








ORIGINAL

Assessment of Strategic Healthcare Development Using Importance-Performance Analysis: A Multicenter Study of Three Sharia Hospitals in Indonesia

Evaluación del Desarrollo Estratégico de la Atención Sanitaria mediante el Análisis de Importancia-Desempeño: Un Estudio Multicéntrico de Tres Hospitales Sharia en Indonesia

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ABSTRACT

Introduction: in the era of competitive healthcare services, Sharia hospitals in Indonesia face increasing pressure to align service delivery with both clinical excellence and Islamic values. Understanding patient perceptions is vital to ensure continuous improvement and fulfill religious expectations in healthcare delivery. **Objectives:** this study aims to assess the quality of service delivery in Sharia hospitals using the Importance-Performance Analysis method and identify key service dimensions that require strategic improvement.

Method: a multicenter observational analytic study was conducted at Yarsi Hospital Jakarta, Sari Asih Hospital Serang, and Annisa Hospital Cikarang Bekasi. Data were collected from patients using a structured questionnaire measuring the importance and performance of various service attributes.

Results: the Importance-Performance Analysis framework was employed to categorize attributes into four quadrants to guide prioritization for quality enhancement. The analysis revealed that several attributes including clarity of information, responsiveness, and attentiveness of staff, fell into the “Concentrate Here” quadrant, indicating high importance but low performance. Conversely, dimensions such as nursing access and coordination showed high performance but were rated lower in importance. The findings highlight discrepancies between patient expectations and perceived service delivery in key service areas.

Conclusions: Sharia hospitals must prioritize improving service dimensions that are deemed highly important by patients but currently underperforming. By incorporating the IPA framework into strategic planning, hospital administrators can better align service delivery with patient expectations and Islamic principles, thus enhancing overall patient satisfaction and care quality.

Keywords: Importance-Performance Analysis; Sharia Hospitals; Healthcare Quality; Patient Satisfaction.

RESUMEN

Introducción: en la era de los servicios de salud competitivos, los hospitales Sharia en Indonesia enfrentan una presión creciente para alinear la prestación de servicios con la excelencia clínica y los valores islámicos.

Comprender las percepciones de los pacientes es vital para garantizar la mejora continua y cumplir con las expectativas religiosas en la atención médica.

Objetivos: este estudio tiene como objetivo evaluar la calidad de la prestación de servicios en hospitales Sharia utilizando el método de Análisis de Importancia-Desempeño (IPA, por sus siglas en inglés) e identificar las dimensiones clave del servicio que requieren mejoras estratégicas.

Método: se llevó a cabo un estudio analítico observacional multicéntrico en el Hospital Yarsi de Yakarta, el Hospital Sari Asih de Serang y el Hospital Annisa de Cikarang Bekasi. Se recolectaron datos de los pacientes mediante un cuestionario estructurado que mide la importancia y el desempeño de varios atributos del servicio.

Resultados: se utilizó el marco del IPA para categorizar los atributos en cuatro cuadrantes con el fin de guiar la priorización de mejoras en la calidad. El análisis reveló que varios atributos, incluidos la claridad de la información, la capacidad de respuesta y la atención del personal, se ubicaron en el cuadrante de “Concentrarse aquí”, lo que indica alta importancia pero bajo desempeño. Por el contrario, dimensiones como el acceso y la coordinación de enfermería mostraron un alto desempeño, pero fueron valoradas con menor importancia. Los hallazgos destacan discrepancias entre las expectativas de los pacientes y la percepción de la prestación del servicio en áreas clave.

Conclusiones: los hospitales Sharia deben priorizar la mejora de aquellas dimensiones del servicio que los pacientes consideran altamente importantes pero que actualmente presentan un bajo desempeño. Al incorporar el marco IPA en la planificación estratégica, los administradores hospitalarios pueden alinear mejor la prestación del servicio con las expectativas de los pacientes y los principios islámicos, mejorando así la satisfacción general del paciente y la calidad de la atención.

Palabras clave: Análisis de Importancia-Desempeño; Hospitales Sharia; Calidad de la Atención Médica; Satisfacción del Paciente.

INTRODUCTION

The healthcare industry in Indonesia is witnessing substantial growth, driven by the increasing demand for healthcare services across both urban and rural areas. With the expansion of healthcare facilities and the rise of specialized care options, hospitals are facing heightened competition in an industry that requires continuous improvement to meet the evolving expectations of patients.^(1,2) In this competitive environment, hospitals must focus on identifying and optimizing key aspects of their services to ensure high-quality care and enhance patient satisfaction.^(3,4) One of the most effective methods for evaluating hospital performance and formulating strategic plans for improvement is Importance-Performance Analysis (IPA). IPA allows for a comprehensive assessment of the gap between the importance of various service attributes to patients and the actual performance of those services, providing valuable insights for hospital decision-makers.^(4,5)

IPA is particularly beneficial for healthcare institutions as it helps prioritize areas of service that need immediate attention, while also identifying aspects that are already being managed effectively. By analyzing the importance and performance levels of service attributes, hospitals can focus on areas where performance is lagging behind patient expectations. This process helps ensure that the allocation of resources and efforts is aligned with what matters most to patients, thus enhancing overall service quality. The IPA framework has been widely utilized across various sectors, particularly in service industries like healthcare, due to its ability to provide clear, actionable information regarding service priorities and areas that require improvement.^(5,2)

The concept of IPA was introduced by Martilla et al.⁽³⁾ in their seminal work Importance-Performance Analysis. They demonstrated how IPA can be used to describe the relationship between customer perceptions of service quality and their expectations of that service. By plotting various service attributes on a two-dimensional grid based on their importance and performance, IPA allows organizations to visually identify areas that need attention. Furthermore, recent studies, such as those by Izadi et al.⁽⁴⁾, have confirmed that IPA is an invaluable tool for healthcare institutions to identify both strengths and weaknesses in their services. Key areas such as the quality of facilities, the competency of healthcare professionals, and the effectiveness of patient communication can all be assessed using this method, which allows hospitals to focus on improving aspects of service that are crucial to patient satisfaction.

In the context of Sharia hospitals in Indonesia, IPA holds particular relevance. These hospitals not only aim to provide high-quality healthcare but also strive to meet the religious and cultural expectations of their patients.⁽⁶⁾ Sharia hospitals must balance the need for effective medical treatment with the values of Islamic principles, which adds a layer of complexity to their service delivery.⁽⁷⁾ By applying IPA, hospitals can better understand the specific needs and expectations of their patients, particularly in the context of healthcare that aligns with Islamic values. This allows for a more nuanced and targeted approach to service improvement, ensuring that both the medical and spiritual needs of patients are met in a holistic manner.⁽⁸⁾

Through IPA, healthcare providers can gain deeper insights into patient preferences, enabling them to allocate resources more effectively and improve service performance in areas that are most important to patients.^(6,8) This can result in better patient outcomes, increased satisfaction, and a stronger competitive position within the healthcare market. Moreover, IPA facilitates the development of strategic plans that are based on real patient feedback and can be used to guide long-term improvements in hospital performance.

This study aims to conduct a statistical assessment of strategic healthcare development using the IPA method, with a focus on three Sharia hospitals in Indonesia. By applying IPA to these hospitals, this research seeks to identify key areas where improvements are needed to enhance service quality and patient satisfaction. The findings will provide valuable recommendations for hospital administrators, helping them develop targeted strategies for service enhancement that align with patient expectations and improve overall hospital performance. Through this approach, the study will contribute to the ongoing efforts to strengthen healthcare services in Indonesia, particularly within the context of Sharia hospitals, which have a unique role in providing culturally and religiously aligned care.

METHOD

Study Design

This study employed a cross-sectional analytical observational design using the Importance Performance Analysis (IPA) method to evaluate service quality based on customer perceptions at three sharia hospitals including Yarsi Hospital Jakarta, Sari Asih Hospital Serang, and Annisa Hospital Cikarang Bekasi. The primary variables measured were the key dimensions of service quality, including responsiveness, assurance, empathy, tangibles, and reliability. Each dimension was assessed through a structured questionnaire consisting of matched items evaluating both the importance and performance of each service attribute. Responses were collected using a 5-point Likert scale, ranging from 1 (Very Unimportant/Very Poor) to 5 (Very Important/Very Good). The IPA framework, originally developed by Martilla *et al.*⁽³⁾, is designed to assess the relationship between the importance of specific service attributes and the actual performance of those attributes as experienced by consumers.

Data Collection and Analysis

The data collected in this study consisted of both primary and secondary data. Primary data were obtained from respondents using a validated and reliable patient experience measurement instrument. Secondary data were sourced from hospital profiles, inpatient visit statistics, and other relevant documents. The data were interpreted by analyzing the alignment between service performance and importance levels from the patients' perspective across the three Islamic hospitals using the IPA approach.

Data collection was conducted through a structured questionnaire distributed to service users. Respondents were asked to evaluate each service attribute on two dimensions: the level of importance (expectation) and the level of performance (perceived service delivery). Both dimensions were assessed using a 5-point Likert scale, with the criteria shown in table 1.

Table 1. Scoring Criteria for Assessing Importance and Performance Dimensions		
Dimensions	Criteria	Likert scale
Importance	Very Important	5
	Important	4
	Fairly Important	3
	Slightly Important	2
	Not Important	1
Performance	Very Satisfied	5
	Satisfied	4
	Fairly Satisfied	3
	Dissatisfied	2
	Very Dissatisfied	1

After data collection, the mean scores for both importance and performance were calculated for each attribute. These values were then plotted on a Cartesian diagram to produce an Importance-Performance

Matrix with four quadrants:

- Quadrant I: concentrate Here (High importance, Low performance).
- Quadrant II: keep Up the Good Work (High importance, High performance).
- Quadrant III: low Priority (Low importance, Low performance).
- Quadrant IV: possible Overkill (Low importance, High performance).

The matrix in figure 1 provides a visual tool to identify service areas that require strategic improvement or maintenance, based on user priorities and satisfaction levels.

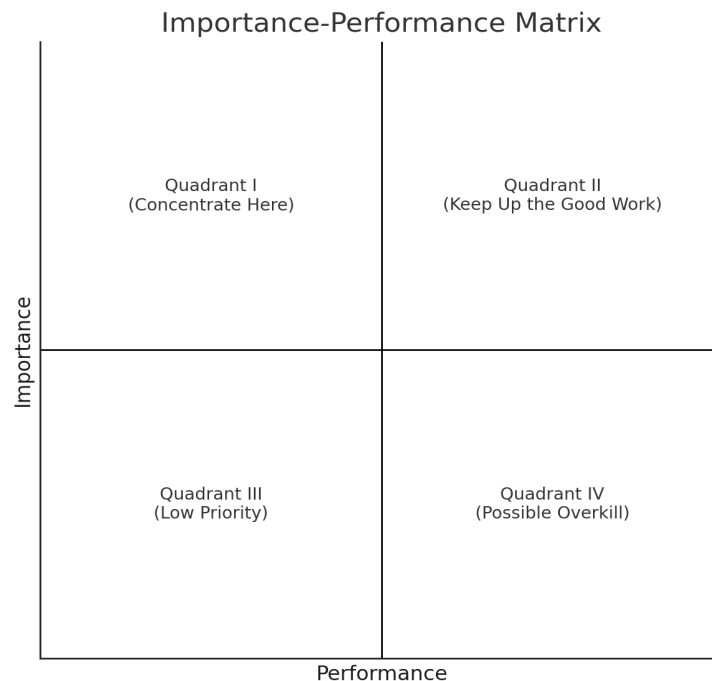


Figure 1. Importance-Performance Matrix in IPA Analysis

Population and Sample

The population in this study consisted of all inpatients at Yarsi Hospital Jakarta, Sari Asih Hospital Serang, and Annisa Hospital Cikarang Bekasi during the year 2023. Historical data from 2020 to 2022 show that Yarsi Hospital recorded a total of 29 093 inpatient visits, Sari Asih Serang Hospital had 39 886 visits, and Annisa Cikarang Bekasi Hospital reported 30 381 visits. The sampling technique used was proportional stratified random sampling, with strata based on the hospital where patients received treatment.

The sample included inpatients who met the following inclusion criteria: patients who had been hospitalized for at least 2×24 hours, patients with a history of previous hospitalization (returning patients), and those who were willing to complete the questionnaire and comply with applicable health protocols.

The sample size was determined using the proportion estimation formula developed by Lemeshow (1997), which considers the confidence level, margin of error, and the estimated proportion of the population possessing specific characteristics.

$$n = \frac{N \cdot Z^2 \cdot P \cdot Q}{d^2(N - 1) + Z^2 \cdot P \cdot Q}$$

Where:

n = total sample size.

N = total population size.

Z = Z-score corresponding to the desired confidence level (1,96 for 95 % confidence).

P = estimated proportion of the population (0,5).

Q = P 0,5.

d = margin of error (0,05 or 5%).

Based on the above formula, the required total sample size was calculated to be:

$$n = \frac{N \cdot Z^2 \cdot P \cdot Q}{d^2(N-1) + Z^2 \cdot P \cdot Q}$$

$$n = \frac{99360 \cdot (1,96)^2 \cdot 0,5 \cdot 0,5}{(0,05)^2(99360 - 1) + (1,96)^2 \cdot 0,5 \cdot 0,5}$$

$$n = 382$$

The number of samples for each hospital was calculated using the following formula:

$$n = \frac{\text{populasi per rumah sakit}}{\text{total populasi}} \times \text{besar sampel}$$

Based on this, the samples were proportionally allocated to the three Sharia hospitals: Yarsi Hospital Jakarta (112 samples), Sari Asih Hospital Serang (153 samples), and Annisa Hospital Cikarang Bekasi (117 samples), totaling 382 samples.

Ethical Approval

This study received ethical approval from the Health Research Ethics Committee of the Faculty of Public Health Hasanuddin University, with protocol number 16424093026. All participants provided informed consent before completing the questionnaire. For participants under the age of 18, informed consent was obtained from a parent or legal guardian. Confidentiality of all responses was maintained throughout the research process.

RESULTS

Participant Characteristics

A total of 382 respondents participated in this study, with the highest proportion recruited from Sari Asih Hospital Serang (n=153), followed by RS Annisa Cikarang (n=117) and RS Yarsi Jakarta (n=112). The majority of participants were female (63,9 %), while males accounted for 36,1 %. Most respondents were in the 19-59 years age group (77,5 %), followed by those aged 10-18 years (15,7 %) and >60 years (6,8 %). No participants were under the age of 10.

Table 2. Participants characteristics

Characteristics	Sari Asih Hospital Serang		Yarsi Hospital Jakarta		Annisa Hospital Cikarang		Total	
	N	%	N	%	N	%	N	%
Sex								
Male	50	32,7	45	40,2	43	36,8	138	36,1
Female	103	67,3	67	59,8	74	63,2	244	63,9
Total	153	100,0	112	100,0	117	100,0	382	100,0
Age (year)								
< 10	0	0,0	0	0,0	0	0,0	0	0,0
10-18	29	19	19	17,0	12	10,3	60	15,7
19-59	120	78,4	87	77,7	89	76,1	296	77,5
> 60	4	2,6	6	5,4	16	13,7	26	6,8
Total	153	100,0	112	100,0	117	100,0	382	100,0
Education								
Elementary school	2	1,3	26	23,2	41	35,0	69	18,1
Junior high school	5	3,3	18	16,1	17	14,5	40	10,5
Senior high school	80	52,3	48	42,9	48	41,0	176	46,1
University degree	66	43,1	20	17,9	11	9,4	97	25,4
Total	153	100,0	112	100,0	117	100,0	382	100,0
Employment								
Housewife	22	14,4	46	41,1	77	65,8	145	38,0
Civil servant	15	9,8	0	0,0	1	0,9	16	4,2

Retired	100	65,4	4	3,6	1	0,9	105	27,5
Private employee	2	1,3	18	16,1	9	7,7	29	7,6
Business	12	7,8	6	5,4	4	3,4	22	5,8
Others	2	1,3	38	33,9	25	21,4	65	17,0
Total	153	100,0	112	100,0	117	100,0	382	100,0
Health Financing								
Governmental insurance	116	75,8	112	100,0	115	98,3	343	89,8
Private Insurance	10	6,5	0	0,0	2	1,7	12	3,1
No insurance	27	17,6	0	0,0	0	0,0	27	7,1
Total	153	100,0	112	100,0	117	100,0	382	100,0
Distance to hospital								
< 1 km	17	11,1	11	9,8	20	17,1	48	12,6
1-5 km	72	47,1	68	60,7	51	43,6	191	50,0
>5 km	64	41,8	33	29,5	46	39,3	143	37,4
Total	153	100,0	112	100,0	117	100,0	382	100,0
Hospital visit frequency								
1	18	11,8	71	63,4	64	54,7	153	40,1
2	57	37,3	23	20,5	22	18,8	102	26,7
>2	78	51,0	18	16,1	31	26,5	127	33,2
Total	153	100,0	112	100,0	117	100,0	382	100,0

In terms of educational background, the majority of participants had completed senior high school (46,1 %), and the most common occupation was housewife (38,0 %). Most participants reported using national health insurance (89,8 %) to cover their healthcare costs. Regarding geographic access, 50,0 % of respondents lived within 1-5 km of the hospital. In terms of hospital utilization, 33,2 % of participants reported visiting the hospital more than twice, indicating regular use of hospital services.

Importance Performance Analysis of Sari Asih Hospital Serang

The questionnaire data revealed an average performance (X) of 3,668 and importance (Y) of 3,740, indicating that patient expectations are higher than actual experiences. The IPA analysis mapped service factors into four quadrants (figure 2). Quadrant I (Critical Priority) includes factors like hospital access (T1-T3), patient education (M2), and cognitive care (D1-D3), which require improvement. Quadrant II (Maintain Performance) includes aspects such as mental health care (G1-G4), medical ethics (H1-H3), family involvement (O1-O3), and staff professionalism (W1-W4), which meet expectations and should be maintained.

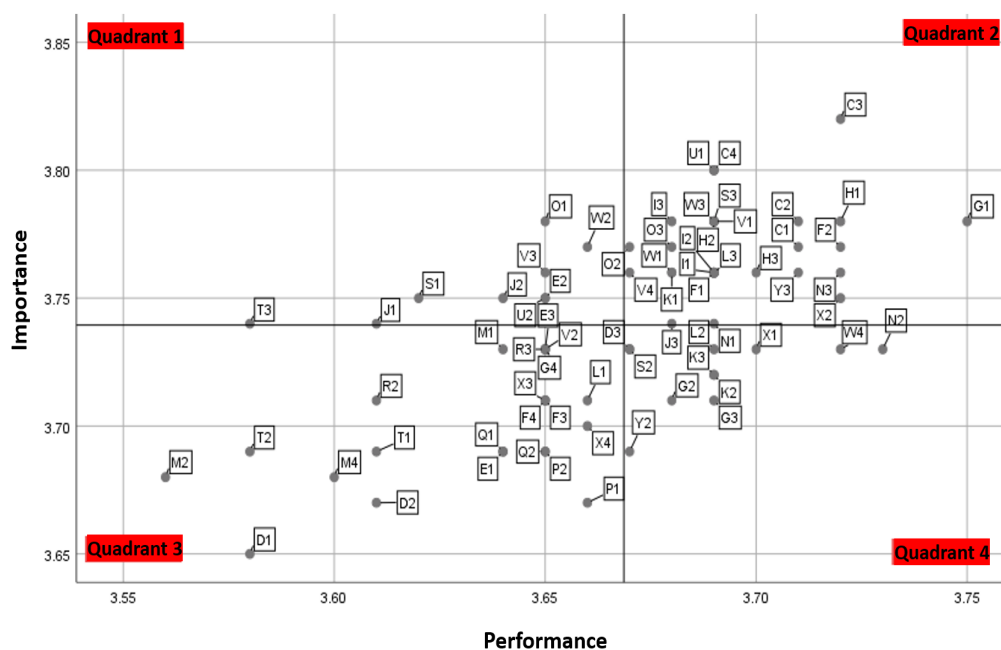


Figure 2. Importance Performance Analysis of Sari Asih Hospital Serang

Quadrant III (Low Priority) contains factors like emotional support (P1-P3) and continuity of care (Q1-Q2), which need improvement but are not urgent. Quadrant IV (Excessive) includes areas like discharge information (X1-X4) and respect in service (L1-L3), where performance is high but importance is lower, suggesting resources could be redirected. To improve service quality, Sari Asih Hospital Serang should focus on factors in Quadrant I, maintain those in Quadrant II, gradually improve those in Quadrant III, and reconsider resource allocation for Quadrant IV.

Importance Performance Analysis of Yarsi Hospital Jakarta

Based on the Importance Performance Analysis (IPA) at Rumah Sakit YARSI shown in figure 3, a gap was found between service performance (3,749) and importance (3,909), indicating that patient expectations exceed actual experiences. The IPA analysis categorized service factors into four quadrants. In Quadrant I (Critical Priority), factors such as patient safety (G1-G3), patient education (M2, M4), nursing access (N2), spiritual and emotional support (F2, F3, K1-K3), and asset protection (E1) require immediate improvement.

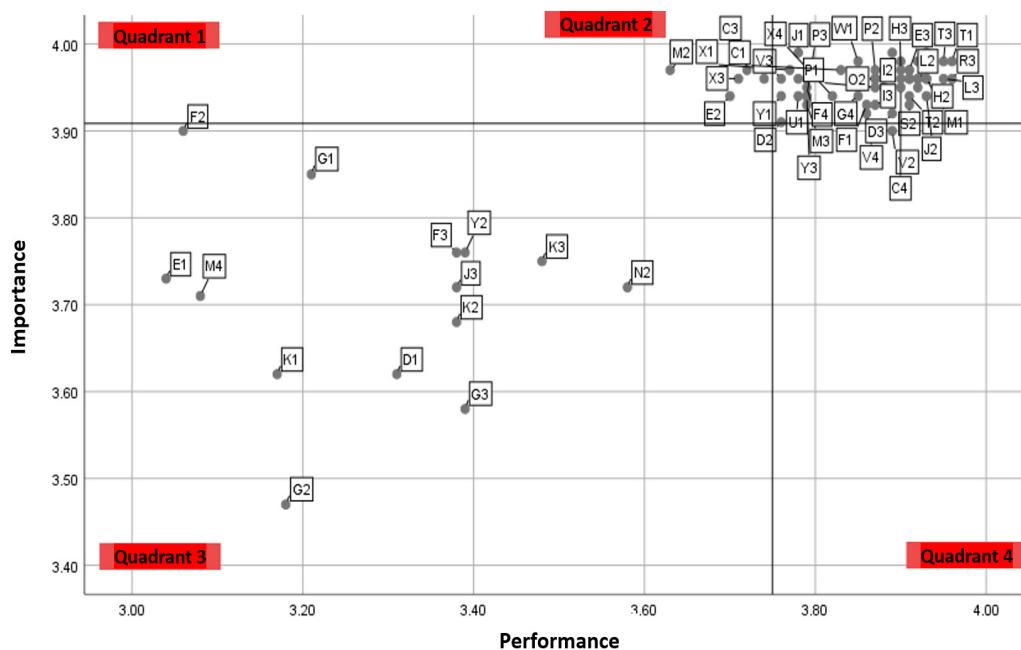


Figure 3. Importance Performance Analysis of Yarsi Hospital Jakarta

Quadrant II (Maintain Performance) includes factors with high importance and performance, such as medical ethics (H1-H3), hospital access (T1-T3), and medical staff quality (W1-W4), which meet patient expectations and should be maintained. Quadrant III (Low Priority) factors like emotional support (P1-P3) and spiritual care (K2, K3) have low importance and performance, so gradual improvement is needed. Quadrant IV (Excessive) factors such as discharge information (X1-X4) and service coordination (S1-S3) show high performance but low importance, suggesting resource reallocation to more critical areas. In conclusion, YARSI Hospital should prioritize improvements in Quadrant I, maintain Quadrant II, address Quadrant III gradually, and reassess Quadrant IV resource allocation. This strategy will enhance patient satisfaction and strengthen the hospital's value-based identity.

Importance Performance Analysis Annisa Hospital Cikarang

The IPA analysis at Annisa Hospital Cikarang revealed a gap between patient expectations and perceived service performance (figure 4). With an average performance of 3736 and an importance of 3903, patients expect more than what is currently provided. The primary focus for improvement is in Quadrant I, where factors such as patient asset protection, information and education, nursing access, emotional support, patient safety, and surgical procedures are highly important but have low performance. Immediate improvements in these areas are necessary to meet patient expectations.

Quadrant II shows that aspects like medical ethics, care environment, medical staff quality, service coordination, and medical staff respect are performing well. These high-performing areas should be maintained and further enhanced to preserve patient satisfaction. Quadrant III, with factors like emotional support (P3), spiritual care (K2-K3), and discharge information (X3), has low importance and performance. While not a top priority, gradual improvement in these areas will improve the overall patient experience. Quadrant IV

includes factors such as hospital access, family involvement, and continuity of care, which perform well but are considered less important by patients. Resources from these areas can be redirected to more critical areas in need of improvement. Overall, Annisa Hospital Cikarang should prioritize improvements in Quadrant I, maintain performance in Quadrant II, gradually improve Quadrant III factors, and reassess resource allocation in Quadrant IV. This strategy will optimize service quality and patient satisfaction.

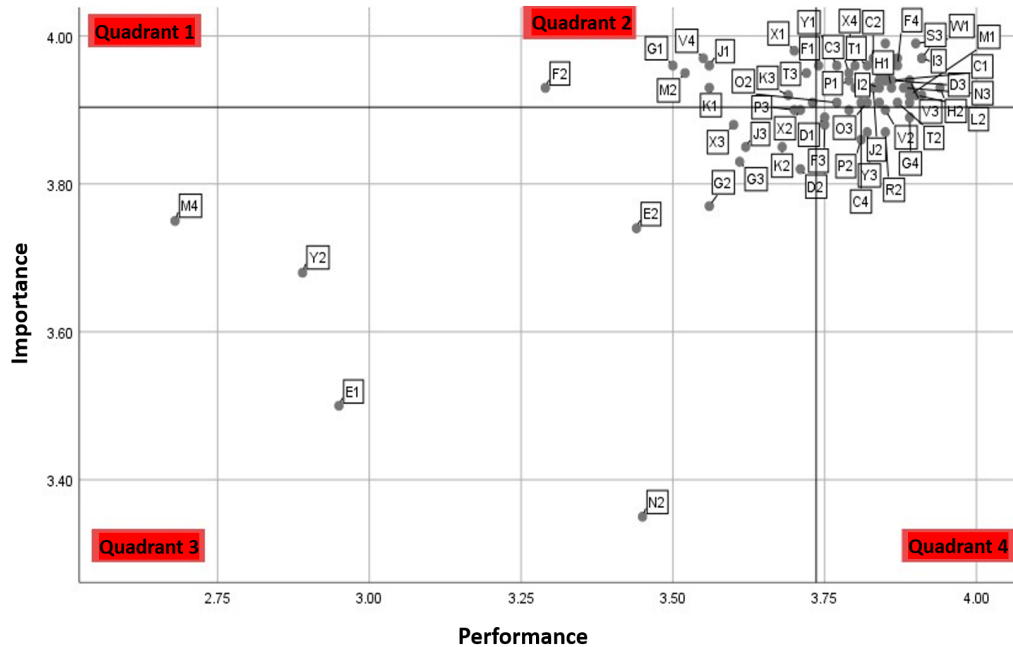


Figure 4. Importance Performance Analysis of Annisa Hospital Cikarang

Importance Performance Analysis of the Three Sharia Hospitals

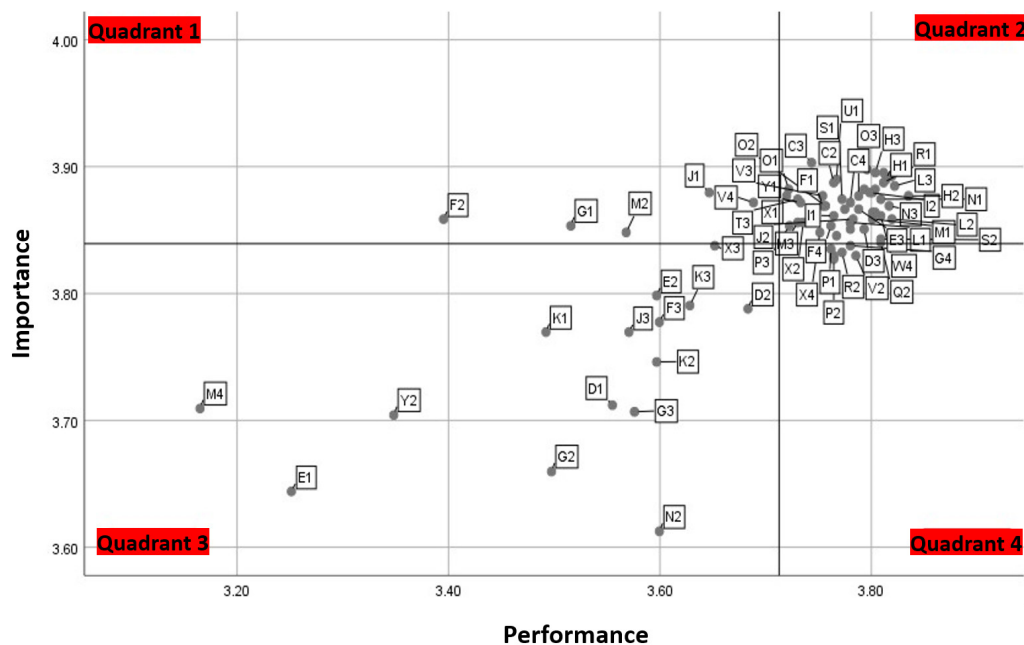


Figure 5. Importance Performance Analysis (IPA) on three Sharia Hospitals

The IPA analysis identifies the gap between perceived service performance and the importance patients place on various factors. The results show an average performance of 3,713 and an average importance of 3,839 (figure 5). These data were plotted into the IPA quadrant diagram to determine improvement priorities. Quadrant I (Critical Priority) revealed factors that are highly important but have low performance, such as Asset Protection (3,251 performance, 3,644 importance), Maintaining Lineage (3,395 performance, 3,859

importance), Hospital Discharge Process (3,348 performance, 3,704 importance), and Patient Education (3,165 performance, 3,709 importance).

The significant gaps indicate the need for immediate improvement to boost patient satisfaction. Quadrant II includes high-performance and high-importance factors, such as Medical Ethics (H1-H3), Respect (L1-L3), Hospital Staff Performance (W1-W4), and Patient-Centered Care (PCC), which should be maintained and further improved. Quadrant III (Low Priority) consists of factors with both low performance and importance, such as Life Protection (G2, G3) and Spiritual Aspects (K1, K2). While improvement is necessary, these areas do not require urgent attention and can be addressed gradually. Quadrant IV (Excessive) contains factors with high performance but low importance, like Coordination (S2, S3) and Nursing Access (N1, N3). Resources in these areas could be reallocated to more critical areas in need of improvement.

Overall, the hospital performs well with an average score of 3,713, but immediate improvements are needed in areas such as patient education, financial security, and the hospital discharge process. Aspects with high importance and performance should be maintained, while gradual improvements can be made in lower-priority factors.

DISCUSSIONS

This study analyzed patient experiences at a Syariah hospital using the Importance Performance Analysis (IPA) method, with the goal of evaluating how well service delivery aligns with Islamic values, particularly those grounded in *maqashid syariah*. The findings revealed that several service dimensions protection of wealth (*hifdz al-maal*), protection of progeny (*hifdz al-nasl*), information and education, and the discharge process, fell into Quadrant A, indicating high importance but low performance. These results suggest critical areas where service improvements are urgently needed to meet patient expectations and fulfill the ethical obligations of Syariah healthcare.

The dimension of protection of wealth (*hifdz al-maal*) plays a central role in Syariah hospital services. It embodies not just financial integrity but also the protection of patient property and fair treatment in all economic interactions. In the Islamic context, safeguarding wealth includes transparency in billing, cost fairness, and avoiding exploitation. Patients in this study considered this dimension very important but felt that hospital performance in this area was lacking. Pratiwi⁽⁹⁾ highlighted that financial dealings in Syariah hospitals must align with Islamic financial ethics, including the prohibition of *riba* and adherence to *halal* investment policies. Collaborating with Islamic financial institutions to manage funds transparently and ethically was emphasized as a best practice. Mustaghfirin et al.⁽¹⁰⁾ further underscored that hospitals adhering to these financial principles tend to enjoy higher patient satisfaction, as patients feel secure and respected within a faith-aligned economic framework.

Equally vital is the dimension of protection of progeny (*hifdz al-nasl*), which underscores the hospital's responsibility to protect and nurture the reproductive health of patients, ensuring services are delivered in accordance with Islamic teachings. This involves providing appropriate maternal and child health services, implementing Sharia-compliant birth control, and delivering reproductive education that respects religious boundaries. However, this study's results indicate a gap between patient expectations and the actual service quality delivered in this domain. Patients reported inadequate education, limited access to Islamic reproductive counseling, and inconsistencies in implementing faith-based guidelines. Andini et al.⁽¹¹⁾, as well as Ismail et al.⁽¹²⁾, emphasized the need for a comprehensive integration of Islamic reproductive values into hospital protocols to ensure spiritual and physical well-being. Mustaghfirin et al.⁽¹⁰⁾ further advocated for the empowerment of healthcare providers through training in Syariah-based medical ethics, especially in obstetric and gynecological care, to reduce patient concerns and ensure respectful treatment.

The need for effective communication and health education emerged strongly through the data, as the information and education dimension were also placed in Quadrant A. Patients reported that they often did not receive sufficient explanation about their medical conditions, treatments, or procedures. This communication gap led to confusion, dissatisfaction, and even mistrust in some cases. In the Syariah hospital context, communication is not just a technical act but a moral responsibility grounded in Islamic values. Dewi et al.⁽¹³⁾ argue that effective communication in hospitals improves patient satisfaction and outcomes, especially when it is embedded with compassion, honesty, and religious sensitivity. Educating patients is not only a clinical task but also a way to uphold their dignity and autonomy as prescribed in Islamic teachings. Therefore, healthcare professionals should be equipped with not just medical knowledge but also spiritual communication skills to deliver information clearly, respectfully, and in alignment with Islamic ethics (*akhlaq*).⁽¹⁴⁾

Leaving hospital or the discharge process is another crucial stage where patients expect care, clarity, and closure. This study found that many patients were dissatisfied with the quality of service during the discharge phase, citing delays, confusion over post-discharge instructions, and lack of spiritual support. The transition from hospital to home is a sensitive period that should be managed carefully, ensuring patients understand their follow-up treatments and medications, and are spiritually supported in continuing their recovery. A

proper discharge process is essential in maintaining patient confidence and improving recovery outcomes, particularly when infused with Islamic practices such as prayers for healing and spiritual encouragement.⁽¹⁵⁾ Therefore, hospitals need to establish comprehensive discharge protocols that incorporate not only clinical but also spiritual and psychological guidance, helping patients feel emotionally prepared and religiously supported as they leave the care environment.

Conversely, dimensions such as coordination and nursing access were placed in Quadrant D, indicating high performance but relatively lower perceived importance. Despite their lower salience in patient priority, these dimensions should still be maintained as areas of strength. Good coordination among hospital staff ensures seamless care delivery, minimizes errors, and improves efficiency. Patients in this study appreciated the teamwork between departments and timely care transitions. This aligns with Kedir Obsa et al.⁽¹⁶⁾, who showed that strong internal coordination leads to fewer clinical errors and enhances patient outcomes. In a Syariah setting, this coordination must also reflect Islamic values, ensuring that decisions are made ethically and in consultation with both clinical and spiritual advisors when necessary.⁽¹⁶⁾

Nursing access was also a high-performing dimension, as patients reported that nurses were approachable and responsive. The presence of compassionate, skilled, and respectful nursing staff significantly improves the patient experience. Training in Syariah-compliant care, such as observing gender concordance where appropriate and maintaining modesty, was particularly appreciated by patients. Abbosh et al.⁽¹⁷⁾ emphasize that culturally competent and faith-sensitive nursing practice fosters trust and enhances the overall quality of care. Hospitals such as Islam Sultan Agung Semarang Hospital exemplify this by assigning same-gender health workers for procedures like ECG and ensuring patient modesty during examinations, demonstrating how Islamic values can be operationalized in daily clinical tasks.⁽¹⁸⁾

Nonetheless, despite the strengths observed in some service aspects, this study highlights a critical challenge for Syariah hospitals: the gap between patient expectations rooted in religious values and the actual performance of service dimensions. While Islamic branding may attract patients seeking faith-aligned care, real value lies in how deeply Islamic ethics are embedded into day-to-day hospital operations. Musviro et al.⁽¹⁹⁾ emphasize that the implementation of *maqashid syariah* must be comprehensive and institutionalized not superficial. Hospitals should not only claim Islamic identity but must also invest in Islamic education for staff, establish clear Sharia-based service standards, and engage in continuous evaluation of their compliance with both health and religious benchmarks.

To address these gaps, it is essential for hospital administrators to prioritize systematic improvements, especially in dimensions falling in Quadrant A. These include training programs for staff in Sharia-based ethics and communication, enhanced collaboration with Islamic scholars in designing health education materials, better financial transparency, and structured discharge procedures that include spiritual counseling. Integrating these improvements holistically will allow Syariah hospitals to meet not only the clinical needs of their patients but also their emotional, spiritual, and ethical expectations creating a more satisfying, complete, and compliant healthcare experience.

CONCLUSIONS

The application of IPA in this study has provided a comprehensive understanding of patient perceptions toward the service quality of Sharia hospitals in Indonesia. The findings reveal significant gaps between the importance patients place on certain service attributes and the actual performance of those attributes. Key areas needing immediate attention include the clarity of information provided by staff, timeliness of service delivery, and the overall responsiveness of hospital personnel. These elements are crucial in fostering patient satisfaction and ensuring the delivery of high-quality care within a framework that aligns with Islamic values. By addressing the attributes located in the “Concentrate Here” quadrant of the IPA matrix, hospital administrators can prioritize improvements in the most critical service aspects. Additionally, maintaining the performance of attributes in the “Keep Up the Good Work” quadrant is essential to sustaining areas that currently meet patient expectations. This study underscores the importance of integrating patient feedback into strategic planning and offers valuable insights for enhancing service quality in Sharia hospitals, ultimately contributing to more patient-centered, culturally sensitive healthcare delivery in Indonesia.

BIBLIOGRAPHIC REFERENCES

1. Kusuma DD. Patient Satisfaction Analysis on the Quality of Health Services at the Cardiology Clinic Using the IPA (Importance Performance Analysis) Method at Bahteramas Regional Hospital, Southeast Sulawesi Province, in 2017 [tesis]. Universitas Halu Oleo; 2018.
2. Wahdatin A, Puspita DW, Abdurrouf M. The implementation of therapeutic communications with postoperative patient satisfaction in Islamic Hospital of Sultan Agung Semarang. *Jurnal Ners*. 2020;14(3):378-82. doi:10.20473/jn.v14i3.17219

3. Martilla JA, James JC. Importance-performance analysis. *J Mark.* 1977;41(1):77-9. doi:10.1177/002224297704100112
4. Izadi A, Jahani Y, Rafiei S, Masoud A, Vali L. Evaluating health service quality: using importance performance analysis. *Int J Health Care Qual Assur.* 2017;30(7):656-63. doi:10.1108/IJHCQA-02-2017-0030
5. Abdurrouf M, Rosalia C. Sharia-based nursing services and patient satisfaction levels in hospitals. UNISSULA Press; 2018. p. 24-31.
6. Dewi A. Islamic health service management: patient-centered care and safety. New Elmatara Publisher; 2020.
7. Rahman MK, Zainol NR, Nawati NC, Patwary AK, Zulkifli WFW, Haque MM. Halal healthcare services: patients' satisfaction and word of mouth lesson from Islamic-friendly hospitals. *Sustainability.* 2023;15(2):1493. doi:10.3390/su15021493
8. Ali D. Islamization of hospital service culture for patient visits at Sultan Agung Islamic Hospital, Semarang. In: *Proceedings of the Unissula Student Scientific Conference (KIMU) 2.* 2019. p. 1291-311. <http://jurnal.unissula.ac.id/index.php/kimuhum/article/view/8259>
9. Pratiwi FD. The impact of implementing Sharia pharmaceutical services on outpatient satisfaction at the Pharmacy Department of Sultan Agung Islamic Hospital, Semarang [tesis]. Universitas Islam Sultan Agung Semarang; 2024.
10. Mustaghfirin M, Ilmi APZ, Ratih D, Latifah E. Sharia principles in hospital management. *JISEF J Int Sharia Econ Financ.* 2023;2(2):79-91.
11. Andini SN, Darmawan ES. Analysis of preference factors of the Greater Bandung community toward Sharia hospitals. *J Masharif Al-Syariah.* 2023;8(4):787-801. doi:10.30651/jms.v8i4.20859
12. Ismail SA, Bachtar A, Darmawan ES, Sari K, Munawar MA. The impact of Sharia hospital certification implementation on hospital performance at Sultan Agung Islamic Hospital [research report]. Universitas Indonesia; 2017.
13. Rahayu S, Sulistiadi W, Mulyanti M, S RY. Analysis of the need for Sharia health services in hospitals, Jakarta, Indonesia. *Health Inf J Penelit.* 2023;15(2):14.
14. Birkeland S, Bismark M, Barry MJ, Möller S. Is greater patient involvement associated with higher satisfaction? Experimental evidence from a vignette survey. *BMJ Qual Saf.* 2022;31(2):86-93. doi:10.1136/bmjqs-2020-012786
15. Hanum C, Lestari ED. Islamic caring behavior by nurses on patient satisfaction: a scoping review. *Int J Glob Health Health Disparities.* 2022;3(1):1-7. <https://jurnal.globalhealthsciencegroup.com/index.php/IJGHR/article/view/3437>
16. Kedir Obsa A, Tegene Y, Gebretsadik A. Iron and folic acid supplementation compliance and associated factors among pregnant women attending antenatal clinic in Shalla District, Southwest Ethiopia: a cross-sectional study. *J Nutr Metab.* 2021;2021:6655027. doi:10.1155/2021/6655027
17. Abbosh C, Frankell AM, Harrison T, Kisistok J, Garnett A, Johnson L, et al. Tracking early lung cancer metastatic dissemination in TRACERx using ctDNA. *Nature.* 2023;616(7957):553-62. doi:10.1038/s41586-023-05776-4
18. Farhan M. The implementation of Sharia principles at Sultan Agung Islamic Hospital Semarang [tesis]. UIN Syarif Hidayatullah Jakarta; 2018.
19. Musviro M, Munawir A, Zulkarnain E. Implementation of Islamic nursing care in improving patient satisfaction. *Health Notions.* 2018;1(4):240-4. <https://heanoti.com/index.php/hn/article/view/72>

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