The Relationship Between Service Quality and BPJS Outpatient Satisfaction at Al Ihsan Regional Hospital, West Java Province

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ABSTRACT

RSUD Al Ihsan, as a major regional referral hospital in West Java, has reported recurring issues related to service quality in its outpatient department, including long waiting times, administrative inefficiencies, and communication challenges, which affect BPJS patient satisfaction. This study aimed to analyze the relationship between service quality, measured through the SERVQUAL dimensions, and outpatient satisfaction among BPJS patients at RSUD Al Ihsan. A quantitative cross sectional design was employed involving 140 BPJS outpatients selected through purposive sampling based on predetermined inclusion criteria. Data were collected using a validated SERVQUAL questionnaire with a 5 point Likert scale, and statistical analysis was performed using SPSS with Chi-square tests. Ethical approval for this study was granted by the Health Research Ethics Committee of RSUD Al Ihsan. The findings showed that 95.7% of respondents rated all five dimensions of service quality, tangibility, reliability, responsiveness, assurance, and empathy, as good, and 95% reported being satisfied with the services received. The Chi-square test demonstrated a significant association between service quality and patient satisfaction ($p < 0.001$), indicating that higher perceived service quality strongly influences satisfaction levels. In conclusion, service quality plays a critical role in shaping the satisfaction of BPJS outpatients at RSUD Al Ihsan, highlighting the importance of improving administrative flow, responsiveness, and facility support to enhance patient experience and strengthen trust in public healthcare services.

Keywords: Outpatient BPJS, Patient Satisfaction, Service Quality

Introduction

Improving the quality of healthcare services has become a central focus in global health systems. The World Health Organization (WHO) emphasizes that service quality and patient experience are key indicators of healthcare facility performance, particularly in the era of universal health coverage such as in Indonesia. In line with this, the government established the National Health Insurance (JKN) through BPJS Kesehatan to ensure equitable access to healthcare for the entire population.

However, despite the significant and continuing expansion of JKN coverage, various challenges related to service quality remain prevalent in healthcare facilities, including hospitals. Several reports and studies in Indonesia have highlighted persistent complaints regarding long waiting times, complex service flows, and perceived differences in treatment between BPJS patients and general patients. These conditions create a service gap between

expected service quality and the actual patient experience, a phenomenon described in the SERVQUAL model as a primary cause of patient dissatisfaction.

RSUD Al Ihsan, as a provincial referral hospital, faces similar challenges. Hospital data indicate that approximately 98% of patients visiting RSUD Al Ihsan are BPJS participants, and in 2023 alone, more than 360,000 BPJS patients received services at this facility. The high proportion of BPJS patients requires hospital management to ensure high quality and non-discriminatory services for all patient groups. Preliminary findings also show that some BPJS outpatients still perceive the service flow as confusing, experience lengthy registration procedures, and encounter sub optimal staff responsiveness. Similar concerns are reflected in patient feedback on Google Reviews.

These conditions reveal an existing research gap. While some studies report a significant relationship between service quality and BPJS patient satisfaction, others indicate no substantial difference in satisfaction levels between BPJS patients and general patients. This inconsistency underscores the need for further investigation, particularly in hospitals with a very high BPJS patient load such as RSUD Al Ihsan.

Using the five dimensions of Service Quality (tangibility, reliability, responsiveness, assurance, and empathy) an internationally recognized instrument for assessing service quality, this study aims to analyze how service quality at RSUD Al Ihsan is associated with the satisfaction levels of BPJS outpatient users.

Materials and Methods

This study employed a quantitative research design with a cross sectional approach to analyze the relationship between service quality and outpatient satisfaction among BPJS patients at RSUD Al Ihsan, West Java Province. A cross sectional method was selected because it allows simultaneous measurement of independent and dependent variables, aligning with widely recommended approaches in healthcare service quality evaluation. The study population consisted of all BPJS outpatient visitors on March 4, 2024, totaling 1,200 individuals. The sample was determined using purposive sampling based on inclusion and exclusion criteria. The inclusion criteria included BPJS outpatients who were able to read and write and who agreed to participate, while the exclusion criteria consisted of patients with communication limitations and first-time visitors to RSUD Al Ihsan. Referring to the guideline of selecting 10% of the population, a total sample of 120 respondents was obtained, which aligns with methodological standards in public health research.

The research instrument utilized a structured questionnaire adapted from the SERVQUAL framework developed by Parasuraman, Zeithaml, and Berry (1988). The questionnaire consisted of 25 statements measuring service quality across five dimensions: tangibility, reliability, responsiveness, assurance, and empathy. Additionally, patient satisfaction was measured using five statements assessing overall satisfaction with outpatient services. All items used a 5 point Likert scale ranging from 1 (very poor/very dissatisfied) to 5 (very good/very satisfied). Prior to the main data collection, the questionnaire underwent validity and reliability testing on 30 respondents. The validity test using the Product Moment correlation showed that all items had r-values greater than the table value (0.361), indicating that all items were valid. Reliability testing using Cronbach's Alpha produced a value of 0.89 for the service quality instrument and 0.82 for the satisfaction instrument, demonstrating high reliability.

This study received ethical approval from the Health Research Ethics Committee of the Immanuel Institute of Health Sciences, Bandung, under approval number 105/KEPK/IKI/VII/2024. All respondents participated voluntarily after receiving information about the study's objectives, benefits, and confidentiality protections, in accordance with ethical research principles. Data were collected using an online questionnaire (Google Form), which respondents completed independently after providing informed consent.

Data were analyzed using IBM SPSS Statistics version 26. Univariate analysis was performed to describe respondent characteristics and the distribution of service quality and satisfaction scores. To examine the relationship between service quality and patient satisfaction, bivariate analysis was conducted using the Chi-Square (χ^2) test. This test was selected because both variables were categorized into nominal data. The Chi-Square statistic was calculated using the formula :

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

and the relationship was considered statistically significant if the p-value was less than 0.05.

Results and Discussion

1. Descriptive Statistics

    a. Respondent Characteristics

        A total of 140 BPJS outpatient respondents participated in this study. Table 1 presents the demographic characteristics of respondents, including age, sex, and occupation.

Table 1. Characteristics of Respondents (n = 140)

Variable	Category	n	%
	17-24	28	20
	25-34	35	25
Age	35-49	36	25,7
	50-64	41	29,3
	> 65	0	0
Sex	Male	68	48,6
	Female	72	51,4
	Laborer	43	30,7
	Millitary/Police	40	28,6
Occupation	Private Employee	19	13,6
	Enterpreneur	11	7,9
	Student	8	5,7
	Unemployed	8	5,7

b. Service Quality (SERVQUAL Dimensions)

All five SERVQUAL dimensions showed similar distribution patterns, with 95.7% of respondents rating the service as *good* and 4.3% rating it as *poor*.

Table 2. Distribution of SERVQUAL Dimensions (n = 140)

Dimension	Good n (%)	Poor n (%)
Tangibles	134 (95,7%)	6 (4,3%)
Reliability	134 (95,7%)	6 (4,3%)
Responsiveness	134 (95,7%)	6 (4,3%)
Assurance	134 (95,7%)	6 (4,3%)
Empathy	134 (95,7%)	6 (4,3%)

c. Patient Satisfaction

Table 3. Patient Satisfaction Levels (n = 140)

Satisfaction Level	n	%
Satisfied	133	95,0
Dissatisfied	7	5,0

2. Bivariate Analysis

   a.   Chi-Square Test for Tangibles and Satisfaction

Table 4. Chi-Square Test for Tangibles and Satisfaction

Statistic	Value
X^2 (Chi-Square)	140,0
Df	1
P-value	<0,001
Cramér's V	1,00

   b.   Chi-Square Test for All Service Quality Dimensions

Table 5. Chi-Square Test for All Service Quality Dimensions

Dimension	χ^2	df	P-value	Cramér's V
Tangibles	140,00	1	<0,001	1,00
Reliability	140,00	1	<0,001	1,00
Responsiveness	140,00	1	<0,001	1,00
Assurance	140,00	1	<0,001	1,00
Empathy	140,00	1	<0,001	1,00
Overall Service Quality	112,06	1	<0,001	0,90

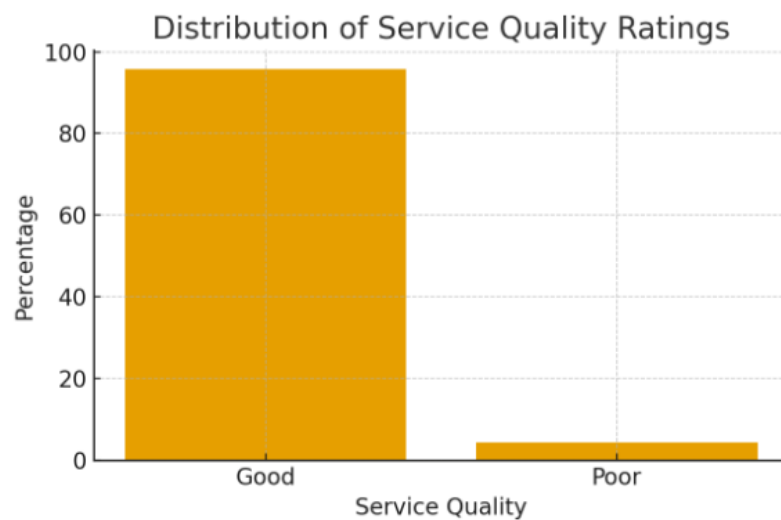   c.   Distribution of Service Quality Ratings

Figure 1. Distribution of Service Quality Ratings

d. Patient Satisfaction Levels

Figure 2. Patient Satisfaction Levels

This study demonstrated that all five dimensions of service quality, tangibles, reliability, responsiveness, assurance, and empathy, were significantly associated with BPJS patient satisfaction at RSUD Al Ihsan. The relationship was statistically strong, with p-values < 0.001 and Cramér's V values ranging from 0.90 to 1.00, indicating a very large effect size. These findings support the SERVQUAL theoretical framework, which posits that the five dimensions collectively determine the perceived service experience and patient satisfaction.

Descriptively, 95.7% of respondents rated the quality of service as good, and 95% reported being satisfied. This suggests that RSUD Al Ihsan has successfully provided outpatient services that align with patient expectations. The consistency across all SERVQUAL dimensions also indicates that improvements in service quality have been implemented uniformly rather than selectively.

The significant association between service quality and satisfaction aligns with previous empirical studies conducted in Indonesian hospitals (Yusran 2021; Ahmad 2021; Safitri 2022; Vernandes & Nurvita 2022). These studies also reported that responsiveness, assurance, and empathy tend to be dominant predictors of satisfaction, especially in healthcare settings where interpersonal interaction plays a major role.

In the context of RSUD Al Ihsan, BPJS users may emphasize the need for efficient, empathetic, and timely services. Dimensions such as responsiveness (speed and willingness to help) and assurance (competence and courtesy of staff) are particularly crucial in outpatient services, where delays and communication failures can significantly affect patient perceptions. The findings imply that RSUD Al Ihsan should maintain and continue enhancing its service quality performance. Strengthening interpersonal communication, improving clarity of

procedures, and maintaining facility cleanliness are essential strategies to sustain patient satisfaction. Given the strong relationship found in all dimensions, improvements need to remain holistic rather than focused on a single domain.

The findings of this study indicate that most respondents perceived all dimensions of service quality at RSUD Al Ihsan as good, and patient satisfaction among BPJS users reached a high level. Rather than merely repeating these results, it is essential to interpret why such patterns emerged. Within the SERVQUAL framework, the five dimensions, tangibles, reliability, responsiveness, assurance, and empathy, represent the core components shaping patients' quality perceptions. The consistently high scores across these dimensions suggest that RSUD Al Ihsan has met fundamental expectations of healthcare service provision, including adequate physical facilities, consistent service delivery, prompt responsiveness, professional assurance, and compassionate interpersonal interactions. When these dimensions align with patient expectations, satisfaction levels increase accordingly. This pattern confirms the theoretical proposition of SERVQUAL that service quality directly influences perceived satisfaction.

The results can also be explained through Donabedian's Structure–Process–Outcome model. The high service quality ratings imply that both structural components (facilities, equipment, physical environment) and process components (service flow, communication, timeliness, and staff behavior) are functioning well in RSUD Al Ihsan. When structure and process elements operate effectively, the resulting outcome patient satisfaction naturally improves. As a regional referral hospital serving a large population of BPJS patients, RSUD Al Ihsan likely benefits from standard operating procedures, queue management improvements, and staff training in communication and responsiveness. These organizational practices provide a theoretical rationale for the favorable satisfaction outcomes observed in this study.

These findings are consistent with several previous studies. Safitri (2024) reported that empathy and responsiveness significantly influenced patient satisfaction in regional hospitals, aligning with the present study's emphasis on interpersonal service dimensions. A study by Efendy (2022) on BPJS participants similarly noted that service quality is the strongest determinant of patient satisfaction. Setyaningrum (2024), applying the Donabedian model, demonstrated that improvements in structural and process components significantly enhance satisfaction outcomes, supporting the theoretical mechanism proposed earlier. Research by Cahyo (2025) found that physical facilities and responsiveness were primary predictors of satisfaction in outpatient services, while Mahmudah (2024) observed that waiting time and

staff communication were critical factors affecting BPJS patient satisfaction. Additional studies published between 2023 and 2025 in Indonesian healthcare settings have consistently confirmed that service quality is strongly correlated with satisfaction, especially in hospitals with high BPJS patient volume. The alignment of the present findings with earlier studies strengthens the external validity of the study and supports the broader generalizability of the SERVQUAL and Donabedian frameworks in the Indonesian healthcare context.

Despite these positive findings, several limitations should be acknowledged. The use of a cross-sectional design limits causal inference, as it captures only a single point in time and cannot determine whether service quality improvements directly lead to higher satisfaction. The reliance on online questionnaires and voluntary participation introduces potential self-selection bias, with more satisfied patients possibly being more inclined to respond. Furthermore, reducing service quality and satisfaction into dichotomous categories may limit the sensitivity of the findings by obscuring subtle variations in patient perceptions. The study was also conducted in a single hospital, restricting generalizability to other healthcare facilities with different patient profiles. Additionally, the analysis relied solely on the Chi-square test without adjusting for potential confounding factors such as age, education level, or frequency of visits. Future research should employ multivariate analysis or longitudinal designs to provide more robust evidence and explore mediating or moderating variables in the relationship between service quality and patient satisfaction.

Overall, this study demonstrates that high service quality at RSUD Al Ihsan is theoretically coherent with the SERVQUAL and Donabedian models and is empirically consistent with previous research on healthcare service quality. The findings highlight that maintaining adequate facilities, optimizing service processes, and strengthening interpersonal communication remain essential strategies for enhancing satisfaction among BPJS patients. Nonetheless, the results should be interpreted carefully considering the study's methodological limitations, and further investigations are needed to deepen the understanding of service quality dynamics in Indonesian healthcare settings.

Conclusion

This study concludes that service quality at RSUD Al Ihsan, across the dimensions of tangibility, reliability, responsiveness, assurance, and empathy, was predominantly perceived as good and was strongly associated with BPJS outpatient satisfaction. Patients who rated the service quality positively were significantly more likely to report higher satisfaction levels, confirming that quality of care remains a key determinant of patient experience within the BPJS

system. These findings imply that improving service processes, strengthening staff responsiveness, and maintaining adequate facilities are essential for enhancing satisfaction among BPJS users. For hospital management, the results highlight the importance of continuous quality improvement, particularly in administrative flow, communication skills, and service efficiency, as these elements directly influence patient trust, service utilization, and overall hospital performance.

Recommendations

1. For RSUD Al Ihsan.

Improve staff empathy through targeted communication training, optimize the registration and waiting-time process, and conduct routine quality monitoring to enhance BPJS patient satisfaction.

2. For Immanuel Institute of Health.

Use the findings as academic material to strengthen teaching on healthcare quality and encourage the development of student competencies related to service improvement.

3. For Future Researchers.

Include additional variables such as waiting time and staff workload, apply multivariate or mixed-method approaches, and involve multiple healthcare facilities to increase generalizability.

Acknowledgment

References

Ahmad, H., dkk. (2021). *Hubungan mutu pelayanan kesehatan terhadap tingkat kepuasan pasien rawat jalan di Puskesmas Mangasa Kota Makassar*. Jurnal Kesehatan Ilmiah Indonesia, 6(2).

Amalia, D. (2018). *Hubungan indeks kepuasan pasien tentang mutu pelayanan dimensi kehandalan dengan minat berobat kembali di RSD Kalisat Kabupaten Jember* (Skripsi).

Ampu, M. N. (2020). *Pengaruh kualitas pelayanan kesehatan terhadap tingkat kepuasan pasien pengguna BPJS di Desa Suanae (Puskesmas Eban)*.

Anggraeni, D. M., & Saryono. (2013). *Metodologi penelitian kualitatif dan kuantitatif dalam bidang kesehatan*. Yogyakarta: Nuha Medika.

Annisa, N. (2017). *Hubungan mutu pelayanan terhadap kepuasan pasien rawat inap kelas III di Rumah Sakit Tk. IV Madiun* (Skripsi). STIKES Bhakti Husada Mulia Madiun.

Az-Zahroh, T. N. (2017). *Pengaruh mutu pelayanan kesehatan terhadap tingkat kepuasan pasien rawat inap di ruang dewasa umum Rumah Sakit X Kabupaten Gresik.*

Budiarto, E. (2013). *Metodologi penelitian kedokteran*. Jakarta: EGC.

Cahyaningrum, I. (2012). *Pengaruh mutu pelayanan kesehatan terhadap kepuasan pasien rawat jalan PKMS di RSUD Kota Surakarta* (Skripsi). Universitas Muhammadiyah Surakarta.

Darmadi. (2016). *Hubungan mutu pelayanan kesehatan dengan tingkat kepuasan pasien rawat inap di Ruang Dahlia RSUD Kota Madiun* (Skripsi). STIKES Bhakti Husada Mulia Madiun.

Efendi, R., Arifin, A., & Darmawansyah. (2013). *Hubungan mutu pelayanan kesehatan dengan kepuasan pasien rawat jalan di Puskesmas Aeng Towa Kabupaten Takalar.* Universitas Hasanuddin.

Fernandes, N. V., & Nurvita, S. (2022). Hubungan mutu pelayanan kesehatan dengan tingkat kepuasan pasien di Rumah Sakit Kota Lospalos tahun 2022. *JURMIK: Jurnal Rekam Medis dan Manajemen Informasi Kesehatan*, 2(2).

Herlambang, S., & Murwani, A. (2012). *Cara mudah memahami manajemen kesehatan dan rumah sakit*. Yogyakarta: Gosyen Publishing.

Mubarak, W. I., & Cahyatin, N. (2009). *Ilmu kesehatan masyarakat: Teori dan aplikasi.* Jakarta: Salemba Medika.

Muninjaya, G. (2011). *Manajemen mutu pelayanan kesehatan*. Jakarta: EGC.

Notoatmodjo, S. (2012). *Metodologi penelitian kesehatan*. Jakarta: Rineka Cipta.

Nursalam. (2012). *Manajemen keperawatan: Aplikasi dan praktik keperawatan profesional* (Edisi ke-3). Jakarta: Salemba Medika.

Nursalam. (2013). *Metodologi penelitian ilmu keperawatan: Pendekatan praktis* (Edisi ke-3). Jakarta: Salemba Medika.

Nursalam. (2016). *Manajemen keperawatan: Aplikasi dan praktik keperawatan profesional* (Edisi ke-5). Jakarta: Salemba Medika.

Pohan, I. S. (2006). *Jaminan mutu layanan kesehatan: Dasar pengertian dan penerapan.* Jakarta: EGC.

Purwanto. (2011). *Statistika untuk penelitian*. Yogyakarta: Pustaka Pelajar.

Purwoastuti, E., & Walyani, E. S. (2015). *Mutu pelayanan kesehatan dan kebidanan.* Yogyakarta: Pustaka Baru.

Riduwan. (2015). *Dasar-dasar statistika*. Bandung: Alfabeta.

Safitri, D., dkk. (2022). Hubungan mutu pelayanan kesehatan terhadap kepuasan pasien pengguna BPJS di Puskesmas Inderapura Kecamatan Pancung Soal. *Flora: Jurnal Ilmu Kesehatan*, 1(2).

Santjaka, A. (2015). *Aplikasi SPSS untuk analisis data penelitian kesehatan*. Yogyakarta: Nuha Medika.

Sari, K. I. (2020). Pengaruh kualitas pelayanan terhadap kepuasan pasien di Puskesmas Urug Kecamatan Kawalu Kota Tasikmalaya. *Dinamika: Jurnal Ilmiah Ilmu Administrasi Negara*, 7, 194–207.

Saryono. (2011). *Metodologi penelitian kesehatan*. Jogjakarta: Mitra Cendikia Press.

Sujarweni, V. W. (2015). *SPSS untuk penelitian*. Yogyakarta: Pustaka Baru Press.

Swarjana, I. K. (2015). *Metodologi penelitian kesehatan* (Edisi revisi). Yogyakarta: Andi.

Wardiah, R. (2021). Hubungan mutu pelayanan kesehatan dengan tingkat kepuasan pasien rawat inap di RSUD dr. Rasidin Padang. *Jurnal Human Care*, 6(1), 225–231.

Wira, I. A. D. (2014). *Hubungan persepsi mutu pelayanan keperawatan dengan kepuasan pasien rawat inap kelas III di RSUD Wangaya Kota Denpasar* (Skripsi). Universitas Udayana.

Yakob, A. (2023). Hubungan mutu pelayanan dengan kepuasan pasien rawat jalan di Rumah Sakit Paru Manguharjo Madiun. *Ventilator: Jurnal Riset Ilmu Kesehatan dan Keperawatan*, 1(4).

Yusran, S. S., & Saimin, J. (2021). Hubungan mutu pelayanan terhadap kepuasan pasien rawat inap di RSU Bombana. *Jurnal Manajemen dan Administrasi Rumah Sakit Indonesia*, 5(2).

Zaniarti, D. (2011). *Hubungan kualitas pelayanan kesehatan dengan kepuasan pasien rawat inap Jamkesmas di RSUD Salatiga* (Skripsi). Universitas Negeri Semarang.