

The Effect of Competence and Service Quality on Outpatient Patient Satisfaction at Dewina Clinic

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ABSTRACT

Patient dissatisfaction at primary healthcare facilities has become a systemic problem in North Sumatra, marked by rising public complaints, low revisit intention, and unmet service promises at Dewina Clinic, a private primary clinic whose workload is dominated by BPJS patients at 79.46% of 7,324 annual outpatient visits. This study aims to analyze the influence of healthcare personnel competence and service quality on outpatient satisfaction, both partially and simultaneously. A quantitative method with a descriptive-verify approach was applied to 100 respondents selected through accidental sampling, and the data were analyzed using multiple linear regression with SPSS version 26. The results show that competence ($B = 0.425$; $t = 5.000$; $p < 0.05$) and service quality ($B = 0.342$; $t = 4.385$; $p < 0.05$) each have a positive and significant partial influence on patient satisfaction, and simultaneously both variables have a significant influence ($F = 48.650$; $p < 0.05$) with a contribution of 50.1% ($R^2 = 0.501$). Competence is the more dominant variable, with medical knowledge scoring highest (4.45), while staff composure during busy conditions (3.88) and registration waiting time (3.50) are the weakest points. These findings validate the Donabedian structure-process-outcome model. Clinic management is advised to strengthen continuous medical education, digitalize the queue system, and develop staff interpersonal competence to sustain service quality and patient safety.

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1. INTRODUCTION

Primary health care in Indonesia is at a crucial point in the transformation of the national health system. The mandate of Article 28H paragraph (1) of the 1945 Constitution concerning the right of every person to receive health services is translated operationally through Law Number 17 of 2023 concerning Health and Government Regulation Number 28 of 2024, which requires all health care facilities to prioritize service quality and patient safety as absolute priorities (Republic of Indonesia, 2023; 2024).

In reality, the implementation of this policy faces challenges in the form of escalating patient dissatisfaction. The North Sumatra Representative Office of the Indonesian Ombudsman recorded approximately 769 public complaints throughout 2025, with 43 reports originating from the health sector. The dominant complaint patterns included the unavailability of routine medications for JKN-BPJS participants, unilateral cancellation of medical procedures, and rigid administrative barriers (North Sumatra Representative Office of the Indonesian Ombudsman, 2025). This regional phenomenon highlights the gap

between the service standards promised through the Universal Health Coverage program and the reality of patient interactions.

Dewina Clinic is a private primary healthcare facility (FKTP) in the form of an inpatient clinic operating in the suburban areas of Deli Tua and Pancurbatu, Deli Serdang Regency. Since partnering with BPJS Kesehatan in 2020, the clinic has experienced a surge in patient volume. Operational data for 2024 recorded 7,324 outpatient visits, with BPJS participants dominating at 5,820 visits or 79.46% of the total workload (Dewina Clinic Profile, 2024). Dissatisfaction issues were detected through three indicators: (1) low intention to revisit, which was only 62% of the target of 75%; (2) a recommendation deficit, where 45% of interviewed patients were reluctant to recommend the clinic; and (3) failure to fulfill service promises in the form of registration waiting times exceeding 30 minutes, with 28 written complaints in the third quarter of 2024 dominated by queue issues.

Theoretically, this dissatisfaction stems from two critical variables. First, healthcare worker competence, which, according to Spencer and Spencer's (1993) Iceberg Model, encompasses not only clinical knowledge but also traits and motives that determine professional behavior when facing workload pressures. Second, service quality, measured through the five dimensions of SERVQUAL: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml, and Berry, 1988). Previous research consistently shows that these two variables are strong predictors of patient satisfaction (Sari, Mahawati, and Isworo, 2025; Wijaya, Rohendi, and Mulyani, 2024; Hafid, Pasigai, and Soraya, 2024), but most of these studies were conducted in government hospitals or community health centers in urban areas.

The novelty of this research lies in a context that has not been widely studied, namely a private primary clinic in a suburban area with a predominance of BPJS patients approaching 80%. This study aims to analyze the influence of health worker competence and service quality on outpatient satisfaction at Dewina Clinic, both partially and simultaneously, using the Donabedian Model framework (1966), which positions competence as a structural component, service quality as a process, and patient satisfaction as an outcome.

2. RESEARCH METHODS

This study uses a quantitative method with a descriptive-verification approach. The descriptive approach is used to describe the characteristics of each variable, while the verification approach is used to test the hypothesis of the causal influence of the independent variables on the dependent variable through multiple linear regression analysis.

The study population was all outpatients at Dewina Clinic with an annual visit volume of 7,324 people based on operational data from 2024. The sample size was determined using the Slovin formula with a margin of error of 10%, resulting in 98.6 respondents, rounded up to 100. The sampling technique used accidental sampling of patients who had completed the entire series of outpatient services on that day. Inclusion criteria included patients being at least 17 years old, able to communicate in Indonesian, and willing to sign informed consent. Exclusion criteria included health workers or internal clinic employees and incomplete questionnaires.

Primary data were collected through a closed-ended questionnaire with a Likert scale of 1-5. The Health Worker Competence variable (X1) was measured using 10 items based on the five dimensions of Spencer and Spencer (1993), namely knowledge, skills, self-concept, character, and motives. The Service Quality variable (X2) was measured using 16 items based on the five dimensions of SERVQUAL. The Patient Satisfaction variable (Y)

was measured using 6 items covering the suitability of expectations, intention to revisit, and willingness to recommend (Tjiptono, 2014; Kotler and Keller, 2016). Secondary data were obtained from clinic profiles and patient visit reports, supplemented by non-participant observation.

Data analysis was carried out using SPSS version 26, including validity tests (Pearson Product Moment, r table 0.1966 for $n = 100$), reliability tests (Cronbach's Alpha > 0.60), classical assumption tests (Kolmogorov-Smirnov normality, multicollinearity, and heteroscedasticity), multiple linear regression analysis, t-test, F-test, and coefficient of determination (R^2).

3. RESEARCH RESULTS AND DISCUSSION

3.1. Respondent Characteristics

Of the 100 respondents, the majority were female (58%), aged 26-35 years (35%), had a high school/vocational high school (SMA) or equivalent (45%), used BPJS Kesehatan/KIS insurance (80%), and had visited 2-3 times (55%). This composition represents the clinic's patient population, which is predominantly JKN-BPJS participants, as shown in Table 1.

Table 1. Respondent Characteristics (n = 100)

Characteristics	Category	f	%
Gender	Man	42	42
	Woman	58	58
Age	17-25 years	20	20
	26-35 years old	35	35
	36-45 years	25	25
	46-55 years	15	15
	> 55 years	5	5
Education	Elementary/Middle School	10	10
	High School/Vocational School	45	45
	Diploma/Master's	40	40
	Postgraduate	5	5
Guarantee	BPJS/KIS	80	80
	General/Cash	20	20
Frequency of visits	First time	15	15
	2-3 times	55	55
	> 3 times	30	30

Source: processed primary data (2026)

3.2. Validity, Reliability, and Classical Assumption Tests

All statement items in the three variables were declared valid with calculated r values ranging from 0.512 to 0.834, all exceeding the r table of 0.1966. The reliability test produced Cronbach's Alpha of 0.885 (X1), 0.912 (X2), and 0.872 (Y), all exceeding the standard of 0.60, so the instrument was declared very reliable. The classical assumption test showed that the residuals were normally distributed (Kolmogorov-Smirnov, Asymp. Sig. 0.200 > 0.05), there was no multicollinearity (Tolerance 0.542 > 0.10 ; VIF 1.845 < 10), and there was no heteroscedasticity based on the random distribution pattern on the scatterplot, so that the regression model met the BLUE (Best Linear Unbiased Estimator) criteria.

3.3.Descriptive Analysis of Variables

The average score for the competency variable was 4.22 (very good category). The indicator of medical knowledge regarding drug function and dosage received the highest score (4.45), while the character indicator of calm and patience during busy clinic conditions received the lowest score (3.88). The average score for service quality was 4.03 (good category). The assurance dimension received the highest score (4.32), while the indicator of speed of registration service in the responsiveness dimension received the lowest score (3.50). The average patient satisfaction score was 4.22, with the highest scores for satisfaction with treatment results (4.34) and intention to revisit (4.33).

3.4.Results of Regression Analysis and Hypothesis Testing

The resulting regression model is $Y = 1.850 + 0.425 X_1 + 0.342 X_2 + e$. A summary of the test results is presented in Table 2 and Table 3.

Table 2. Results of Multiple Linear Regression and t-Test

Variables	B	t count	Sig.	Is.
Permanent	1,850	4,405	0,000	
Competence (X1)	0,425	5,000	0,000	Sig.
Service Quality (X2)	0,342	4,385	0,000	Sig.

Source: processed primary data (2026)

Table 3. Results of Simultaneous Test (F Test) and Coefficient of Determination

F count	Sig.	R	R Square	Adj. R Square
48,650	0,000	0,708	0,501	0,491

Source: processed primary data (2026)

The first hypothesis test shows that the competence of health workers partially has a positive and significant effect on patient satisfaction ($t \text{ count } 5.000 > t \text{ table } 1.98$; sig. $0.000 < 0.05$), so H1 is accepted. The second hypothesis test shows that the quality of service partially has a positive and significant effect on patient satisfaction ($t \text{ count } 4.385 > t \text{ table } 1.98$; sig. $0.000 < 0.05$), so H2 is accepted. The third hypothesis test shows that both variables simultaneously have a significant effect ($F \text{ count } 48.650$; sig. $0.000 < 0.05$) with a coefficient of determination of 0.501, which means that competence and quality of service can explain 50.1% of the variation in patient satisfaction, while the remaining 49.9% is influenced by other factors outside the model, so H3 is accepted.

3.5.The Influence of Healthcare Worker Competence on Patient Satisfaction

The finding of a positive influence of competence on patient satisfaction aligns with research by Sari and Handayani (2020) and Alya and Latunreng (2021). From the perspective of Spencer and Spencer's (1993) theory, a high medical knowledge indicator score (4.45) indicates that patients place the highest value on doctors' ability to accurately explain illnesses and determine medication dosages. In suburban communities like Deli Tua, doctors are positioned as authority figures with expert power, so satisfaction is determined more by the accuracy of diagnoses and clarity of medical information than by the luxury of facilities. This finding is supported by Lestari, Ikhtiar, and Hamzah (2025), who found a strong influence of medical technical quality on patient satisfaction.

On the other hand, a paradoxical finding was found in the traits indicator, where officers' composure in crowded conditions received the lowest score (3.88). Based on the Iceberg Model, character is a subsurface competency that is difficult to change but significantly influences professional behavior. This low score is a direct impact of operational pressures resulting from the volume of BPJS visits, which reached 79.46%, in line with the

phenomenon of interpersonal conflicts between officers and patients reported by the Ombudsman in various health facilities in North Sumatra.

3.6.The Influence of Service Quality on Patient Satisfaction

The positive influence of service quality on patient satisfaction is consistent with research by Wijaya, Rohendi, and Mulyani (2024) and Hafid, Pasigai, and Soraya (2024). Analysis per SERVQUAL dimension shows that the assurance and empathy dimensions obtained high scores (4.20 to 4.32), reflecting the strength of health workers' soft skills in building a sense of security and emotional bonds with patients. Conversely, the registration waiting time indicator in the responsiveness dimension obtained the lowest score (3.50), confirming complaints about the failure to fulfill service promises. From the perspective of Parasuraman, Zeithaml, and Berry's (1988) Gap Analysis, this constitutes Gap 3 (service delivery gap), where the promised speed standards have not been realized in the field, especially during peak hours.

Despite the low responsiveness score, overall satisfaction remained high because the reliability dimension, specifically diagnostic accuracy, scored well. This suggests a perceptual compensation mechanism, where satisfactory medical outcomes offset administrative deficiencies. Similar findings were reported by Nefia (2022), who identified reliability as a dominant factor in patient satisfaction in hospitals.

3.7.Simultaneous Influences in the Framework of the Donabedian Model

The simultaneous contribution of 50.1% validates the Donabedian Model (1966) as the grand theory of this study: competence acts as a structure (input), service quality as a process, and patient satisfaction as an output. A competent human resource structure facilitates a quality service process, which ultimately results in satisfaction. The larger regression coefficient of competence ($B = 0.425$) compared to service quality ($B = 0.342$) implies that in suburban primary clinics with high BPJS patient volumes, investment in human resource capacity development, particularly medical knowledge and interpersonal skills, has a greater impact on satisfaction than improvements to physical infrastructure alone.

4. CONCLUSION

Healthcare worker competence and service quality, both partially and simultaneously, had a positive and significant impact on outpatient satisfaction at Dewina Clinic, with a simultaneous contribution of 50.1%. Competence had a more dominant influence, with medical knowledge as the most influential indicator, while critical points were found in the character indicator, namely the calmness of staff during busy times, and the responsiveness dimension, namely waiting time for registration. Patient loyalty was driven more by trust in the doctor's figure than the luxury of supporting facilities, with a perceptual compensation mechanism where satisfactory treatment results offset shortcomings in administrative aspects.

Managerial implications include three areas. First, investing in updating staff medical knowledge through continuous medical training (Continuous Medical Education) as mandated by Health Law Number 17 of 2023. Second, digital transformation of the queuing system, including integration with the Mobile JKN application and the provision of self-service queue terminals, with the target of reducing registration waiting times from over 30 minutes to a maximum of 15 minutes. Third, strengthening staff interpersonal competencies and emotional management through therapeutic communication and conflict management training, along with flexible shift arrangements to prevent burnout. For future researchers, it is recommended to test other variables such as clinical leadership, information technology, or accessibility to explain the remaining 49.9% of variation in

satisfaction, as well as using a mixed-methods approach to explore the psychological aspects of patients more deeply.

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6. BIBLIOGRAPHY

- Alya, N., & Latunreng, W. (2021). Analisis pengaruh kompetensi dan kedisiplinan tenaga kesehatan terhadap kepuasan pasien rawat inap Puskesmas Jasinga Kabupaten Bogor Jawa Barat. *Transparansi: Jurnal Ilmiah Ilmu Administrasi*, 4(1), 70-84. <https://doi.org/10.31334/transparansi.v4i1.1608>
- Donabedian, A. (1966). Evaluating the quality of medical care. *The Milbank Memorial Fund Quarterly*, 44(3), 166-206.
- Hafid, M., Pasigai, M. A., & Soraya, Z. (2024). The influence of service quality on patient satisfaction at Salomekko Community Health Center, Bone Regency. *Income: Journal of Economics Development*, 4(2), 64-76.
- Handayani, T., Zaman, C., & Ekawati, D. (2024). Analysis of BPJS patient satisfaction with the quality of health services in 2024. *Cendekia Medika: Jurnal STIKes Al-Ma'arif Baturaja*, 9(2), 298-306. <https://doi.org/10.52235/cendekiamedika.v9i2.376>
- Kementerian Kesehatan Republik Indonesia. (2022). Peraturan Menteri Kesehatan Republik Indonesia Nomor 34 Tahun 2022 tentang Akreditasi Pusat Kesehatan Masyarakat, Klinik, Laboratorium Kesehatan, Unit Transfusi Darah, Tempat Praktik Mandiri Dokter, dan Tempat Praktik Mandiri Dokter Gigi. Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2024). Peraturan Menteri Kesehatan Republik Indonesia Nomor 17 Tahun 2024 tentang Perubahan Kedua atas

- Peraturan Menteri Kesehatan Nomor 14 Tahun 2021 tentang Standar Kegiatan Usaha dan Produk pada Penyelenggaraan Perizinan Berusaha Berbasis Risiko Sektor Kesehatan. Kementerian Kesehatan RI.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson Education.
- Lestari, A. A., Ikhtiar, I., & Hamzah, W. (2025). Pengaruh technical quality, functional quality, image related dimensions dengan kepuasan pasien di Rumah Sakit Umum Daerah Daya Kota Makassar. *Journal of Innovative and Creativity*, 5(3), 31656-31669. <https://doi.org/10.31004/joecy.v5i3.4760>
- Nefia, O. (2022). Analisis kepuasan mutu pelayanan kesehatan pada pasien kebidanan rawat jalan di Rumah Sakit Umum Pusat Dr. Mohammad Hoesin Palembang. *Jurnal Kesehatan dan Pembangunan*, 12(24), 60-70.
- Ombudsman Republik Indonesia Perwakilan Sumatera Utara. (2025). Laporan tahunan pengaduan masyarakat Perwakilan Sumatera Utara tahun 2025. Ombudsman RI Perwakilan Sumatera Utara.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.
- Pohan, I. S. (2007). *Jaminan mutu layanan kesehatan: Dasar-dasar pengertian dan penerapan*. EGC.
- Profil Klinik Dewina. (2024). Laporan operasional dan data kunjungan pasien rawat jalan Klinik Pratama Rawat Inap Dewina Clinic tahun 2024. Dokumen internal tidak dipublikasikan.
- Putri, I. M. I., & Ngasu, K. E. (2021). Hubungan antara caring dan komunikasi terapeutik dengan kepuasan pasien. *Journal Healthcare Education*, 3(1), 1-10.
- Republik Indonesia. (2023). Undang-Undang Republik Indonesia Nomor 17 Tahun 2023 tentang Kesehatan. Sekretariat Negara.
- Republik Indonesia. (2024). Peraturan Pemerintah Republik Indonesia Nomor 28 Tahun 2024 tentang Peraturan Pelaksanaan Undang-Undang Nomor 17 Tahun 2023 tentang Kesehatan. Sekretariat Negara.
- Sari, A. R., & Handayani, D. M. (2020). Analisis kepuasan pasien terhadap pelayanan dokter di poliklinik rawat jalan rumah sakit. *Jurnal Kesehatan Masyarakat*, 12(2), 145-152.
- Sari, A. R., Mahawati, E., & Isworo, S. (2025). Pengaruh kompetensi tenaga medis terhadap kepuasan pasien: Literature review. *Jurnal Ners*, 10(1), 829-837. <https://doi.org/10.31004/jn.v10i1.50973>
- Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. John Wiley & Sons.
- Tjiptono, F. (2014). *Pemasaran jasa: Prinsip, penerapan, dan penelitian*. Andi Offset.
- Wahyuni, A. (2020). Faktor-faktor yang mempengaruhi kepuasan pasien rawat jalan terhadap kualitas pelayanan di RSUD Full Bethesda Kabupaten Deli Serdang. *Jurnal Rekam Medic*, 3(1), 20-31. <https://doi.org/10.33085/jrm.v3i1.4914>
- Wijaya, H., Rohendi, A., & Mulyani, K. (2024). Pengaruh kepercayaan, kualitas pelayanan, dan kewajaran harga terhadap kepuasan pasien di Klinik S, Tangerang Selatan. *Innovative: Journal of Social Science Research*, 4(1), 2446-2457. <https://doi.org/10.31004/innovative.v4i1.7848>