

# Work Environment, Discipline, and Stress as Determinants of Service Quality at Jangkang Community Health Center

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Quality in primary health services is essential for achieving Universal Health Coverage, particularly in rural areas where community health centers face geographical, organizational, and workforce constraints. This study examines the effects of work environment, work discipline, and work stress on service quality at Jangkang Community Health Center, Kapuas Regency, Central Kalimantan. A quantitative explanatory design was applied using a census sampling technique. Questionnaire responses from 45 employees were analyzed through multiple linear regression using SPSS version 27. The results show that work environment positively and significantly affects service quality ( $B = 0.782$ ;  $p = 0.006$ ), work discipline positively and significantly affects service quality ( $B = 0.669$ ;  $p = 0.026$ ), and work stress negatively and significantly affects service quality ( $B = -1.205$ ;  $p = 0.000$ ). Simultaneously, the three variables significantly explain service quality ( $F = 15.231$ ;  $p = 0.000$ ), with an Adjusted R Square of 0.492. The findings indicate that improving service quality requires adequate work conditions, consistent discipline practices, and structured stress-management support. Strengthening organizational support and employee well-being is therefore important for sustainable primary health service delivery.

**Keywords:** work environment, work discipline, work stress, service quality, primary health care

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## 1. Introduction

Universal Health Coverage requires more than service availability; it requires services that are safe, effective, timely, integrated, equitable, efficient, and responsive to people's needs. Primary health care is a fundamental platform for this goal because it is the point at which communities most frequently encounter the health system (World Health Organization, 2025a, 2025b). In Indonesia, community health centers (puskesmas) are frontline institutions of primary care. The national health profile recorded 10,180 puskesmas operating in 2023, emphasizing the scale of the service quality challenge across diverse geographical areas (Kementerian Kesehatan Republik Indonesia, 2024).

Quality assurance in puskesmas is reinforced through Regulation of the Minister of Health Number 34 of 2022, which directs accreditation toward continuous quality improvement and patient/community safety (Kementerian Kesehatan Republik Indonesia, 2022). Nevertheless, formal quality standards need to be supported by organizational conditions at the service level. In remote and sparsely populated areas, the availability of facilities, coordination among staff, punctuality of service, and manageable psychological demands become especially relevant determinants of patients' service experience.

Work environment represents both physical and psychosocial conditions that support employees in carrying out their responsibilities. From the Job Demands-Resources perspective, adequate resources such as supportive leadership, clear procedures, teamwork, and sufficient facilities can improve motivation and protect employees from excessive demands (Bakker & Demerouti, 2023). In health care, a positive work

environment is associated with improved safety and patient outcomes, while resource constraints can obstruct consistent service delivery (Ystaas et al., 2023).

Work discipline is essential in a health service organization because service quality depends on adherence to procedures, timeliness, accurate documentation, and safety practices. The global patient safety agenda places consistent compliance and safety culture as central elements of service improvement (World Health Organization, 2021). At the service interface, disciplined performance strengthens reliability and reduces variations in patient care.

Work stress can weaken service quality by reducing concentration, emotional stability, empathy, and decision-making capacity. Evidence among health workers in Indonesia indicates meaningful levels of burnout dimensions, while a systematic review and meta-analysis has linked nurse burnout to lower patient safety, satisfaction, and quality of care (Lamuri et al., 2023; Li et al., 2024). Accordingly, improvement of primary care quality requires attention to employee well-being rather than reliance on infrastructure or procedural compliance alone.

Jangkang Community Health Center is located in Pasak Talawang District, Kapuas Regency, Central Kalimantan, and serves a dispersed rural area consisting of 10 villages. The study background identifies geographical access challenges, limitations in particular categories of health personnel, workload pressures, and community concerns relating to waiting times, facilities, and staff attitudes. Evidence integrating work environment, discipline, and stress as simultaneous determinants of service quality in a rural Kalimantan primary care setting remains limited (Lamuri et al., 2023; Li et al., 2024; Solikha et al., 2025).

Therefore, this study examines: (1) the effect of work environment on service quality; (2) the effect of work discipline on service quality; (3) the effect of work stress on service quality; and (4) the simultaneous effect of the three predictors on service quality at Jangkang Community Health Center.

## 2. Method

This study used a quantitative explanatory approach with a cross-sectional survey design. The study was conducted at Jangkang Community Health Center, Kapuas Regency, Central Kalimantan. A census sampling technique was applied, and 45 valid employee responses were analyzed. Participants represented personnel involved in delivering or supporting primary health services.

Primary data were collected through a structured questionnaire using a five-point Likert scale. The independent variables were work environment (X1), work discipline (X2), and work stress (X3), while service quality (Y) served as the dependent variable. The variables and their operational indicators are summarized in Table 1.

**Table 1.** Operationalization of Research Variables

Code	Variable	Operational Definition	Indicators
X1	Work Environment	Physical and psychosocial conditions supporting service work.	Resources and support; work control; workload; communication; job characteristics.
X2	Work Discipline	Consistent adherence to work rules and clinical-administrative procedures.	Punctuality; SOP compliance; safety compliance; documentation; coordination.
X3	Work Stress	Physical and psychological strain resulting from work demands.	Headache; fatigue; muscle tension; digestive disorders.

Code	Variable	Operational Definition	Indicators
Y	Service Quality	Consistency of primary care processes and outputs in meeting service standards.	Requirements; procedures; time; costs; service outputs; competence; behavior; facilities; complaint handling.

Source: Processed research data/SPSS version 27 output, 2025.

Data were processed using SPSS version 27. The analytical sequence comprised validity and reliability tests, classical assumption tests, multiple linear regression analysis, coefficient of determination analysis, partial hypothesis testing using t-statistics, and simultaneous hypothesis testing using the F-test. A significance level of 0.05 was used for statistical decisions.

### 3. Results and Discussion

#### Respondent Characteristics

The research analyzed 45 respondents. Female employees formed the majority of respondents, while most respondents were below 40 years old and held a Diploma III qualification. This profile reflects a workforce primarily engaged in daily operational services.

**Table 2.** Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	15	33.3
Gender	Female	30	66.6
Age	< 40 years	35	77.7
Age	40-50 years	10	22.2
Education	Diploma III	36	80.0
Education	Diploma IV/Bachelor	9	20.0

Source: Processed research data/SPSS version 27 output, 2025.

#### Instrument Quality and Classical Assumptions

All indicator correlations met the validity criterion applied in this study, with significance values of 0.000. Reliability testing also showed that each construct exceeded the Cronbach's Alpha threshold of 0.60. The instrument was therefore adequate for regression analysis.

**Table 3.** Validity and Reliability Summary

Construct	Correlation Range	Sig.	Cronbach's Alpha	Result
Work Environment (X1)	0.681-0.899	0.000	0.867	Valid and reliable
Work Discipline (X2)	0.696-0.940	0.000	0.862	Valid and reliable
Work Stress (X3)	0.856-0.911	0.000	0.896	Valid and reliable
Service Quality (Y)	0.751-0.930	0.000	0.958	Valid and reliable

Source: Processed research data/SPSS version 27 output, 2025.

**Table 4.** Classical Assumption Test Summary

Test	Statistical Evidence	Interpretation
Normality	Kolmogorov-Smirnov Asymp. Sig. = 0.200	Normal residual distribution
Multicollinearity	VIF: X1 = 1.053; X2 = 1.042; X3 = 1.079	No multicollinearity
Heteroscedasticity	Glejser Sig.: X1 = 0.159; X2 = 0.604; X3 = 0.673	No indication
Linearity	Deviation Sig.: X1 = 0.273; X2 = 0.633; X3 = 0.606	Linearity supported

Source: Processed research data/SPSS version 27 output, 2025.

### Multiple Regression and Hypothesis Testing

The estimated regression equation was:  $Y = 21.992 + 0.782X_1 + 0.669X_2 - 1.205X_3$ . The positive coefficients of work environment and work discipline suggest that improved organizational conditions and stronger procedural compliance increase service quality. The negative coefficient of work stress indicates that increased stress reduces service quality.

**Table 5.** Multiple Linear Regression Results

Variable	B	Std. Error	Beta	t	Sig.
Constant	21.992	9.682	-	2.271	0.028
Work Environment (X1)	0.782	0.268	0.321	2.916	0.006
Work Discipline (X2)	0.669	0.290	0.253	2.307	0.026
Work Stress (X3)	-1.205	0.263	-0.512	-4.590	0.000

Source: Processed research data/SPSS version 27 output, 2025.

**Table 6.** Model Summary and Hypothesis Testing

Test/Hypothesis	Relationship or Statistical Result	Statistic	Decision/Interpretation
Model fit	R = 0.726; R Square = 0.527; Adjusted R Square = 0.492; SEE = 2.993	-	Adjusted model explanation is 49.2%.
H1	Work Environment -> Service Quality	p = 0.006	Supported; positive significant effect.
H2	Work Discipline -> Service Quality	p = 0.026	Supported; positive significant effect.
H3	Work Stress -> Service Quality	p = 0.000	Supported; negative significant effect.
H4	X1, X2, X3 -> Service Quality	F = 15.231; p = 0.000	Supported; simultaneous effect.

Source: Processed research data/SPSS version 27 output, 2025.

### Discussion

Work environment has a positive and significant effect on service quality (B = 0.782; p = 0.006). The result indicates that health service quality depends on enabling physical and psychosocial conditions, including available work facilities, coordination, supportive relationships, and manageable service arrangements. This finding aligns with the Job Demands-Resources perspective and with evidence linking supportive healthcare work environments to better patient-related outcomes (Bakker & Demerouti, 2023; Ystaas et al., 2023).

Work discipline has a positive and significant effect on service quality (B = 0.669; p = 0.026). In a primary care organization, discipline includes timely attendance, compliance with SOPs, patient-safety behavior, complete documentation, and coordination of service flows. The result supports the emphasis on safety culture and continuous quality assurance in accreditation and global patient safety guidance (Kementerian Kesehatan Republik Indonesia, 2022; World Health Organization, 2021).

Work stress has a significant negative effect on service quality (B = -1.205; p = 0.000) and has the largest absolute standardized coefficient in the model (Beta = -0.512). The result positions stress management as a major managerial priority for the studied health center. Work stress can adversely influence attentiveness, empathy, accuracy, and responsiveness. This finding is consistent with evidence on healthcare worker burnout and its relationship with reduced quality and patient safety (Lamuri et al., 2023; Li et al., 2024).

The simultaneous test confirms that work environment, work discipline, and work stress jointly influence service quality ( $F = 15.231$ ;  $p = 0.000$ ), with an Adjusted R Square of 0.492. Thus, service quality improvement should be designed as an integrated intervention: resources and work conditions, procedural discipline, and employee mental well-being must be strengthened together. The study provides context-specific evidence from a rural primary care facility; however, its single-site and employee-perception design limits broad generalization.

#### 4. Conclusion

The study concludes that work environment and work discipline positively and significantly affect service quality at Jangkang Community Health Center, while work stress negatively and significantly affects service quality. The three variables simultaneously influence service quality, and the regression model produces an Adjusted R Square of 0.492. These findings emphasize that primary health service quality is shaped by organizational resources, behavioral compliance, and psychosocial conditions of healthcare employees.

Jangkang Community Health Center is recommended to improve physical and psychosocial work conditions through adequate facilities, safer and more comfortable workspaces, supportive supervision, and strengthened teamwork. Discipline should be reinforced through consistent SOP implementation, routine briefings, accurate service documentation, and fair monitoring mechanisms. Because work stress demonstrated the strongest negative coefficient, priority should be given to workload evaluation, equitable scheduling, counselling access, peer support, and well-being programs. The local health authority may use these findings as input for accreditation supervision and rural primary care quality improvement.

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