Correlating Work Motivation, Job Satisfaction, and Performance Among Remote Archipelagic Nurses

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ABSTRACT

Nurses working in remote, border, and island areas face complex geographic, infrastructure, and resource limitations that create significant professional challenges in delivering sustainable healthcare services. This study aimed to determine the correlation between work motivation, job satisfaction, and performance among nurses in public health centers in Sangihe Islands Regency. A quantitative cross-sectional design was employed, with a study population consisting of all nurses across public health centers in the regency. A total of 72 nurses were selected through purposive sampling, specifically those working on small islands. Results showed that the majority of nurses had high job satisfaction (76.4%), while performance was predominantly in the sufficient category (56.9%). No significant relationship was found between work motivation and job satisfaction ($\chi^2 = 0.006$; $p = 0.936$); however, a significant relationship existed between work motivation and nurse performance ($\chi^2 = 19.039$; $p = 0.000$), with 76.9% of highly motivated nurses demonstrating good performance. These findings suggest that work motivation substantially contributes to improved nurse performance, whereas job satisfaction is more strongly shaped by organizational and environmental factors. Improving nurse performance in island regions therefore requires strengthening work motivation alongside systemic reforms in organizational policies, working conditions, and broader health system support.

Keywords: Archipelagic; Job satisfaction; Motivation; Nurse performance; Public health center

INTRODUCTION

Globally, the nursing workforce is under severe strain. The World Health Organization estimated a shortage of 5.9 million nurses worldwide as of 2020, with projections indicating that demand will continue to outpace supply unless structural investments are made [1]. Nurses represent the largest segment of the global health workforce and provide more than half of all health service contacts, making their performance central to the achievement of universal health coverage [2]. Evidence consistently shows that nurse performance is directly associated with patient safety, care continuity, and health system quality [3]. Sustaining adequate performance among nurses, however, requires more than individual competence, it depends on sufficient work motivation and a working environment that supports job satisfaction [4,6]. These demands are magnified in primary healthcare settings, where nurses operate with less specialist backup and must independently manage a broader range of patient and community health needs.

Indonesia faces this challenge at a particularly complex scale. The country encompasses over 17,000 islands and a population exceeding 270 million, served by 10,373 public health centers (Puskesmas), yet an estimated 34% of these facilities are located in remote, border, and island areas (DTPK), where health workforce shortages are most acute [3]. A 2025 WHO Indonesia report confirmed that critical shortages and skill mismatches across the health workforce continue to undermine equitable service delivery, particularly in areas defined by poor connectivity and limited physical infrastructure [3]. In island and border regions, nurse density frequently falls below national and WHO-recommended standards, compelling existing nurses to take on expanded and unsupported roles under conditions of limited supervision, inadequate incentives, and severely restricted professional development opportunities [3,4]. Understanding what drives nurse motivation and whether it translates into satisfaction and performance in such contexts has direct implications for the continuity of essential healthcare in underserved communities.

Sangihe Islands Regency in North Sulawesi Province exemplifies these conditions. Located along Indonesia's northern maritime border adjacent to the Philippines. According to data from the Central Statistics Agency (BPS) of the Sangihe Islands Regency in Figures, this region consists of 105 islands. Of these, 26 are inhabited and 79 are uninhabited [5]. There are seven community health centers whose catchment areas include small islands, and three of these Marore, Kahakitang, and Nusa Tabukan Health Centers are located directly on small islands rather than on the main Sangihe Island. Healthcare delivery across these islands depends almost entirely on nurses stationed at small-island Puskesmas, given the near-absence of specialist physicians and the severe constraints on inter-island referral imposed by sea transport dependency and weather variability. National and regional evidence supports the gravity of this situation: a study of medical workforce distribution in the Maluku Islands found that geographic isolation, professional isolation, and inadequate facilities were the primary determinants of workforce retention and performance in remote island practice [5]. Mangoma and Sulistiadi (2024) characterized Indonesia's island communities as healthcare deserts, noting that geographic fragmentation persistently limits access to care and professional support for health workers [8].

Work motivation, job satisfaction, and nurse performance are theoretically interrelated constructs examined extensively in hospital and urban primary care contexts. Motivation encompassing internal dimensions such as responsibility, goal-setting, and achievement drive, alongside external dimensions including incentives, recognition, and working conditions is among the strongest individual-level predictors of performance in healthcare settings [6]. Job satisfaction, framed through Herzberg's two-factor theory, reflects nurses' cumulative appraisal of both hygiene factors (salary, working conditions, organizational policy, interpersonal

relationships, supervision) and motivating factors (achievement, recognition, the work itself, responsibility, career advancement), and is significantly associated with turnover intention, absenteeism, and care quality [1,2]. Prior research in Indonesian Puskesmas found that job satisfaction among primary care nurses is shaped primarily by supervision quality, interpersonal relationships, and organizational support [2]. Yanti et al. (2019) demonstrated that motivation is a significant predictor of nurse performance in regional hospitals [6]. However, the majority of this evidence derives from hospital-based or mainland primary care settings, and the degree to which these relationships hold in island settings characterized by geographic isolation, sparse infrastructure, and structural resource deficits remains largely unexamined [5,7,8,9].

This gap constitutes the principal novelty of the present study. To our knowledge, no previous published research has simultaneously examined the correlations among work motivation, job satisfaction, and nurse performance in an archipelagic border Puskesmas setting in Indonesia. The structural conditions faced by nurses in island public health centers from economic constraints to professional isolation and geographic barriers may produce patterns of motivation and satisfaction that diverge from those documented in urban or hospital nursing populations. Generating evidence grounded in the realities of this workforce is essential for designing workforce policies and interventions that are contextually appropriate and effective. Accordingly, this study aimed to analyze the relationship between work motivation, job satisfaction, and performance among nurses working at small-island public health centers in Sangihe Islands Regency, Indonesia.

METHODS

This study employed a quantitative cross-sectional design to examine the correlations among work motivation, job satisfaction, and nurse performance at a single point in time. This design was selected because the study aimed to determine the prevalence and pattern of associations among categorical variables within a specific, geographically bounded population, without manipulation of variables or longitudinal follow-up. The study was conducted from June to September 2023 across four public health centers (Puskesmas) serving small-island areas in Sangihe Islands Regency, North Sulawesi Province, Indonesia: Puskesmas Salurang, Puskesmas Lapango, Puskesmas Manalu, and Puskesmas Marore. These four Puskesmas were selected as the study setting because they represent the archipelagic primary healthcare frontier of Sangihe, operating under conditions of geographic isolation, restricted inter-island transport, and limited specialist medical support.

The study population comprised all registered nurses employed at Puskesmas across Sangihe Islands Regency. A purposive sampling technique was applied, targeting nurses assigned to the four small-island Puskesmas as the primary inclusion criterion. Nurses who were absent during the data collection period due to leave, illness, or out-of-station duty were excluded. All nurses who were present and willing to participate provided informed consent prior to data collection. A total of 72 nurses met the inclusion criteria: Puskesmas Salurang (n = 17), Puskesmas Lapango (n = 22), Puskesmas Manalu (n = 14), and Puskesmas Marore (n = 19), including both civil servants (PNS) and non-permanent staff (honorer/THL and volunteer).

Three study variables were measured using validated, structured self-administered questionnaires. The work motivation scale (37 items) comprised six internal dimensions (responsibility, goal orientation, feedback, enjoyment of work, achievement striving, and achievement) and four external dimensions (need fulfillment, praise, incentives, and attention). The job satisfaction scale (20 items) assessed ten dimensions derived from Herzberg's two-factor theory: salary, working conditions, organizational policy, interpersonal relationships, supervision, achievement, recognition, the work itself, responsibility, and career promotion [10]. The nurse performance scale (23 items) covered six dimensions: work attitude, skill level,

worker–supervisor relationships, performance management, workforce efficiency, and work creativity. All instruments used Likert-type response options, and total scores were categorized as Good (Baik), Sufficient (Cukup) or Poor (Kurang) according to predetermined cut-off points. The work motivation and nurse performance scales were adapted from Putri's instrument on the relationship between work motivation and nurse performance among inpatient nurses at RSI Siti Aisyah Madiun [11]. Job satisfaction was measured using a questionnaire adapted from Manik's nurse job satisfaction instrument developed for Puri Mandiri Kedoya Hospital in West Jakarta [12].

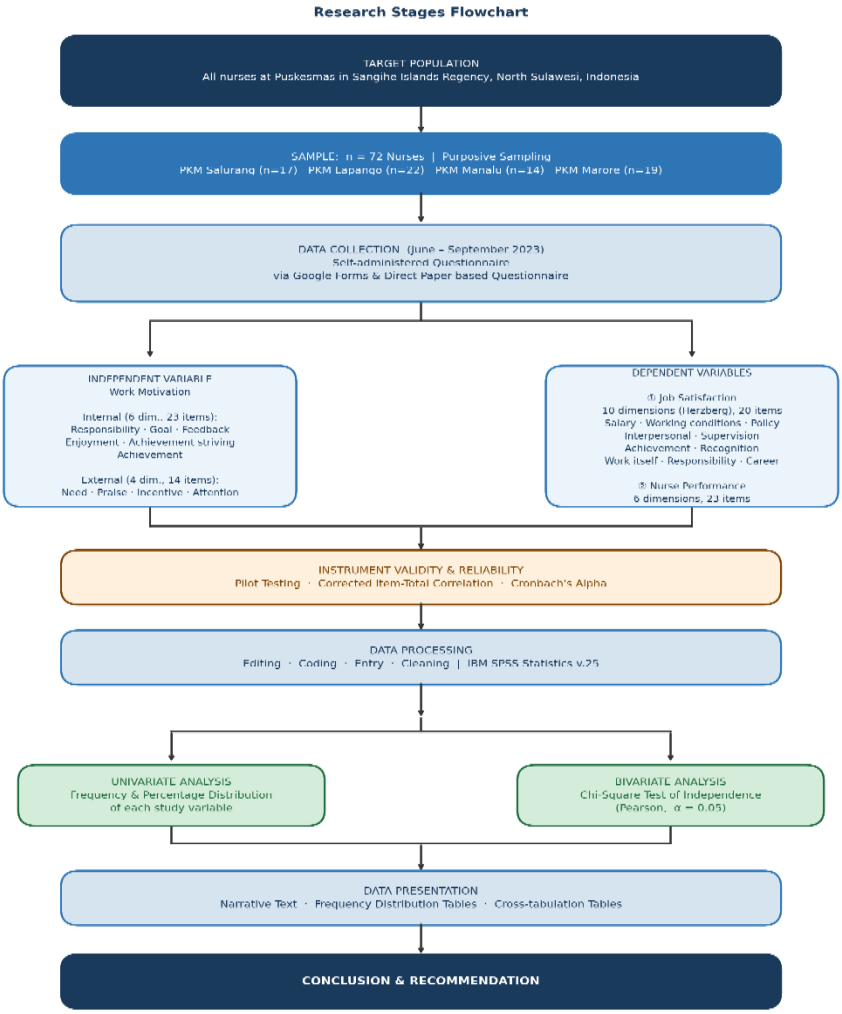

Figure 1. Research Stages Flowchart

Data were collected using a structured self-administered questionnaire distributed via Google Forms (QR code and direct link) as well as through direct paper-based completion on-site at each Puskesmas, between June and September 2023. Written informed consent was obtained from all participants prior to questionnaire completion. No personal identifying data beyond the required demographic characteristics were collected. Collected data were processed through four sequential stages: editing (checking completeness and consistency of responses), coding (assigning numeric codes to categorical responses), data entry, and data cleaning (verification and correction of entry errors), using IBM SPSS Statistics version 25. Univariate analysis produced frequency distributions and percentages for all respondent characteristics and study variables. Bivariate analysis used Pearson's chi-square test of independence to examine the association between work motivation and job satisfaction, and between work motivation and nurse performance, at a significance level of $p < 0.05$ (two-tailed). Data are

presented in the form of narrative text, frequency distribution tables, and cross-tabulation tables.

RESULTS

This section presents the results of the study systematically. A total of 72 nurses from four small-island public health centers in Sangihe Islands Regency participated in the study. Results are presented in three parts: respondent characteristics, univariate distribution of study variables, and bivariate analysis of correlations.

Table 1. Respondent Characteristics (n = 72)

Characteristic	Category	n	%
Age (years)	< 30	21	29.2
	31–40	27	37.5
	41–50	21	29.2
	> 50	3	4.2
Sex	Female	59	81.9
	Male	13	18.1
Marital Status	Married	51	70.8
	Single	21	29.2
Work Unit	PKM Salurang	17	23.6
	PKM Lapango	22	30.6
	PKM Manalu	21	19.4
	PKM Marore	19	26.4
Length of Work	< 1 year	4	5.6
	1–3 years	50	69.4
	3–5 years	17	23.6
	> 5 years	1	1.4
Education	SPK	1	1.4
	Diploma III (DIII)	54	75.0
	Diploma IV (DIV)	1	1.4
	Bachelor (S1)	2	2.8
	Nurse (Ners)	14	19.4
Employment Status	Civil Servant (PNS)	44	61.1
	Non-permanent (Honorer/THL)	27	37.5
	Volunteer	1	1.4
Monthly Income	< Rp 2,000,000	21	29.2
	Rp 2,000,000–3,500,000	25	34.7
	> Rp 3,500,000	26	36.1

Table 1 presents the demographic and professional characteristics of the 72 respondents. The majority were female (81.9%), aged 31–40 years (37.5%), and married (70.8%). Most nurses were stationed at Puskesmas Lapango (30.6%), followed by Puskesmas Marore (26.4%), Puskesmas Salurang (23.6%), and Puskesmas Manalu (19.4%). In terms of professional profile, 69.4% had 1–3 years of working experience, and 75.0% held a Diploma III (DIII) nursing qualification. The majority were civil servants (PNS; 61.1%), and 36.1% reported a monthly income above Rp 3,500,000.

Table 2. Distribution of Work Motivation, Job Satisfaction, and Nurse Performance (n = 72)

Variable	Category	n	%
Work Motivation	Good (Baik)	26	36.1
	Sufficient (Cukup)	46	63.9
	Total	72	100.0
Job Satisfaction	Good (Baik)	55	76.4

	Sufficient (Cukup)	17	23.6
	Total	72	100.0
Nurse Performance	Good (Baik)	31	43.1
	Sufficient (Cukup)	41	56.9
	Total	**72**	**100.0**

Table 2 presents the distribution of work motivation, job satisfaction, and nurse performance among the 72 respondents. Work motivation was predominantly in the sufficient (Cukup) category (63.9%; n = 46), with 36.1% (n = 26) rated as good (Baik). Job satisfaction was predominantly good (76.4%; n = 55), with only 23.6% (n = 17) rated as sufficient. Nurse performance was predominantly sufficient (56.9%; n = 41), with 43.1% (n = 31) rated as good.

Table 3. Correlation between Work Motivation and Job Satisfaction (n = 72)

Work Motivation	Job Satisfaction - Good n (%)	Job Satisfaction - Sufficient n (%)	Total n (%)	χ^2 (p-value)
Good (Baik)	20 (76.9%)	6 (23.1%)	26 (100%)	0.006
Sufficient (Cukup)	35 (76.1%)	11 (23.9%)	46 (100%)	(p = 0.936)
Total	**55 (76.4%)**	**17 (23.6%)**	**72 (100%)**	

Table 3 presents the cross-tabulation of work motivation and job satisfaction with the chi-square test result. Among nurses with good work motivation, 76.9% (n = 20) reported good job satisfaction and 23.1% (n = 6) reported sufficient job satisfaction. Among those with sufficient work motivation, 76.1% (n = 35) reported good satisfaction and 23.9% (n = 11) reported sufficient satisfaction. Chi-square analysis yielded $\chi^2(1) = 0.006$, $p = 0.936$ ($p > 0.05$), indicating no statistically significant relationship between work motivation and job satisfaction.

Table 4. Correlation between Work Motivation and Nurse Performance (n = 72)

Work Motivation	Nurse Performance - Good n (%)	Nurse Performance - Sufficient n (%)	Total n (%)	χ^2 (p-value)
Good (Baik)	20 (76.9%)	6 (23.1%)	26 (100%)	19.039
Sufficient (Cukup)	11 (23.9%)	35 (76.1%)	46 (100%)	(p = 0.000)
Total	**31 (43.1%)**	**41 (56.9%)**	**72 (100%)**	

Table 4 presents the cross-tabulation of work motivation and nurse performance. Among nurses with good work motivation, 76.9% (n = 20) demonstrated good performance and 23.1% (n = 6) demonstrated sufficient performance. Among nurses with sufficient work motivation, 23.9% (n = 11) demonstrated good performance and 76.1% (n = 35) demonstrated sufficient performance. Chi-square analysis yielded $\chi^2(1) = 19.039$, $p = 0.000$ ($p < 0.05$), indicating a statistically significant relationship between work motivation and nurse performance.

DISCUSSION

A. Work Motivation Profile

The majority of nurses (63.9%) demonstrated sufficient work motivation, with only 36.1% categorized as good consistent with comparable resource-constrained settings where Oljira et al. (2025) found only 51.3% of Ethiopian public hospital nurses were classified as motivated amid limited training, poor leadership, and inadequate resources [18]; in the Indonesian archipelagic context, compound demotivating conditions, restricted inter-island transport, limited professional development, and structural welfare inequity, similarly suppress motivation to a sufficient rather than good level [13], reflecting professional resilience rather than organizational failure. Sub-dimension analysis revealed a striking internal asymmetry: Tanggung Jawab (responsibility) was rated good by 97.2% and Umpan Balik (feedback) by 84.7%, yet Tujuan (goal orientation) reached good in only 2.8% the lowest score across all ten dimensions, indicating nurses are driven by professional duty rather than career aspiration, an asymmetry Erlina et al. (2021) explain

through the finding that achievement of purpose is the most influential factor for sustained nurse motivation [14]. The remaining internal dimensions, Berusaha Mengungguli (59.7%), Prestasi (50.0%), and Senang Dalam Bekerja (43.1%), reflected latent intrinsic potential that, as Kato et al. (2022) demonstrated in 561 long-term care nurses, can significantly predict work engagement ($\beta = 0.164$, $p < 0.001$) when deliberately activated through peer recognition, structured goal-setting, and accessible professional development [17].

The most critical external deficits were Kebutuhan (need fulfillment, 20.8% good) and Perhatian (supervisory attention, 31.9% good), mirroring patterns documented by Sulidah and Retnowati (2019) across border Puskesmas in North Kalimantan, where pay inequity, limited transport allowances, and minimal institutional attention drove demotivation and high turnover among frontier health workers [13]; Insentif (52.8%) and Pujian (55.6%) indicate inconsistent acknowledgment insufficient to constitute a reliable motivational scaffold. Andriyani and Mendrofa (2025) found that motivation predicted job satisfaction ($\beta = 0.360$) and, combined with leadership and satisfaction, explained 79.2% of nurse performance variance [16], underscoring the organizational cost of leaving these gaps unaddressed; Wateriri et al. (2025), by comparison, reported 83.3% good motivation among hospital hemodialysis nurses ($r = 0.466$, $p = 0.022$ with performance) [15], a gap that highlights how geographic marginality suppresses motivational infrastructure in island Puskesmas. Collectively, the motivational profile is duty-driven and compliance-anchored: professionally committed, yet lacking the goal structures and external supports needed to elevate motivation to the good tier, with equitable incentive distribution, supervisory attention, and structured goal-setting as the priority levers for improvement.

B. Job Satisfaction Profile

Overall job satisfaction was rated good by 76.4% of nurses, the highest-scoring variable, yet sub-dimension analysis reveals a pattern consistent with Herzberg's Two-Factor Theory [19]: the aggregate score was driven by strong hygiene factor performance, while motivator factors showed strikingly low satisfaction. Among hygiene factors, Supervisi scored 86.1% satisfied, Hubungan Antar Pribadi 80.6%, Kondisi Kerja 73.6%, and Gaji 70.8%, indicating nurses perceive their basic work environment as structurally adequate with the exception of Kebijakan Perusahaan at only 25.0%, reflecting policy frameworks perceived as ill-adapted to island healthcare realities. Among motivator factors, a sharp paradox emerges: Tanggung Jawab scored 94.4% satisfied the highest of all ten dimensions, mirroring the duty-based dominance in the motivation profile and Promosi/Pengembangan Karir (86.1%) and Pengakuan (79.2%) were also high; yet Prestasi (achievement) reached only 5.6% satisfied and Pekerjaan Itu Sendiri (work itself) only 8.3%, placing the majority in what Herzberg describes as a "not dissatisfied but not genuinely satisfied" state, retained by functional adequacy yet deprived of the intrinsic professional fulfillment that generates sustained engagement [19]. Hidayat et al. (2017), in a cross-sectional study of 120 Indonesian nurses, confirmed the performance stakes of this gap, finding a significant correlation between job satisfaction and nurse performance (contingency coefficient = 0.661, $p = 0.000$) [21].

This deficiency in achievement and work-itself satisfaction is ecologically consistent with the limited clinical complexity and restricted professional exposure characteristic of small-island primary care, where advanced procedures are rarely performed and geographic isolation constrains peer clinical learning. Ibrahim et al. (2023), through path analysis of 130 hospital nurses, found that job satisfaction had a direct positive effect on nurse performance ($\beta = 0.179$, $p = 0.012$), with work motivation acting as a partial mediating pathway [22], underscoring that unaddressed motivator deficits carry direct

performance consequences in the downstream chain from satisfaction to outcomes. These findings collectively indicate that structured clinical achievement recognition, case-based learning sessions, and PHC-adapted competency milestones represent the highest-leverage interventions for elevating authentic job satisfaction and, consequently, nurse performance in archipelagic Puskesmas settings.

C. Nurse Performance Profile

Nurse performance was categorized as good by 43.1% and sufficient by 56.9%, a sub-optimal profile that contrasts with the higher job satisfaction rate (76.4% good), reflecting the principle that hygiene-factor-driven satisfaction does not reliably translate into elevated performance without strong intrinsic motivators [19,15]. This pattern is consistent with geographically isolated primary care settings where constrained infrastructure, limited specialist support, and thin staffing ratios restrict individual performance expression. The crosstabulation most clearly demonstrates the motivation–performance relationship: good-motivation nurses (n = 26) achieved good performance at 76.9%, whereas sufficient-motivation nurses (n = 46) achieved good performance in only 23.9%, with 76.1% remaining at the sufficient level ($\chi^2 = 19.039$, df = 1, p = 0.000). Ibrahim et al. (2023) confirmed work motivation as a direct significant predictor of nurse performance ($\beta = 0.160$, p = 0.011) [22], and Wateriri et al. (2025) reported an identical 76.9% good-performance rate among good-motivation nurses (r = 0.466, p = 0.022) [15], reinforcing motivation as the primary modifiable determinant of performance quality across care contexts.

The lower good-performance rate (43.1%) compared to hospital-based studies reflects not individual motivational deficit, but the broader organizational ecology: structural limitations, inadequate equipment, restricted referral pathways, minimal clinical mentorship, compress performance toward the sufficient tier even among motivated nurses. Andriyani and Mendrofa (2025) demonstrated that motivation, leadership, and satisfaction jointly explained 79.2% of nurse performance variance [20], affirming that improvement requires a dual-track approach: individual-level motivational activation through goal-setting and achievement recognition, alongside organizational-level investment in infrastructure and supervisory capacity to enable motivated nurses to deliver measurably excellent care outcomes.

D. Non-Significant Correlation — Work Motivation and Job Satisfaction

Chi-square analysis revealed no statistically significant association between work motivation and job satisfaction ($\chi^2 = 0.006$, df = 1, p = 0.936), with near-identical satisfaction profiles across motivation categories: 76.9% of good-motivation nurses reported good satisfaction versus 76.1% of sufficient-motivation nurses, a difference of less than one percentage point. This contrasts with Handayani et al. (2022), who found a significant motivation–satisfaction relationship (p = 0.003) among 98 health workers at the Mentawai Islands District Health Office, where 55.8% of high-motivation employees achieved good satisfaction compared to only 23.9% of low-motivation employees [24]; the divergence is likely attributable to the narrow motivational distribution in the present sample, where 63.9% cluster in the sufficient tier, substantially reducing statistical power to detect an association.

From a Self-Determination Theory perspective, motivation predicts satisfaction only when it is autonomous rather than compliance-based: McAnally and Hagger (2024) demonstrated that controlled motivation, driven by external obligation and duty, produces no proportionate satisfaction gain [23]. In the present study, the predominant orientation is duty-driven (Tanggung Jawab 97.2%, Tujuan 2.8%), which explains why motivation level does not differentiate satisfaction outcomes. Moreover, satisfaction here is anchored to structurally stable hygiene factors, supervision and interpersonal relations that operate

independently of individual motivation, producing a structural decoupling that renders motivation-focused interventions insufficient to improve satisfaction unless the motivator deficit in achievement and work itself is simultaneously addressed.

E. Significant Correlation — Work Motivation and Nurse Performance

Chi-square analysis confirmed a highly significant association between work motivation and nurse performance ($\chi^2 = 19.039$, df = 1, p = 0.000), with a near-mirror-image crosstabulation: good-motivation nurses achieved good performance at 76.9%, while sufficient-motivation nurses achieved good performance in only 23.9%, with 76.1% remaining at the sufficient level, providing strong directional evidence for motivation as the primary behavioral driver of performance quality. This is consistent with Indonesian nursing literature: Hidayat et al. (2017) confirmed a significant motivation–performance correlation (contingency coefficient = 0.566, p = 0.003) in a hospital setting [21], and Wateriri et al. (2025) reported an identical 76.9% good-performance rate among high-motivation nurses in a hemodialysis unit [15], affirming the cross-setting robustness of this association.

The co-occurrence of a significant motivation–performance relationship alongside a non-significant motivation–satisfaction relationship reveals a key dissociation: motivation drives behavior (performance) without proportionately driving affect (satisfaction), explained by SDT theory through the distinction between behavioral enactment, sustainable through controlled duty-based motivation, and experiential satisfaction, which requires autonomous motivation grounded in need fulfillment and value alignment [23]. Muddassir et al. (2023) similarly found that work motivation significantly predicted performance while job satisfaction contributed independently rather than as a motivational outcome in Selayar Islands Regency [25]. This dissociation is actionable: even the current duty-anchored motivational profile produces performance differentiation, and targeted elevation of goal orientation (Tujuan), need fulfillment (Kebutuhan), and supervisory attention (Perhatian) leveraging the strong Tanggung Jawab foundation, represents the evidence-based priority pathway for improving nurse performance in Sangihe's archipelagic primary health care system.

F. Contextual Synthesis: What Makes This Finding Unique

Across all three study variables, a coherent and contextually embedded pattern emerges: nurses in Sangihe's remote island Puskesmas demonstrate a duty-driven motivational architecture, high in professional responsibility and supervisory responsiveness, but deficient in goal orientation, achievement experience, need fulfillment, and institutional attention, that is structurally produced by the compound disadvantages of geographic marginality, resource scarcity, and limited career infrastructure characteristic of archipelagic frontier healthcare. This duty-driven profile simultaneously explains the paradox observed in the bivariate findings: because job satisfaction in this setting is anchored to structurally stable hygiene factors (supervision, interpersonal relations) rather than to motivation-responsive motivator factors, the level of motivation does not differentiate satisfaction outcomes, producing the non-significant association (p = 0.936) [19,23]. Yet the same duty-driven motivation, precisely because it sustains behavioral commitment to professional obligations, remains a potent predictor of performance-level differentiation (p = 0.000) [15,21]. The convergence of these findings within the archipelagic primary care context of Kabupaten Kepulauan Sangihe, a setting sharing structural characteristics with other Indonesian island health frontiers [13,24,25], affirms that motivation in geographically isolated healthcare settings functions as a behavioral resource rather than an affective one, and that policies aimed at improving nurse outcomes

in such settings must be architected at the system level: simultaneously targeting goal-setting capacity, incentive equity, supervisory quality, and clinical achievement infrastructure to convert the existing duty-based motivational foundation into genuine professional fulfillment and sustained high performance.

CONCLUSION

The majority of nurses working at small-island Puskesmas in Sangihe Islands Regency demonstrated a sufficient level of work motivation and a sufficient level of nurse performance, while job satisfaction was predominantly at a good level. No significant correlation was found between work motivation and job satisfaction among nurses at these island Puskesmas, indicating that the level of work motivation did not meaningfully influence the level of job satisfaction in this setting. A significant correlation was found between work motivation and nurse performance, indicating that nurses with good work motivation tended to demonstrate good performance, while nurses with sufficient work motivation tended to demonstrate sufficient performance. This study is limited by its cross-sectional design, which does not allow causal conclusions to be drawn, and by its sample restricted to four Puskesmas within a single regency, which limits the generalizability of the findings. It is recommended that health facility managers give greater attention to strengthening nurses' work motivation, particularly through structured goal-setting, improved supervisory engagement, and equitable incentive provision, as a practical strategy to improve nurse performance quality in remote island primary health care settings. Further research using longitudinal designs and involving a broader sample across multiple archipelagic regions is encouraged to validate and extend these findings.

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