurses in Outpatient Hospital X for the Period of January – June 2024

No	Workload Perception	Low Burnout		Medium Burnout		High Burnout		Total	
		n	%	n	%	n	%	n	%
1	Light	59	90,8	6	9,2	0	0,0	65	100,0
2	Medium	57	50,0	51	44,7	6	5,3	114	100,0
3	Heavy	9	40,9	11	50,0	2	9,1	22	100,0
4	Total	125	62,2	68	33,8	8	4,0	201	100,0

Source: Data from *Nursing, Nurse Burnout Questionnaire* Survey at Hospital X January - June 2024

Based on table 3, it was found that most nurses have a perception of medium – heavy workload. Nurses with a perception of a light workload tend to experience lower levels of burnout, compared to nurses who have a perception of a moderate or heavy workload. From the results of the correlation test that has been carried out by the Department of Nursing, it was found that the perception of workload affects burnout in nurses in the outpatient hospital X (p value = 0.000).

Discussion

Burnout syndrome is influenced by two main factors, namely external factors and internal factors. According to Lee and Ashforth (1996) in Sari (2014), external factors that affect burnout syndrome include role ambiguity, role conflict, workload, motivation, and support. Meanwhile, internal factors include demographic aspects (gender, age, education level, marital status, and working age) as well as personality characteristics (personality type, self-esteem, and locus of control).

Burnout syndrome in nurses can have a significant impact on the quality of nursing services provided to patients. This condition can reduce work effectiveness, strain social relationships between colleagues, and give rise to negative feelings towards patients, work, and the work environment. In more serious conditions, nurses may feel like switching to another profession. If this situation is not handled thoroughly, the hospital where the nurse works will experience a decrease in the quality of service. In addition, the image of nurses as health workers who are close to patients can deteriorate in the eyes of the public (Tawale, 2011, in Sari, 2014).

Nurses at Hospital X with less working time tend to experience higher *burnout* when compared to nurses with longer working periods. Maslach (1982) explained that *burnout* tends to be felt in employees with a short working time, because the longer the employee works, the more accustomed he will be to his job, while for employees who are just starting to master their

jobs and begin to learn to master work indirectly can become a burden and stress that can eventually lead to boredom at work.

In line with research conducted by the Nurses who have a working period of less than 10 years, it is easier to experience (Ayudytha, 2019) *Burnout* compared to nurses with a working period of more than 10 years. Longer work experience allows nurses to have better adaptability to their tasks. This makes them better able to overcome various problems at work, so the risk of experiencing burnout is smaller. This finding is in line with Farber's theory (in Sari, 2015), which states that the more work experience a person has, the lower the level of burnout he or she experiences. On the other hand, lack of work experience tends to increase the risk of burnout.

Nurses who have higher education have a tendency to experience *burnout* when compared to nurses with low levels of education. Maslach (1982) stated that professionals with higher education backgrounds are more prone to burnout compared to those with lower levels of education. Highly educated professionals tend to have ideal expectations or aspirations. However, when they are faced with a reality that doesn't live up to those expectations, the resulting gaps can trigger anxiety and disappointment, which ultimately has the potential to lead to burnout.

According to Siagian (2009), the higher a person's level of education, the greater the motivation to apply one's knowledge and skills. This is often accompanied by increased job demands, which in turn affects work behavior and makes individuals more susceptible to burnout compared to those with lower levels of education. In addition, higher positions also tend to be accompanied by greater workload and pressure, thus increasing the risk of burnout. The existence of targets, demands and deadlines makes nurses in higher positions easily experience stress so that it can trigger *burnout*.

The perception of the workload of nurses at Hospital X can affect *burnout*. The results of this study are in line with the research of Wardah and Tampubolon (2020) entitled "Factors Related to the Incidence of Nurse Burnout at Santa Maria Hospital Pekanbaru". The study showed that burnout syndrome has a significant relationship with nurses' workload. High workload can affect the occurrence of burnout in nurses, where physical fatigue that lasts continuously for a long period of time can cause psychological fatigue. This is supported by the theory put forward by Gillies (1998), which states that the components that affect the workload of nurses include the number of patients admitted to one care unit per day, per month, and per year, the condition of the patient in the care unit or the level of patient dependence, the average patient who stays every day, the nursing actions performed by the nurse, the frequency of nursing actions, as well as the time required to carry out nursing actions.

In carrying out their duties, a nurse not only interacts with the patients who are being treated, but also with doctors, fellow nurses, patients' families, and various other parts of the hospital such as laboratories, radiology, and others. The high level of interaction with others, the demand to treat patients with patience and empathy, and heavy workloads, are a particular pressure for nurses in hospitals (Khamisa, et al., 2017).

Burnout among healthcare workers is associated with high rates of turnover and absenteeism due to illness, inefficiencies in the workplace, as well as low job satisfaction (Sabancio and Dogan, 2015). *Burnout syndrome* is continuous exposure to work stress associated with poor working conditions, so that nurses' performance can decrease (Mealer et

al., 2014). Given this, it is important to identify organizational *stressors* associated with burnout in order to be able to devise a prevention strategy. (de Olivera, 2018).

Burnout is a syndrome that consists of three main dimensions, namely mental or emotional exhaustion, negative feelings and perceptions of work, others, or oneself, and a decrease in sense of personal achievement (Maslach and Jackson, 1981). *Burnout* not only causes personal harm (Freudenberger, 1975), but can manifest in many problems, such as related to physical and mental health (Maslach et al., 2001). Physical symptoms of *Burnout* are present in complaints of fatigue and somatization, social withdrawal, inability to regulate emotional expression, absenteeism, (Ahola et al., 2008); decreased morale, decreased efficiency and performance (Taris, 2006).

Some conceptualizations of burnout argue that the symptoms are unidimensional. However, the three-dimensional model of *burnout* Maslach (1982, 1993) and the *Maslach Burnout Inventory* are considered the "gold standard" in *burnout research* (Schutte et al., 2000). According to Maslach and Leiter (2005) sources of *burnout* include one or more of the following factors: workload (too much work, not enough resources); control (micromanagement, lack of influence, accountability without power); rewards (not enough salary, recognition, or satisfaction); community (isolation, conflict, disrespect); justice (discrimination, favoritism); and values (ethical conflict, meaningless tasks).

Etiopathogenesis

1. Job-Demand Control Model

This model, developed by Robert Karasek in 1979, is a theoretical framework that explains the relationship between job demands and job control to work stress, which can lead to burnout. Job demands refer to the workload that an individual must complete, high job demands will increase the risk of stress and fatigue. Job control refers to the degree of freedom that individuals have to regulate the way they work, set their own schedules and targets and use skills on the job. A high level of control can help individuals cope with the stress that arises from the demands of work.

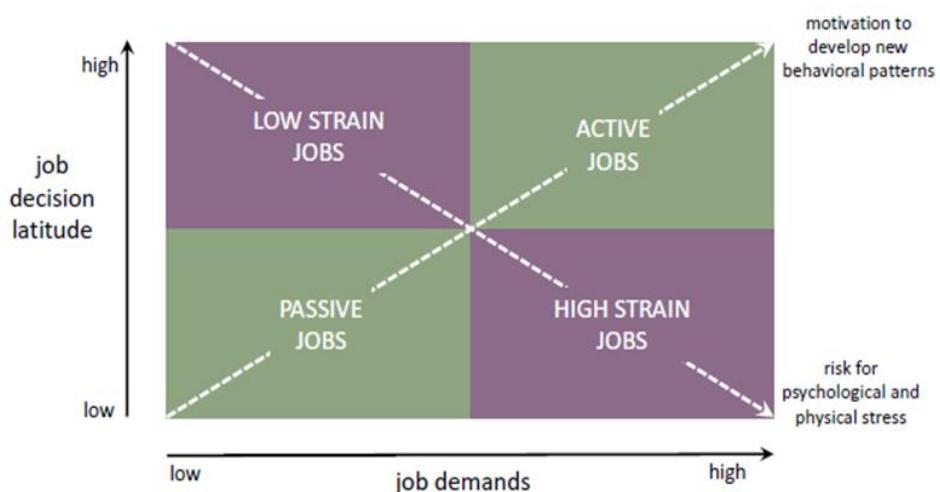


Figure 6 The job demand-control model, introduced by Karasek in 1979 focuses on the balance between the magnitude of the demands (height of strain) and the level of control (decision latitude) in a person's work situation.²²

Figure 1. Type Job Demand – Control (Karasek, 1979)

The four categories of working conditions in the Job-Demand Control Model are: a) Low-strain jobs where the job demand is low but the level of control is high as in creative workers. This type is the least at risk of causing burnout. b) High-Strain Jobs where job demands are high but control is low as in production workers. This type is most at risk of causing burnout. c) Active Jobs where the demands of the job are high but the control is also high like in the Doctor, although stress can arise a high level of control can help individuals find ways to overcome challenges resulting in satisfaction and growth. d) Passive Jobs where job demands are low and control is also low. This condition often leads to boredom and a lack of motivation to grow.

2. Model Effort – Reward Imbalance

This model was proposed by Johannes Siegrist in 1996 and is often used to understand work-related health risks. Defined as the mismatch between high effort and inappropriate rewards, over a long period of time. Effort is any form of physical, mental, or emotional energy that a person devotes to fulfilling the demands of a job. Awards include salary rewards, recognition or endorsement from co-workers and superiors, and career.

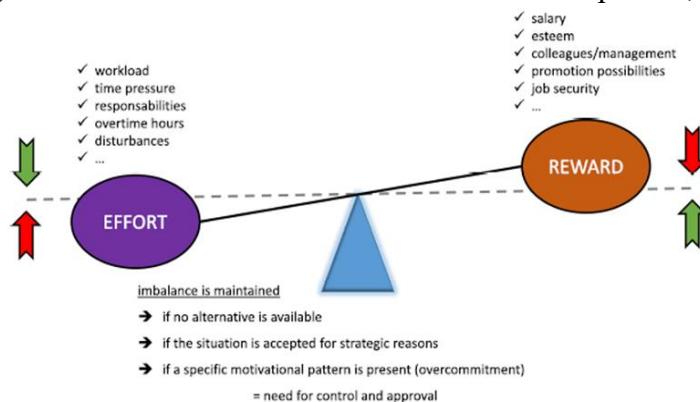


Figure 2. The effort-reward imbalance model, proposed by Siegrist in 1996 defines threatening job conditions as a mismatch between high demand (high workload) and low control over long-term rewards.²³

Figure 2. Type Effort – Reward Imbalance (Johannes Siegrist, 1996)

3. Model Organization Injustice

A concept that refers to employees' perception of injustice in the organization, which has a significant effect on their motivation, job satisfaction, and behavior. The concept of organizational fairness was first introduced by Jerald Greenberg in 1987, which examines how employees assess and react to the treatment they receive in the workplace. Organizational fairness encompasses four key aspects: a) Distributive Justice: Focus on fairness in the sharing of revenues, such as salaries or promotions. b) Procedural Fairness: Relating to the fairness of the decision-making process. c) Interpersonal Justice: Assessing the quality of interactions between individuals, such as respect and good manners. d) Informational Fairness: Concerns the transparency and completeness of the information received by employees.

Burnout Management

Burnout management is a series of strategies and actions designed to address the emotional, mental, and physical fatigue that often arises as a result of prolonged stress, especially at work or in demanding activities. Burnout management, according to experts,

focuses on scientific approaches and evidence-based practices to address fatigue caused by chronic stress. Here are some expert views and the approaches they offer:

1. Christina Maslach: A Psychological Perspective

Christina Maslach, a social psychologist known as the Maslach Burnout Inventory (MBI), states that burnout consists of three main dimensions: a) Emotional exhaustion: Feeling emotionally drained. b) Depersonalization: A cynical attitude or indifference to work or others. c) Decreased personal achievement: Feeling less effective or productive.

Management strategy according to Maslach: a) Focus on improving the work environment, such as better communication between management and employees. b) Reduced workload to prevent excessive stress. c) Provide social support, both to colleagues and their families. Support from colleagues and participatory leadership can significantly reduce emotional burnout.

2. Herbert Freudenberger: Treatment of Chronic Fatigue

Herbert Freudenberger, the originator of the term "burnout," defined it as a state of emotional, mental, and physical exhaustion caused by excessive demands and an imbalance between expectations and outcomes.

Freudenberger's recommendations: a) Conduct a self-assessment to identify the root cause of burnout. b) Practice self-care, such as regular exercise, meditation, and a healthy diet. c) Regular breaks to restore energy, both physical and emotional.

3. Dr. Michael Leiter: Focus on Relationships and the Environment

Michael Leiter, a burnout expert and colleague of Christina Maslach, suggested that interpersonal relationships in the workplace greatly affect the risk of burnout.

Leiter's Approach: a) Improve relationships between employees through communication and teamwork training. b) Increase appreciation and recognition for employee contributions. c) Create an inclusive and supportive work culture.

4. Richard S. Lazarus: Stress Management

According to Lazarus, burnout is the result of chronic stress that is not managed. He introduced the concept of transactional stress theory, which highlights the importance of the way one evaluates stress.

Lazarus' Strategy: a) Use coping strategies, such as problem-focused coping and emotion-focused coping (managing emotional responses to stress). b) Practice resilience, which is the ability to bounce back after facing pressure.

5. WHO (World Health Organization): A Holistic Approach

The WHO classifies burnout as an occupational phenomenon in ICD-11, emphasizing the importance of a systemic approach to managing it.

WHO Recommendations: a) Promote work-life balance. b) Implement workplace policies that support mental health. c) Facilitate access to psychological support, such as counseling or the Employee Assistance Program (EAP).

6. Cary Cherniss: Organizational Intervention

Cary Cherniss, an organizational psychologist, emphasizes that burnout is more effectively managed if the organization takes responsibility.

Cherniss Recommendation: a) Reduce role conflicts and provide clear direction. b) Provide stress management training to employees. c) Encourage the development of emotional balance through mindfulness training.

According to Hamming (2018), individuals use various ways or strategies to respond to or cope with high workloads and chronic work stress. American psychologists Richard S. Lazarus and Susan Folkman in cognitive stress theory wrote about how to deal with stress that focuses on problems and emotions (Lazarus, R.S., and Folkman, S., 1984). According to this theory, there are in principle two ways to cope with reactions to work stress, modifying stressful working conditions: emotional regulation (e.g. emotional dissociation and withdrawal) or the elimination of stressors (e.g. quitting a job or leaving a profession).

Another way is to remain exposed to workload and work pressure but when you feel that you are starting to get pressure out of bounds, allow yourself to "calm down" and distance yourself emotionally to maintain one's work function (Büssing A, et al., 2017). Another adaptive strategy is to avoid or reduce prolonged work stress by changing jobs or organizations, if this does not help solve the problem, then the last solution is to leave the job. It is not without reason that the risk of burnout and turnover of medical personnel is one of the most frequently re-examined and learned outcomes in hospital management. Both stress reactions, burnout and intention to leave, are major challenges for the healthcare system.

To reduce the risk of burnout, intervention programs should be aimed at reducing workers' experiences of stress and, subsequently, should be directed at individuals and organizations. Following Leiter and Maslach's approach, in controlling the risk of burnout, healthcare managers must devise strategies aimed at reducing workers' workloads and increasing their sense of control. Maslach and Leiter argue that organizational interventions aimed at reducing the risk of burnout should be framed according to the dimensions considered (burnout, cynicism, or a sense of efficacy). These authors develop a model that proposes the existence of organizational interventions by considering policies and practices capable of shaping six key areas of work life (manageable workload, job control, rewards, community, fairness, and values). The results of this study show that organizations will benefit from interventions aimed at reducing workload and encouraging work control.

There is a widespread belief that "preventing fatigue is a better strategy than waiting to treat it after it has become a problem". In fact, beyond the impact on the health of individual workers, burnout also poses risks to others, in the form of work accidents, injuries, and deaths. Additionally, there are unexplored issues related to the crossover effects of burnout. Specifically, it concerns interpersonal processes that occur when the work stress experienced by one person affects the level of tension experienced by others in the same social environment. Thus, the crossover effect illustrates the contagious effects of burnout among professionals in the same work environment.

The well-being of health workers depends on the quality of their work environment. In the last 30 years, many researchers have been able to identify factors that contribute to work burnout. The results of current research demonstrate the importance of developing organizational management practices that enable job control and provide employees with resources to reduce the risk of burnout.

Recommendations

1. Stress management

Use coping strategies, such as problem-focused coping and emotion-focused coping (managing emotional responses to stress). Implement a rolling system, to prevent saturation in work. Organizational Intervention. Provide stress management training to employees. Improve

relationships between employees through communication training. Increase appreciation and recognition for employee contributions. Create a comfortable work atmosphere, an inclusive and supportive work culture. Support from colleagues and participatory leadership can significantly reduce emotional fatigue. Reduce role conflicts and provide clear direction.

2. Reduce workload.

When job resources are limited, it can pose a major challenge for healthcare managers. However, in cases where it is difficult to hire new employees due to economic and regulatory constraints, managers can temporarily reduce the workload by providing employees with flexible schedules, such as floating labor (especially applicable to nurses). Healthcare managers can increase workers' sense of control by promoting their autonomy in the workplace. In fact, work autonomy is considered an important coping strategy in reducing the workload.

3. Promote Job-Control

The main finding of this article is the noteworthy moderation effect of job control on the relationship between workload and burnout. This interaction is considered one of the most controversial aspects of Karasek and Theodore's theory. This positive relationship between workload and fatigue is strongest when job control is lower. In this sense, workload and job control play a crucial role in improving working conditions. Job control can protect workers from burnout when workload increases. The findings of Pothogese (2014) show that high workloads do not pose a major concern when workers have adequate job controls.

CONCLUSION

At Hospital X, 37.8% of nurses experienced moderate to severe Burnout Syndrome, primarily driven by emotional exhaustion, which is exacerbated by factors such as work duration, education, position, and workload perceptions. Support from superiors and colleagues effectively reduces work stress and emotional fatigue, mitigating burnout incidence, while organizational stressors like these necessitate targeted prevention strategies to safeguard nurse performance and overall health. A comprehensive management approach—combining individual stress management, self-care, social support, workload optimization, and organizational interventions (e.g., fostering a comfortable atmosphere, rewarding contributions, and enhancing job control)—proves essential for effective prevention. For future research, longitudinal studies could investigate the long-term efficacy of tailored job control interventions on burnout rates among nurses in similar Indonesian hospital settings, incorporating quantitative measures of emotional exhaustion alongside qualitative insights from nurse experiences.

REFERENCES

Ahola, K., Honkonen, T., Isometsä, E., Kalimo, R., Nykyri, E., Aromaa, A., & Lönnqvist, J. (2005). The relationship between job-related burnout and depressive disorders: Results from the Finnish Health 2000 Study. *Journal of Affective Disorders*, 88(1), 55–62. <https://doi.org/10.1016/j.jad.2005.06.004>

Ayudytha, A. U. (2019). *Factors that affect burnout in nurses in the inpatient room of PMC Hospital. Real in Nursing Journal*.

Büssing, A., Falkenberg, Z., Schoppe, C., Recchia, D. R., & Poier, D. (2017). Work stress associated cool down reactions among nurses and hospital physicians and their relation to

burnout symptoms. *BMC Health Services Research*, 17(1), 551. <https://doi.org/10.1186/s12913-017-2445-3>

Cañadas-De la Fuente, G. A., Vargas, C., San Luis, C., García, I., Cañadas, G. R., & De la Fuente, E. I. (2015). Risk factors and prevalence of burnout syndrome in the nursing profession. *International Journal of Nursing Studies*, 52(1), 240–249. <https://doi.org/10.1016/j.ijnurstu.2014.07.001>

Cherniss, C. (1980). *Professional burnout in human service organizations*. Praeger.

Chowdhury, S. R., Kabir, H., Akter, N., Iktidar, M. A., Roy, A. K., Chowdhury, M. R., & Hossain, A. (2023). Impact of workplace bullying and burnout on job satisfaction among Bangladeshi nurses: A cross-sectional study. *Helijon*, 9(2), e13162. <https://doi.org/10.1016/j.helijon.2023.e13162>

de Oliveira, G. S., Chang, R., Fitzgerald, P. C., Almeida, M. D., Castro-Alves, L. S., Ahmad, S., & McCarthy, R. J. (2013). The prevalence of burnout and depression and their association with adherence to safety and practice standards: A survey of United States anesthesiology trainees. *Anesthesia & Analgesia*, 117(1), 182–193. <https://doi.org/10.1213/ANE.0b013e3182917da9>

Freudenberg, H. J. (1975). The staff burn-out syndrome in alternative institutions. *Psychotherapy: Theory, Research & Practice*, 12(1), 73–82. <https://doi.org/10.1037/h0086411>

Gillies, D. A. (1998). *Nursing management: A systems approach* (3rd ed.). W. B. Saunders.

Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review*, 12(1), 9–22. <https://doi.org/10.5465/amr.1987.4306437>

Hämmig, O. (2018). Explaining burnout and the intention to leave the profession among health professionals: A cross-sectional study in a hospital setting in Switzerland. *BMC Health Services Research*, 18(1), 785. <https://doi.org/10.1186/s12913-018-3556-1>

Jahari, J. (2019). Effect of workload, work environment, work stress on employee performance of private universities in Bandung, Indonesia. *International Journal of Science and Society*, 1(2). <https://doi.org/10.54783/ijsc.v1i2.15>

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285–308. <https://doi.org/10.2307/2392498>

Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. Basic Books.

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. <https://doi.org/10.3390/ijerph120100652>

Komsatun, K., Nasution, S., & Nurzam, N. (2021). The effect of workload and work environment on employee performance at the Regional Secretariat of Seluma Regency. *Journal of Indonesian Management*, 1(4). <https://doi.org/10.53697/jim.v1i4.333>

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.

Lee, H. F., Yen, M., Fetzer, S., & Chien, T. W. (2015). Predictors of burnout among nurses in Taiwan. *Community Mental Health Journal*, 51(6). <https://doi.org/10.1007/s10597-014-9818-4>

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123–133. <https://doi.org/10.1037/0021-9010.81.2.123>

Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, 17(3), 331–339. <https://doi.org/10.1111/j.1365-2834.2009.01004.x>

Maslach, C. (1982). *Burnout: The cost of caring*. Prentice-Hall.

Maslach, C. (1993). Burnout: A multidimensional perspective. Dalam W. B. Schaufeli, C. Maslach, & T. Marek (Ed.), *Professional burnout: Recent developments in theory and research* (hlm. 19–32). Taylor & Francis.

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99–113. <https://doi.org/10.1002/job.4030020205>

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>

Mealer, M., Burnham, E. L., Goode, C. J., Rothbaum, B., & Moss, M. (2009). The prevalence and impact of posttraumatic stress disorder and burnout syndrome in nurses. *Depression and Anxiety*, 26(12), 1118–1126. <https://doi.org/10.1002/da.20631>

Oyekunle, A. A. (2022). Social predictors of burnout among nurses in a Nigerian teaching hospital. *International Journal of Clinical Science and Medical Research*, 2.

Ridwan, G. R., Irawati, S., & Praharjo, A. (2022). The effect of workload and work environment on employee performance and work stress as intervening variable. *Jamanika (Jurnal Manajemen Bisnis dan Kewirausahaan)*, 2(1). <https://doi.org/10.22219/jamanika.v2i1.20737>

Sabancıoğlu, S., & Doğan, S. (2015). Effects of the professional identity development programme on the professional identity, job satisfaction and burnout levels of nurses: A pilot study. *International Journal of Nursing Practice*, 21(6), 847–857. <https://doi.org/10.1111/ijn.12330>

Sari, N. K. (2014). *Gambaran tingkat burnout pada perawat di Rumah Sakit Umum Pusat Haji Adam Malik Medan* [Skripsi sarjana tidak dipublikasikan]. Universitas Sumatera Utara.

Sari, N. K. (2015). *Burnout ditinjau dari persepsi terhadap beban kerja pada perawat* [Skripsi sarjana tidak dipublikasikan]. Universitas Sumatera Utara.

Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1(1), 27–41. <https://doi.org/10.1037/1076-8998.1.1.27>

Suka Anjasmara, I. K. A., Jata, I. W., Adyatma, P., & Santi Diwyarthi, N. D. M. (2025). Pengaruh beban kerja dan lingkungan kerja terhadap kinerja karyawan di Hotel Pale. *Jurnal Multidisiplin West Science*, 4(8). <https://doi.org/10.58812/jmws.v4i08.2523>

Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 20(4), 316–334. <https://doi.org/10.1080/02678370601065893>

Undang-Undang Republik Indonesia Nomor 17 Tahun 2023 tentang Kesehatan. (2023). Sekretariat Negara.

Winoto, S. C. N. C. R., & Perkasa, D. H. (2024). Pengaruh beban kerja, stres kerja dan lingkungan kerja terhadap kinerja karyawan UP PKB Pulogadung. *Revenue: Lentera Bisnis Manajemen*, 2(1). <https://doi.org/10.59422/lbm.v2i01.86>

Wardah, A., & Tampubolon, M. (2020). Faktor-faktor yang berhubungan dengan kejadian burnout perawat di Rumah Sakit Santa Maria Pekanbaru. *Nursing Arts*, 14(1), 43–54.



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