

Determinants Of Nurses' Job Satisfaction: A Cross-Sectional Study In An Indonesian Public Hospital

Determinan Kepuasan Kerja Perawat: Studi Cross-Sectional di Rumah Sakit Umum Indonesia

Aida Rachmiana ^{1*}

Suryadi ²

^{1,2} Universitas Islam Negeri Ar-Raniry
Banda Aceh, Aceh, Indonesia

*email: aida.rachmiana@ar-raniry.ac.id

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Abstract

Job satisfaction is a key element in achieving optimal performance and quality of care among nurses, particularly in public healthcare institutions where structural and psychological challenges often intersect. This study aims to identify and analyze six workplace factors, such as job characteristics, promotion opportunities, working conditions, salary, supervision, and peer relationships, that influence nurses' job satisfaction at Meuraxa General Hospital in Banda Aceh, Indonesia. A quantitative, cross-sectional study was conducted involving 77 civil servant nurses selected through total sampling. Data were collected using a structured questionnaire and analyzed using bivariate and multivariate linear regression. The results revealed that job characteristics, salary, and peer relationships had a statistically significant positive effect on job satisfaction in both bivariate and multivariate models. In contrast, promotion, supervision, and working conditions were significant only in the bivariate analysis, suggesting their influence diminishes when analyzed alongside stronger variables. The study concludes that meaningful job design, fair compensation, and collegial support are essential drivers of job satisfaction in the nursing profession. These findings offer valuable input for hospital management and policymakers to enhance nurse engagement, reduce turnover, and improve service quality. Future research may expand to include qualitative perspectives and explore these dynamics across various healthcare settings in Indonesia.

INTRODUCTION

Hospitals serve as a crucial pillar in healthcare systems, providing essential services to improve the health and well-being of individuals and communities. As complex organizations, hospitals integrate advanced technologies and skilled personnel to manage medical needs efficiently (Alarjani et al., 2020; Alkhathami et al., 2019; Bhati et al., 2023; Haleem et al., 2022). Among healthcare professionals, nurses represent the largest and most visible workforce, delivering round-the-clock patient care (AL-hrinat et al., 2024; Kumar et al., 2023). The quality of care delivered by nurses has been directly linked to their psychological well-being and job satisfaction (Abdullah et al., 2021; Huhtala et al., 2021; Sönmez et al., 2023). Job satisfaction, therefore, becomes a central concern not only for employee retention but also for

maintaining high standards of care and patient outcomes (Aman-Ullah et al., 2022; Hoxha et al., 2024; Stemmer et al., 2022)

Job satisfaction is generally defined as a positive emotional state resulting from the appraisal of one's job or job experiences (Adamopoulos, 2022; Chitra & Karunanidhi, 2021; Dreer, 2024; Judge et al., 2023). It is influenced by a range of individual and organizational factors, including working conditions, compensation, supervision, promotion opportunities, and relationships with colleagues (Adamopoulos & Syrou, 2022; Karaferis et al., 2022; Thant & Chang, 2021). In the context of nursing, job satisfaction is further complicated by emotional labor, high workloads, and the need for professional autonomy, all of which can either enhance or diminish a nurse's engagement with their work (Altaş et al., 2024; Maghsoud et al., 2022).

Numerous studies across various countries have examined determinants of job satisfaction among nurses. For instance, a cross-sectional study in China by Xu et al. (2023) found that nurses' satisfaction was significantly related to organizational support, working conditions, and interpersonal relationships. Similarly, Phommavong (2025) emphasized the role of job characteristics and conflict resolution mechanisms in shaping satisfaction among healthcare workers in Laos. Meanwhile, in Turkey, Davras and Aktürk (2024) demonstrated that compensation and supervision were among the most highly correlated human resource practices with job satisfaction. These findings suggest that job satisfaction is multidimensional and culturally contextual, making it a dynamic construct worthy of localized exploration.

Despite the growing body of literature on this topic, few studies in Indonesia, particularly in Aceh Province, have explored the combined influence of multiple workplace factors on nurses' job satisfaction. Furthermore, the interplay between internal motivators (e.g., job content, autonomy) and external factors (e.g., salary, supervision) within Indonesian public hospitals has not been sufficiently analyzed using an integrated framework. This presents a research gap that warrants systematic investigation, especially in light of ongoing challenges in public healthcare staffing and quality assurance (Kamirullah et al., 2024; Liu et al., 2023; Ratri, 2023).

This study adopts a comprehensive approach to examine how six factors, job characteristics, promotion opportunities, working conditions, salary, supervision, and peer relationships, contribute to nurses' job satisfaction. The research is conducted at Meuraxa General Hospital, a public healthcare facility in Banda Aceh, Indonesia, which serves as a critical referral hospital for the region. By applying both bivariate and multivariate statistical analyses, this study aims to identify the most influential factors and how

they interrelate, providing valuable insights for hospital management and policy-making.

The findings of this research are expected to contribute to the theoretical understanding of job satisfaction among nurses in developing countries and to offer practical recommendations for improving workforce retention and service quality. Ultimately, this study seeks to answer the following question: *Which workplace factors most significantly affect nurses' job satisfaction, and how can they be optimized to enhance performance and organizational commitment?*

RESEARCH METHODS

Research Design

This study employed a quantitative research approach using a cross-sectional survey design, which is commonly used to examine relationships among variables at a single point in time (Ghanad, 2023; Mageda et al., 2023). The design allows researchers to capture data from a defined population without manipulating variables, making it suitable for identifying patterns, associations, and predictors among constructs such as job satisfaction and its influencing factors.

The cross-sectional design is particularly appropriate for this study because it facilitates the collection of self-reported perceptions from a large group of nurses simultaneously, providing a snapshot of how workplace factors (e.g., job characteristics, supervision, salary) relate to job satisfaction. This is essential in healthcare settings where workforce satisfaction can shift quickly in response to changes in policy, workload, or organizational climate. Additionally, the design is resource-efficient and enables the use of robust statistical methods (e.g., bivariate and multivariate regression) to test hypotheses derived from existing theories and literature (Imai et al., 2023).

Research Setting

The study was conducted at Meuraxa General Hospital, a public healthcare facility in Banda Aceh, Indonesia. This hospital serves as a critical referral center within the region, employing a significant number of nursing staff, making it an appropriate context for the study.

Population and Sample

This study focused on nurses employed at Meuraxa General Hospital, Banda Aceh, who hold civil servant (PNS) status. The hospital was selected due to its role as a public referral facility and its relevance in representing the nursing workforce in a government healthcare context. Given the relatively limited and well-defined population, the study adopted a census sampling technique, selecting all eligible participants who met the inclusion criteria. The inclusion criteria were (1) registered as civil servant nurses (PNS), (2) actively working in nursing units during the data collection period, and (3) willing to participate and complete the questionnaire. Based on these criteria, all 77 nurses were included in the sample. Table 1 provides an overview of the sample characteristics by department/unit.

Table 1. Distribution of Sample by Department (N = 77)

No.	Department/ Unit	Number of Nurses	Percentage (%)
1	Emergency Unit	12	15.6%
2	Intensive Care Unit (ICU)	10	13.0%
3	Surgical Ward	14	18.2%
4	Medical Ward	13	16.9%
5	Pediatric Unit	9	11.7%
6	Obstetrics & Gynecology	11	14.3%
7	Outpatient/ Polyclinic	8	10.3%
Total		77	100%

All selected respondents participated voluntarily and fully completed the research instrument. This comprehensive coverage eliminates sampling bias and enhances the representativeness and generalizability of

findings within the hospital context. By using a full population approach, the study ensures that every variation in job satisfaction among civil servant nurses at Meuraxa General Hospital is captured, thus strengthening the internal validity of the statistical analysis.

Variables and Conceptual Framework

In order to systematically examine the factors influencing nurses' job satisfaction, this study identifies and classifies variables into two categories: independent and dependent. The dependent variable is job satisfaction, which reflects the nurses' overall emotional and cognitive evaluation of their work experience. The independent variables consist of six workplace-related factors believed to contribute to job satisfaction, such as (a) job characteristics, (b) promotion opportunities, (c) working conditions, (d) salary, (e) supervision, and (f) peer relationships. These variables were selected based on established theories of job satisfaction and findings from previous empirical studies. The conceptual framework underlying this research illustrates how each independent variable is hypothesized to exert a direct influence on the dependent variable, forming the basis for the statistical testing of hypotheses in the later stages of the study. The dependent variable was job satisfaction. The conceptual framework is illustrated in Figure 1.

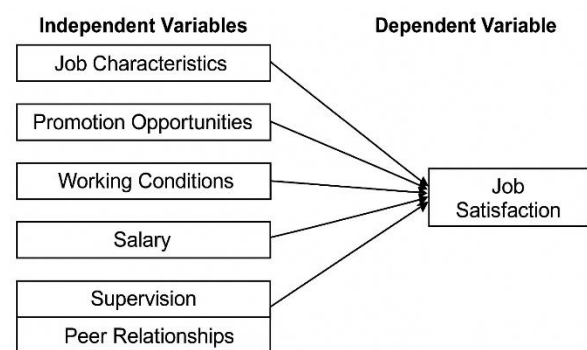


Figure 1. Conceptual Framework of the Study

Instrument and Data Collection

Data were collected using a structured questionnaire consisting of items adapted from previously validated scales aligned with the six variables under study. Responses were recorded on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire underwent a validity and reliability test with a pilot sample of 30 nurses. All items showed a correlation coefficient (r-count) above the r-table threshold, indicating strong validity. The reliability test yielded Cronbach's alpha coefficients above 0.6 for all variables, confirming acceptable internal consistency. Prior to the full-scale distribution of the questionnaire, a pilot test was conducted involving 30 respondents to evaluate the instrument's reliability across all measured variables. This preliminary step ensured that each set of items produced consistent and dependable results when applied in a similar context. The reliability of each variable was assessed using Cronbach's alpha coefficient, a statistical measure commonly used to determine internal consistency (see Table 2).

Table II. Reliability Statistics (Pilot Test, N = 30)

No.	Variable	Cronbach's Alpha	Interpretation
1	Job Characteristics	0.842	Reliable
2	Promotion Opportunities	0.775	Reliable
3	Working Conditions	0.796	Reliable
4	Salary	0.801	Reliable
5	Supervision	0.764	Reliable
6	Peer Relationships	0.823	Reliable
7	Job Satisfaction	0.851	Reliable

As shown in Table 2, all measured variables demonstrated Cronbach's alpha values exceeding the commonly accepted threshold of 0.6, indicating that the questionnaire items were internally consistent and

suitable for data collection. These results provided a solid psychometric foundation for proceeding with the main survey and regression analysis phases of the study.

Data Analysis

Data collected from respondents were analyzed using SPSS version 22. The analysis was structured to address the study's objectives and hypotheses by examining both individual and combined effects of the independent variables on job satisfaction. The process began with descriptive analysis to summarize participants' responses, followed by bivariate regression analysis to assess the impact of each independent variable separately. Finally, a multiple linear regression analysis was conducted to determine the joint influence of all independent variables on the dependent variable. Each analytical step was designed to test the significance, direction, and strength of the relationships, using commonly accepted thresholds such as $p < 0.05$ for statistical significance and R^2 values to explain variance in job satisfaction.

Table 3 summarizes the Summary of Data Analysis Techniques in this study.

Table III. Summary of Data Analysis Techniques

Analysis Type	Purpose	Tools Used	Output/Indicators
Descriptive Statistics	To summarize demographic and response data	SPSS 22	Frequency, mean, standard deviation
Bivariate Regression	To examine individual effects of each independent variable	SPSS 22	Coefficient (B), t-test, R^2 , p-value
Multivariate Regression	To assess combined effects of all independent variables	SPSS 22	Adjusted R^2 , F-test, t-values, p-values
Reliability Analysis	To evaluate internal consistency of the questionnaire	SPSS 22	Cronbach's alpha

This multistep analysis allowed the researchers to not only determine which workplace factors significantly influenced job satisfaction but also to understand the relative contribution of each factor within a combined model. The results from this analysis form the basis for the interpretation and discussion presented in the next section of the paper.

RESULTS AND DISCUSSION

RESULTS

This section presents the findings from the bivariate and multivariate analyses conducted to examine the influence of six independent variables on nurses' job satisfaction at Meuraxa General Hospital. The results are presented in sequence for each variable.

1. Effect of Job Characteristics on Job Satisfaction

Bivariate regression analysis showed that job characteristics had a statistically significant influence on job satisfaction. The calculated t-value was 8.684, exceeding the critical value of 1.991, and the significance level was $p = 0.000$. The R^2 value of 0.501 indicates that 50.1% of the variation in job satisfaction can be explained by job characteristics alone.

Table 4. Bivariate Regression Results for Job Characteristics

Variable	B	t	R ²	Sig. (p)
Job Characteristics	2.111	8.684	0.501	0.000

In the multivariate regression, job characteristics remained significant ($t = 3.424$, $p = 0.001$), indicating that this factor independently contributes to job satisfaction even when other variables are considered.

2. Effect of Promotion Opportunities on Job Satisfaction

The bivariate regression analysis indicated a significant relationship between promotion opportunities and job satisfaction ($t = 5.732$, $p = 0.000$, $R^2 = 0.305$). However, in the multivariate analysis, promotion was not statistically significant ($t = 1.188$, $p = 0.239$), suggesting a reduced influence when accounting for other variables.

Table V. Bivariate Regression Results for Promotion Opportunities

Variable	B	t	R ²	Sig. (p)
Promotion Opportunities	1.669	5.732	0.305	0.000

3. Effect of Working Conditions on Job Satisfaction

Analysis results showed that working conditions significantly influenced job satisfaction in the bivariate model ($t = 4.820$, $p = 0.000$, $R^2 = 0.236$). In the multivariate analysis, this variable was not significant ($t = 0.117$, $p = 0.908$), indicating that its impact is moderated by other workplace factors.

Table VI. Bivariate Regression Results for Working Conditions

Variable	B	t	R ²	Sig. (p)
Working Conditions	1.623	4.820	0.236	0.000

4. Effect of Salary on Job Satisfaction

The salary variable showed a strong and statistically significant effect on job satisfaction in both bivariate ($t = 5.574$, $p = 0.000$, $R^2 = 0.293$) and multivariate analysis ($t = 3.611$, $p = 0.001$), indicating a consistent and robust relationship.

Table VII. Bivariate Regression Results for Salary

Variable	B	t	R ²	Sig. (p)
Salary	1.361	5.574	0.293	0.000

5. Effect of Supervision on Job Satisfaction

The supervision factor had a statistically significant effect on job satisfaction in the bivariate model ($t =$

3.198, $p = 0.002$, $R^2 = 0.120$), but lost significance in the multivariate analysis ($t = -0.909$, $p = 0.366$).

Table VI. Bivariate Regression Results for Supervision

Variable	B	t	R ²	Sig. (p)
Supervision	0.684	3.198	0.120	0.002

6. Effect of Peer Relationships on Job

Satisfaction

Peer relationships had a significant impact in both models. Bivariate analysis showed $t = 6.766$, $p = 0.000$, and $R^2 = 0.379$, while multivariate analysis showed $t = 2.303$, $p = 0.024$, confirming its independent contribution to job satisfaction.

Table IX. Bivariate Regression Results for Peer Relationships

Variable	B	t	R ²	Sig. (p)
Peer Relationships	1.500	6.766	0.379	0.000

7. Multivariate Regression Summary

The multivariate regression model incorporating all six independent variables was statistically significant ($F = 20.432$, $p = 0.000$, Adjusted $R^2 = 0.605$), indicating that the model explains 60.5% of the variation in job satisfaction.

Table X. Multivariate Regression Coefficients Summary

No.	Variable	B	t	Sig. (p)
1	Job Characteristics	1.234	3.424	0.001
2	Promotion	0.327	1.188	0.239
3	Working Conditions	0.041	0.117	0.908
4	Supervision	-	-	0.366
		0.165	0.909	
5	Peer Relationships	0.576	2.303	0.024
6	Salary	0.752	3.611	0.001

DISCUSSION

Understanding what drives nurses to feel satisfied with their work is essential not only for their well-being but also for the overall quality of healthcare delivery. This study set out to explore the influence of six key workplace factors: job characteristics, promotion opportunities, working conditions, salary, supervision, and peer relationships on the job satisfaction of civil servant nurses at Meuraxa General Hospital in Banda Aceh. The findings provide a deeper look into how nurses experience their professional environment and what truly matters most in keeping them engaged, motivated, and fulfilled.

Job Characteristics: Where Satisfaction Begins

Among all the variables analyzed, job characteristics stood out as the most powerful predictor of job satisfaction. This reveals a profound insight: nurses derive much of their fulfillment not simply from external rewards, but from the inherent meaning and challenge found in their daily responsibilities. When nurses feel that their tasks are purposeful, intellectually engaging, and aligned with their skills, they experience a deeper connection to their roles.

This result affirms the idea that job content matters greatly, a view echoed in contemporary healthcare literature. Xu et al. (2023) found that job enrichment through autonomy, task variety, and role clarity had a strong association with professional satisfaction. Similarly, Altaş et al. (2024) highlighted that the sense of independence and meaningfulness in nursing tasks promotes emotional resilience and reduces burnout. It is evident that beyond protocols and performance metrics, nurses thrive when they feel their work makes a difference.

Salary: A Practical, Yet Powerful Motivator

Although the intrinsic nature of work is critical, financial rewards cannot be overlooked, especially in a system where nurses often face high workloads and

emotional demands. This study revealed that salary remains one of the most consistent and significant factors influencing job satisfaction. A fair and stable income gives nurses a sense of security and recognition, enabling them to meet personal and family needs without undue stress.

This aligns with the findings of Koc et al. (2014) and Al-Hinai & Bajracharya (2024), both of whom emphasized that adequate compensation not only supports retention but also reflects institutional respect for the nursing profession. In fact, Herzberg's theory reminds us that while salary may not always *motivate*, its absence is a major source of dissatisfaction. In Indonesia, where many public health professionals juggle financial pressures, this finding carries practical urgency.

Peer Relationships: The Emotional Backbone of the Workplace

The human aspect of the work environment how colleagues treat and support one another also emerged as a key contributor to job satisfaction. The significant role of peer relationships suggests that nurses don't work in isolation; rather, they thrive in environments where collaboration, trust, and mutual respect are part of the daily culture.

The importance of these social dynamics is supported by Sönmez et al. (2023), who found that a collegial atmosphere enhances both psychological well-being and professional performance. Phommavong (2025) also noted that strong interpersonal bonds in the workplace reduce turnover intention. In a profession where emotional labor is intense, having a supportive network of peers can make the workplace feel more human and more humane.

The Quiet Influence of Promotion, Supervision, and Working Conditions

Interestingly, promotion opportunities, supervision, and working conditions, although significant in the

bivariate analysis, did not hold strong in the multivariate model. This does not mean these factors are unimportant. Rather, it suggests that their influence may be indirect or dependent on how they interact with other more dominant variables, like job content and salary.

For example, promotion may only enhance satisfaction when linked to clear merit-based systems and genuine career development something highlighted by Davras and Aktürk (2024). Likewise, supervision may impact satisfaction more when it embodies mentorship and psychological support, rather than just administrative oversight, as discussed by Huhtala et al. (2021). Working conditions, such as infrastructure and safety, do matter but their effects may be subdued if the core experience of the job lacks purpose or recognition.

These findings are a gentle reminder that satisfaction is holistic. It is shaped by a blend of emotional, social, and practical elements. Addressing one without the other may not be enough.

Reflections on the Local Context

In the Indonesian public healthcare system, especially in provincial areas like Banda Aceh, nurses often navigate complex realities. Limited budgets, high patient loads, and hierarchical work cultures can all affect job satisfaction. Yet, this study shows that even within such constraints, there are levers of influence that management can pull: designing meaningful roles, ensuring fair compensation, and fostering a collegial atmosphere.

This echoes findings by Kamirullah et al. (2024) and Ratri (2023), who emphasized the interplay of cultural values, motivation, and social support in shaping nurse engagement across Indonesia. The present study adds localized evidence that could guide hospital administrators and policymakers in creating work environments that honor and empower nurses not only as workers, but as people.

Theoretical and Practical Implications

Theoretical Implications

This study makes several contributions to the theoretical understanding of job satisfaction within the nursing profession, particularly in developing country contexts. First, it confirms the multidimensional nature of job satisfaction by integrating both intrinsic (e.g., job characteristics, peer relationships) and extrinsic (e.g., salary, promotion) factors into a unified analytical model. This reinforces the validity of established frameworks such as Herzberg's Two-Factor Theory and expands on it by emphasizing the contextual relevance of each factor in a public healthcare environment. Second, the study demonstrates that not all predictors operate equally. Variables such as supervision and working conditions, while commonly cited in the literature, may lose their influence when deeper motivators like meaningful work and fair compensation are simultaneously considered. This highlights the importance of inter-variable interactions and the need to move beyond single-variable explanations in job satisfaction research. Third, the findings contribute to the emerging literature on healthcare human resource management in Southeast Asia, where empirical studies remain limited. By offering a localized, statistically grounded understanding of what drives satisfaction among nurses in Indonesia, this research helps bridge a critical gap between global theory and regional practice.

Practical Implications

From a managerial and policy-making standpoint, this study provides concrete guidance for improving nurse satisfaction and, by extension, care quality and workforce retention. The most immediate implication is the need to redesign nursing roles in ways that promote autonomy, creativity, and task variety. Nurses must be seen not merely as implementers of

orders, but as professionals whose contributions are intellectually and emotionally engaging. Second, the consistent significance of salary in both bivariate and multivariate models underscores the necessity of fair and competitive compensation systems. Especially in the public sector, where budget constraints often limit financial incentives, ensuring that nurses feel adequately rewarded for their labor is vital. This may involve not only base salary adjustments but also performance-based bonuses, overtime compensation, and transparent pay scales. Third, the importance of peer relationships calls for an intentional effort to foster a collaborative and emotionally supportive work culture. Management can encourage this through team-based rotations, conflict resolution training, and recognition systems that reward teamwork and collegiality. When nurses feel valued by their peers, they are more likely to remain committed to their institution and perform at their best.

Finally, the findings suggest that traditional HR practices such as hierarchical supervision and promotion schemes must be re-evaluated. Instead of focusing solely on upward mobility or control, leadership should emphasize mentorship, participatory decision-making, and shared governance, which have been shown to enhance psychological safety and professional identity. In sum, this study calls for a strategic, human-centered approach to nurse management one that acknowledges both the emotional and material dimensions of job satisfaction. For institutions seeking to improve healthcare delivery through better workforce engagement, these insights offer a roadmap grounded in empirical evidence and contextual relevance.

CONCLUSION

This study concluded that among the six factors examined, job characteristics, salary, and peer relationships had the most significant influence on nurses' job satisfaction at Meuraxa General Hospital.

These findings highlight the importance of designing meaningful work, ensuring fair compensation, and fostering a supportive team environment to enhance satisfaction in the nursing profession. While promotion opportunities, supervision, and working conditions were initially significant, their effects diminished when analyzed alongside other variables, suggesting the need to prioritize intrinsic motivators in workforce management. Future research is encouraged to explore these relationships in broader institutional settings, incorporate qualitative insights to capture nurses' lived experiences, and examine longitudinal patterns that may reveal how job satisfaction evolves over time in response to policy changes and organizational dynamics.

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