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The Relationship Between Social Support and Burnout Among Nurses at 'Aisyiyah Bojonegoro Hospital, East Java, Indonesia

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ABSTRACT

Background: Hospitals are expected to create a work environment that is safe, comfortable, and supportive of employees' well-being. This study aims to identify the factors that contribute to burnout among nurses, including those originating from the work environment as well as individual factors.

Subjects and Method: This study employed an analytical quantitative design with a cross-sectional approach at 'Aisyiyah Bojonegoro Hospital. A total of 114 nurses were selected using a simple random sampling technique. The dependent variable in this study was the level of burnout, while the independent variables included sociodemographic characteristics (age, gender, highest educational attainment, marital status, length of employment, and employment status) and social support. Data were collected using a structured closed-ended questionnaire, and data analysis was conducted using the Spearman's rho test.

Results: The results of the analysis showed that social support had a significant effect on burnout (b= 0.04; 95% CI: 0.01–0.13; p < 0.001), and gender was also significantly associated with burnout (p= 0.028). In contrast, other variables, including age, educational level, marital status, length of employment, and employment status, did not show a statistically significant association with burnout. Social support emerged as the primary contributing factor in this study. Higher levels of social support were associated with a greater likelihood of positive outcomes, particularly a reduction in burnout levels.

Conclusion: There is a significant relationship between social support and burnout, with a negative correlation direction, indicating that higher levels of social support are associated with lower levels of burnout. Meanwhile, gender also demonstrates a significant difference in burnout outcomes. The researchers recommend that hospitals implement regular stress management programs, as well as communication and interpersonal skills training, to help reduce burnout among nurses and enhance their overall well-being.

Keywords: burnout, support social, social demographics, nurses

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BACKGROUND

Burnout is a global issue that continues to receive serious attention, particularly among healthcare professionals, especially nurses. A study conducted in Andalusia, Spain, reported that 674 (80%) of the nurses surveyed experienced high levels of burnout. This condition is closely related to personality traits, such as being prone to anxiety or social withdrawal, and is influenced by the levels of anxiety and depression experienced by individuals (Ramirez-Baena et al., 2019).

Burnout can lead to various negative consequences, including frustration, feelings of rejection by the surrounding environment, decreased job performance, weakened patient safety culture, increased rates of hospital-acquired infections, and other adverse incidents (Li et al., 2024).

The increasing demands of healthcare services require hospitals to pay greater attention to employee well-being. Social support is one of the important factors in preventing burnout. Social support encompasses comfort, care, appreciation, self-esteem enhancement, and various forms of assistance received by individuals. The presence of such support can create a more positive and supportive work environment, thereby reducing the risk of burnout (Andersen et al., 2025).

In Indonesia, nurses also experience considerable work-related pressure. A survey conducted by the Indonesian National Nurses Association (PPNI) in 2021 revealed that 50.9% of nurses in four provinces, including East Java, experienced fatigue, work-related stress, and difficulties obtaining adequate rest due to excessive workloads (Jundillah et al., 2024). These findings indicate that stressful working conditions can become a major trigger for burnout among nursing personnel.

Similar conditions have also been identified at 'Aisyiyah Bojonegoro Hospital. Based on interviews conducted with the Head of Nursing, primary data indicated that nurses at the hospital experience burnout due to continuous and recurring stressors. In addition, nurses who work in the same ward or unit for extended periods are particularly vulnerable to occupational burnout. Secondary data from previous studies further support these findings, showing that burnout among nurses at the hospital falls within the high category, with an average burnout score of 3.44 (Devitryanty, 2022).

Research has shown that healthcare and social service professions have some of the highest rates of burnout, reaching approximately 43%. Among healthcare professionals, nurses experience higher levels of stress than physicians and pharmacists (Adawiyah et al., 2018). As frontline healthcare providers, nurses play a critical role in maintaining the quality of hospital services. However, in practice, nurses are frequently exposed to high work demands, repetitive tasks, and emotionally demanding interactions with patients and their families. These conditions make them particularly vulnerable to burnout, which, if left unaddressed, may adversely affect nurses' physical and mental health, reduce job performance, and ultimately diminish the quality of healthcare services delivered to the public (Andhani, 2023).

Social support from spouses, supervisors, and coworkers plays an important role in mitigating symptoms of burnout. Such support includes feelings of being valued, loved, and cared for, which can

strengthen nurses' psychological resilience in coping with occupational stress (Velando-Soriano et al., 2020). Therefore, it is essential for hospitals to address this issue through policies and programs that support the well-being of nursing staff. Accordingly, the present study aims to examine the relationship between social support and burnout among nurses at 'Aisyiyah Bojonegoro Hospital.

SUBJECTS AND METHOD

1. Study Design

This study employed a cross-sectional approach using a quantitative correlational research design to examine the relationship between social support and burnout among nurses at 'Aisyiyah Bojonegoro Hospital. The cross-sectional approach involved measuring both the independent and dependent variables simultaneously at a single point in time without any follow-up intervention. The study was conducted from November 2024 to July 2025.

2. Population and Sample

This study involved nurses working at 'Aisyiyah Bojonegoro Hospital. From a total population of 159 nurses, 114 nurses were selected as study participants using a sample size determined by Slovin's formula, taking into account the average number of patients served. Data collection was conducted based on predefined inclusion and exclusion criteria to ensure the representativeness and validity of the data.

The inclusion criteria comprised active nurses employed at 'Aisyiyah Bojonegoro Hospital during the study period. The exclusion criteria included nurses who did not meet the participation requirements or were unable to participate based on the study considerations.

3. Study Variables

The independent variable in this study was social support, measured based on Sarafino's theory, which comprises four dimensions: emotional support, instrumental support, informational support, and appraisal support. The dependent variable was burnout, measured using Maslach's theory, which includes three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment.

4. Operational Definition of Variables

Support Social refers to all forms of comfort, attention, appreciation, affection, and assistance provided to an individual by other people or groups. In this study, social support was measured as a factor that may influence the level of burnout among nurses.

Burnout is a psychological syndrome that occurs at the individual level and consists of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. In this study, burnout was measured as an outcome among nurses working in human service professions

5. Study Instruments

Social support was assessed using a questionnaire developed based on Sarafino's theoretical framework, which evaluates various forms of social support perceived by individuals. Burnout was measured using the Maslach Burnout Inventory (MBI), a widely recognized and validated instrument for assessing burnout. The MBI was translated into Indonesian and adapted to the study context. The instrument measures three core dimensions of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment.

6. Data analysis

Data analysis was conducted after the assumptions required for statistical testing had been satisfied. Hypothesis testing was performed using Spearman's rho correlation test, which is appropriate for ordinal-scale data. This test was selected because it

is suitable for measuring the strength and direction of the relationship between two variables when at least one variable is measured on an ordinal scale. The correlation coefficient was calculated based on ranked data rather than actual values. The interpretation of Spearman's rho results was based on the statistical significance level ($p < 0.05$) and the magnitude of the correlation coefficient. Multivariate analysis was performed using a logistic regression model to identify factors associated with burnout. Statistical significance was determined at a 95% confidence interval (CI) with a significance level of $p < 0.05$.

7. Research Ethics

Ethical approval for this study was obtained from the Ethics Committee of 'Aisyiyah Bojonegoro Hospital (Approval No. 004/K-E.RSA/2025), issued on June 5, 2025, prior to the initiation of data collection. The study was conducted in accordance with established ethical principles for research involving human participants.

RESULTS

1. Sample Characteristics

The demographic characteristics of the respondents are presented in Table 1. Most participants were between 36 and 45 years of age (57%). Female nurses constituted the majority of the sample (65.79%). With respect to educational background, most respondents held a Bachelor of Nursing degree (93.86%). The majority were married (90.35%). In terms of work experience, 73.68% of respondents had been employed for more than 11 years. Furthermore, most participants were permanent employees (85.09%).

Table 1. Demographic Characteristics of Respondents at 'Aisyiyah Bojonegoro Hospital

Characteristic	Category	Frequency (n)	Percentage (%)
Age	24-35 Years	38	33
	36-45 Years	65	57
	46-55 Years	11	10
Gender	Male	75	34.21
	Female	39	65.79
Last education	Diploma III in Nursing	6	5.26
	Bachelor of Nursing	107	93.86
	Master of Nursing	1	0.88
Marital status	Not married yet	7	6.14
	Marry	103	90.35
	Others	4	3.51
Length of work	2-5 Years	18	15.79
	6-10 Years	12	10.53
	>11 Years	84	73.68
Employee Status	Permanent	97	85.09
	Contract	3	2.63
	Temporary	14	12.28

2. Bivariate Analysis

Table 2 presents the associations between respondents' characteristics and levels of social support and burnout among nurses. Regarding social support, none of the respondents' characteristics were significantly associated with social support levels. Age was not significantly associated with social support (OR=1.20; p=0.535). Most respondents aged 32–49 years

reported both moderate social support (n=28) and high social support (n=28). Similarly, gender showed no significant association with social support (OR=0.67; p= 0.331), with female nurses representing the majority of respondents in both the moderate (n=36) and high (n=39) social support groups.

Educational level was not significantly associated with social support (OR=0.47; p=0.235). Most respondents had a Bachelor of Nursing degree, accounting for 50 nurses in the moderate social support group and 57 nurses in the high social support group. Marital status was also not significantly associated with social support (OR=0.54; p=0.464). Married nurses constituted the largest proportion of respondents in both the moderate (n=45) and high (n=58) social support categories.

Likewise, tenure (OR=1.19; p=0.601) and employment status (OR=1.17; p=0.737) were not significantly associated with social support. Nurses with more than 11 years of work experience represented the largest proportion in both the moderate (n=36) and high (n=48) social support groups, while permanent employees comprised the majority of respondents across social support categories.

In terms of burnout, gender was the only characteristic significantly associated with burnout levels (OR=2.75; p=0.031). Female nurses accounted for a greater proportion of moderate burnout cases (n= 39) compared with male nurses (n= 12), indicating that burnout levels differed significantly according to gender.

In contrast, age was not significantly associated with burnout (OR=1.05; p= 0.644). The majority of respondents aged 32–49 years were observed in both the low burnout (n=28) and moderate burnout (n=28) groups. Educational level also showed no significant association with burnout (OR=3.18; p=0.235), despite most respondents holding a Bachelor of Nursing degree.

Furthermore, marital status (OR= 2.07; p= 0.329), tenure (OR= 0.98; p= 0.973), and employment status (OR=0.82; p=0.589) were not significantly associated with burnout levels. Married nurses, nurses with more than 11 years of work experience, and permanent employees constituted the largest proportions in both low and moderate burnout groups.The results of the Spearman's rho correlation analysis demonstrated a statistically significant association between social support and burnout among nurses (r= -0.714, p < 0.001). The correlation coefficient indicates a strong negative relationship, suggesting that increased levels of perceived social support are associated with reduced burnout levels. Conversely, lower levels of social support are associated with higher levels of burnout.

Table 2. Association Between Respondents' Characteristics and Levels of Social Support and Burnout Among Nurses

Variables	Social Support		OR	p	Burnout		OR	p
	Moderate N	High N			Low N	Moderate N		
Age								
24-31 Years	8	10			12	6		
32-49 Years	28	28	1.20	0.535	28	28	1.05	0.644
40-57 Years	14	21			20	15		
48-55 Years	1	4			3	2		
Gender			0.67	0.331			2.75	0.031

Variables	Social Support		OR	p	Burnout		OR	p
	Moderate N	High N			Low N	Moderate N		
Male	15	24			27	12		
Female	36	39			36	39		
Education			0.47	0.235				
Diploma III in Nursing	1	5			5	1	3.18	0.235
Bachelor of Nursing	50	57			57	50		
Master of Nursing	0	1			1	0		
Marital status								
Not married yet	3	4	0.54	0.464	5	2	2.07	0.329
Marry	45	58			57	46		
Others	3	1			1	3		
Tenure								
2-5 Years	10	8	1.19	0.601	10	8	0.98	0.973
6-10 Years	5	7			7	5		
>11 Years	36	48			46	38		
Employee Status								
Permanent	43	54	1.17	0.737	53	44	0.82	0.589
Contract	2	1			1	2		
Temporary	6	8			9	5		

Table 3. Association Between Social Support and Burnout Among Nurses

Variables	r	p
Social Support	-0.71	<0.001

3. Multivariate Analysis

Table 4 showed that social support was identified as a significant predictor of burnout (b= 0.04; 95% CI= 0.01 to 0.13; p < 0.001), indicating that higher levels of perceived social support were associated with a lower likelihood of experiencing burnout. Gender also showed a significant association with burnout (OR = 3.64; 95% CI= 1.15 to 11.51; p = 0.028), suggesting a difference in burnout risk between male and female nurses. Age, educational level, marital status, length of employment, and employment status were not significantly associated with burnout. These findings suggest that social support is the most influential factor associated with burnout in this study, highlighting its importance as a protective factor against occupational burnout among nurses.

Table 4. Multivariate logistic regression of variables associated with burnout among nurses

Independent Variable	b	95% CI		p
		Lower Limit	Upper Limit	
Support Social	0.04	0.01	0.13	<0.001
Age	1.30	0.52	3.27	0.569
Gender	3.64	1.15	11.51	0.028
Last education	3.24	0.36	29.18	0.295
Marital status	1.91	0.29	12.48	0.496
Length of work	1.17	0.43	3.16	0.744
Employee Status	0.84	0.31	2.25	0.734

DISCUSSION

Based on the results of the bivariate analysis, a significant relationship was found between social support and burnout among nurses at 'Aisyiyah Bojonegoro Hospital. The correlation coefficient of -0.714 indicates a strong negative relationship, suggesting that higher levels of perceived social support are associated with lower levels of burnout, and vice versa. Furthermore, the multivariate analysis showed that social support was significantly associated with burnout, indicating that greater social support reduces the risk of burnout. Gender was also found to be significantly associated with burnout. In contrast, age, educational attainment, marital status, length of employment, and employment status were not significantly associated with burnout.

These findings are consistent with Maslach's theory (Dewi, 2019), which states that burnout is characterized by three primary dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. One of the factors contributing to burnout is social support, which generally refers to assistance provided by individuals closest to nurses, including family members, coworkers, supervisors, and friends (Moisoglou et al., 2024).

The findings are also supported by the study conducted by Wu et al. (2023), which reported that inadequate social support increases the likelihood of burnout among nurses. In the nursing profession, which requires intensive interpersonal interaction and emotional engagement, social support plays a crucial role in maintaining psychological and emotional stability.

From an organizational perspective, a work environment that provides strong social support fosters a positive climate and enhances job satisfaction. This finding is supported by Nie et al. (2015), who found that nurses with higher levels of social support experienced significantly lower levels of burnout. Similarly, Innab et al. (2025) reported that the quality of social interactions in the workplace is a critical factor influencing the emotional resilience of healthcare workers. Therefore, it can be concluded that higher levels of social support are associated with lower levels of burnout among nurses. Interventions such as communication skills training, supportive leadership development, and the promotion of a collaborative work culture may serve as effective strategies for reducing burnout in a systematic and sustainable manner.

Burnout may also be mitigated through regular peer-sharing sessions that facilitate the exchange of knowledge, experiences, and professional insights among nurses. In addition, professional development activities, such as training in the use of medical equipment and stress management programs, can help nurses improve their ability to manage occupational stress and regulate their emotions effectively (Solikhiyah, 2025).

According to Sarafino's theory, social support consists of four key dimensions: emotional support, instrumental support, informational support, and appraisal support (Pasinringi et al., 2022). Emotional support provided by supervisors and colleagues helps nurses feel valued and understood, thereby enhancing self-efficacy and strengthening coping mechanisms when facing workplace challenges. When nurses receive adequate social support, they are more likely to perform their duties effectively and achieve higher levels of well-being (Rahmawati, 2020).

This study reinforces previous findings indicating that nurses with low levels of social support are at greater risk of experiencing burnout, which may ultimately reduce the quality of patient care. There-

fore, healthcare institutions should prioritize the development of supportive work environments and establish adequate social support systems for nursing personnel to promote their well-being and reduce the risk of occupational burnout.

AUTHOR CONTRIBUTION

AFN is the principal investigator of this study and was responsible for determining the research topic, conducting the study, collecting the data, and drafting the manuscript. S, SM, and SFR contributed to data collection and field implementation. PAW, SM, and AU reviewed the first draft of the manuscript and provided methodological guidance throughout the research process. SFR, S, and AU contributed to data analysis, interpretation of the findings, and organization of the research data. PAW, SM, and AU conducted the scientific evaluation and critical review of the manuscript and provided valuable feedback for its improvement. All authors have read and approved the final version of the manuscript.

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CONFLICT OF INTEREST

There are no conflicts of interest.

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