

# The Influence of Health Worker Services on Patient Satisfaction with Islamic Spiritual Concepts as a Moderating Variable

Healthcare Services  
on Patient  
Satisfaction

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## ABSTRACT

Quality healthcare services not only emphasize technical medical aspects but also consider empathy and patients' spiritual values. In Indonesia, where the majority of the population is Muslim, Islamic-based healthcare services play an important role in shaping patient satisfaction. This study aims to analyze the effects of healthcare staff services, service quality, and healthcare staff empathy on patient satisfaction, with Islamic service as a moderating variable. This study employed a quantitative approach with a cross-sectional design involving 100 outpatient respondents. Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software. The results indicate that healthcare staff services, service quality, and healthcare staff empathy have positive and significant effects on patient satisfaction. Furthermore, Islamic service was found to strengthen the relationships between these variables and patient satisfaction. The discussion highlights that integrating Islamic values into healthcare services enhances patients' holistic service experiences. This study concludes that professional, empathetic, and spiritually grounded healthcare services play a crucial role in improving patient satisfaction.

**Keywords:** Empathy, Healthcare Services, Islamic Service, Patient Satisfaction, Service Quality.

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## INTRODUCTION

Healthcare services aim not only to treat physical illness but also to address patients' psychological, social, and humanitarian needs (Amalia, 2020). However, service quality is often evaluated mainly through technical aspects such as facilities, treatment speed, and professional competence, while patient experience receives less attention (Anjayati, 2021; Tumsekali et al., 2021). Patients are often in vulnerable physical and psychological conditions, healthcare services must combine medical competence with empathy and respect to create a sense of safety and appreciation (Handayani, 2016). In Indonesia's predominantly Muslim society, Islamic values, including trustworthiness, honesty, responsibility, and patience, also shape patients' expectations of healthcare services (Isnaini & Syarifuddin, 2022; Rustiana, 2022). Consequently, patients evaluate not only medical outcomes but also the attitudes and communication of healthcare workers, and the absence of these values may lead patients to feel undervalued despite technically adequate care (Rombon et al., 2021; Khayru & Issalillah, 2022).

Patient satisfaction is a key indicator of healthcare service quality, reflecting patients' acceptance of the care they receive (Ilyas, 2018; Sibai et al., 2021). Satisfied patients tend to develop greater trust in healthcare facilities and medical staff, whereas dissatisfaction can lead to negative perceptions and reduce the likelihood of returning for future services (Erlindai, 2019; Taekab, 2019). In this context, the service provided by healthcare personnel plays a crucial role, particularly through direct interactions with patients (Irawati et al., 2022). Elements such as friendly attitudes, effective communication, and adherence to service procedures are easily perceived and evaluated by patients (Ansyori,

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2023). Responsive and clear communication can foster a sense of security and increase patient trust, while indifferent or poor communication may lead to discomfort and disappointment (Handayani, 2016; Fauziah et al., 2021). Therefore, the quality of healthcare workers' service is a strategic factor in shaping patients' perceptions of overall healthcare quality.

Healthcare service quality is a key factor in achieving patient satisfaction, as it encompasses the reliability of the service system, timeliness, safety assurances, and the comfort of facilities experienced by patients during care (Fristiohady, 2020; Anjayati, 2021; Sugiarto, 2021). Patients evaluate not only medical outcomes but also the entire service process, including administrative procedures and service flow from registration to the completion of treatment (Taekab, 2019). When service quality fails to meet expectations, patient satisfaction may decline even if healthcare professionals are technically competent (Eninurkhayatun et al., 2017). In addition, empathy from healthcare workers plays an essential role in shaping meaningful patient experiences. Empathy is reflected in the ability of healthcare staff to understand patients' conditions, listen to their concerns, and respond with warmth and reassurance (Isnaini & Syarifuddin, 2022; Rustiana, 2022). Patients who feel emotionally understood tend to communicate more openly and experience greater psychological comfort during treatment, which ultimately strengthens satisfaction and the therapeutic relationship between patients and healthcare professionals (Ilyas, 2018; Rombon et al., 2021).

From an Islamic perspective, healthcare is closely linked to spiritual values that emphasize moral responsibility and ethical conduct in serving patients (Isnaini & Syarifuddin, 2022). Illness is often viewed as a test, making spiritual support an important component of care (Rustiana, 2022). Services delivered with sincere intention, patience, and respect for patients' religious practices can foster inner peace and a sense of dignity among patients (Khayru & Issalillah, 2022). Integrating Islamic spiritual values into healthcare practices also promotes more humane interactions between healthcare workers and patients, thereby shaping positive perceptions of service quality (Jonkisz, 2021).

Previous studies confirm the importance of Islamic spiritual values in improving patient satisfaction. Sharia-compliant hospital services, including halal assurance and adherence to Islamic principles, have been shown to increase patient satisfaction, loyalty, and positive word of mouth (Alfarizi & Arifian, 2023). Similarly, fulfilling patients' spiritual needs enhances comfort and satisfaction during treatment (Amiruddin & Murniati, 2020). Integrating Islamic spiritual care with healthcare service quality can strengthen both patient satisfaction and loyalty (Sahil et al., 2025). Dimensions of Islamic service quality, including honesty, empathy, and adherence to Sharia, are likewise positively related to patient satisfaction (Hanun, 2025). A scoping review by Rizkina et al. (2024) found that the application of Islamic values in healthcare consistently improves patient satisfaction, particularly among Muslim populations.

Although various studies have proven that Islamic spiritual values and Sharia-based services influence patient satisfaction, most of these studies still focus their analysis on the direct impact of spirituality or Sharia compliance on patient satisfaction or loyalty. Additionally, the research context has predominantly focused on Islamic hospitals or sharia hospitals, while studies on primary clinics with outpatient characteristics are still relatively limited. Based on this gap, this research is directed to more deeply examine the role of Islamic services in the context of healthcare at primary clinics. The objective of this research is to analyze the influence of healthcare workers' services, the quality of healthcare services, and the empathy of healthcare workers on patient satisfaction with Islamic services as a moderating variable.

## LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

### The Effect of Healthcare Service on Patient Satisfaction

The quality of healthcare services has long been recognized as an essential factor in determining patient satisfaction, particularly in the context of outpatient services where direct interaction between patients and healthcare providers is frequent. Amalia (2020)

emphasizes the multifaceted nature of healthcare, which not only addresses physical health but also the psychological and emotional needs of patients. However, traditional healthcare models tend to focus primarily on technical medical aspects, neglecting the humanistic components, which can lead to a less holistic patient experience (Anjayati, 2021). This perspective aligns with Eninurkhayatun et al. (2017), who argue that the interaction between healthcare personnel and patients is crucial, particularly in outpatient settings where patients are emotionally and physically vulnerable.

Patient satisfaction and the quality of healthcare services are crucial elements for the long-term success of health institutions (Ferreira et al., 2023; Milosavljević et al., 2024). Previous studies have shown that improving the quality of healthcare services contributes significantly to higher levels of patient satisfaction. Research by Fatima et al. (2018) found that better healthcare service quality tends to enhance patient satisfaction and foster patient loyalty. Several aspects of healthcare services, including the physical environment, a patient-friendly atmosphere, responsiveness, effective communication, as well as privacy and safety, are positively associated with patient loyalty, with patient satisfaction acting as a mediating factor. Similarly, Manzoor et al. (2019) reported that healthcare services have a significant effect on patient satisfaction, particularly in laboratory and diagnostic services, which are positively and significantly associated with patient satisfaction.

H1: Healthcare service has a significant effect on patient satisfaction.

#### **The Effect of Service Quality on Patient Satisfaction**

Patient satisfaction is a dynamic concept shaped by multiple factors, particularly the quality of healthcare services and the emotional and spiritual support provided by healthcare workers. According to Silsilia and Tailaso (2018), service quality in healthcare institutions, reflected in reliability, responsiveness, and patient comfort, has a direct influence on patient satisfaction. Nevertheless, satisfaction is inherently subjective, meaning that elements beyond clinical procedures also contribute to how patients evaluate their care experience. Emotional attention, empathy, and supportive communication from healthcare providers can significantly enhance patients' perceptions of care. This perspective is especially relevant in Islamic healthcare contexts, where spiritual support and the alignment of healthcare practices with religious values form an important component of patient-centered care.

Empirical studies further demonstrate that improving service quality consistently leads to higher levels of patient satisfaction. Amalina et al. (2025) found that service quality has a significant positive effect on patient satisfaction, emphasizing the importance of maintaining high service standards through continuous staff training, infrastructure development, and effective communication with patients. Similarly, Divya et al. (2025) identified a positive relationship between service quality, patient satisfaction, and patient loyalty, indicating that satisfied patients are more likely to remain loyal to healthcare providers. Supporting these findings, Dama et al. (2024) reported that good service quality not only enhances patient satisfaction but also contributes positively to patient loyalty and strengthens the overall image of the hospital.

H2: Service quality has a significant effect on patient satisfaction.

#### **The Effect of Healthcare Provider Empathy on Patient Satisfaction**

Empathy plays a crucial role in shaping patient satisfaction within healthcare settings. Ilyas (2018) identifies empathy as a key driver of patient satisfaction because it helps establish a therapeutic relationship that increases patient comfort and trust in healthcare providers. When healthcare professionals demonstrate understanding and concern for patients' emotional conditions, patients tend to feel more valued and supported during the care process. Similarly, Isnaini and Syarifuddin (2022) emphasize that the ability of healthcare workers to empathize with patients' emotional states is an essential component

of healthcare delivery that goes beyond the technical execution of medical procedures. Empirical evidence also supports this relationship. Walsh et al. (2019) found a strong positive correlation between patient-rated physician empathy and satisfaction with medical consultations. In addition, Abdelwahed and Zehrim (2025) report that several aspects of healthcare services, including reliability, responsiveness, empathy, nursing care, and medical care, have a positive influence on patients' satisfaction.

Empathy can also interact with spiritual and cultural values to further enhance the patient experience. In Islamic healthcare contexts, empathy is often integrated with spiritual care practices that support patients both emotionally and spiritually. Sahil (2025) explains that Islamic spiritual care emphasizes patience, prayer, and respect for patients' beliefs, thereby providing deeper emotional support alongside clinical treatment. This integration of spiritual values helps create a more holistic healthcare experience. Aupia et al. (2024) further highlight that combining empathy with spiritual support strengthens the relationship between patients and healthcare providers, which ultimately improves patient satisfaction and loyalty. Moreover, efforts to improve interpersonal interactions among healthcare staff can also enhance patient satisfaction. Ghosh (2014) demonstrates that providing strong training for both medical and non-medical hospital staff in interpersonal skills and realistic communication significantly contributes to higher levels of patient satisfaction.

H3: Healthcare provider empathy has a significant effect on patient satisfaction.

#### **Moderating Effect of Islamic Service**

The integration of spiritual values into healthcare services is particularly significant in Indonesia, where a majority of the population practices Islam. Islamic values such as trustworthiness, patience, and empathy are essential in shaping the expectations and perceptions of Muslim patients. Rustiana (2022) explains that Islamic teachings emphasize the moral responsibility of healthcare providers, influencing the way healthcare services are perceived by patients. This moral framework, as highlighted by Khayru and Issalillah (2022), is integral to the service experience and can directly affect patient satisfaction when these values are not reflected in the behavior of healthcare staff.

Islamic service moderates and strengthens the relationship between healthcare workers' service, service quality, and empathy with patient satisfaction. When healthcare services are delivered based on Islamic values, the positive impact of professional care and service quality on patient satisfaction becomes stronger. This indicates that healthcare effectiveness is influenced not only by clinical competence but also by spiritual and ethical dimensions aligned with patients' beliefs. Keshavarzi and Ali (2018) explain that spiritual approaches in Islamic counseling help patients cope with illness by addressing psychological and spiritual needs. Similarly, Ngatindriatun et al. (2024) found that the implementation of Sharia principles in healthcare increases patient satisfaction because patients feel their religious values are respected. In addition, Sharia-compliant services positively affect patient satisfaction and loyalty while strengthening the relationship between service quality and satisfaction (Alfarizi & Arifian, 2023). Islamic service also enhances the effect of empathy on satisfaction, as empathy delivered through spiritual support deepens patients' emotional experiences. This is supported by Sahil (2025) and Aupia et al. (2024), who show that integrating Islamic spiritual care and fulfilling patients' spiritual needs improves satisfaction and ultimately patient loyalty.

H4: Islamic service moderates the effect of healthcare service on patient satisfaction.

H5: Islamic service moderates the effect of service quality on patient satisfaction.

H6: Islamic service moderates the effect of healthcare provider empathy on patient satisfaction.

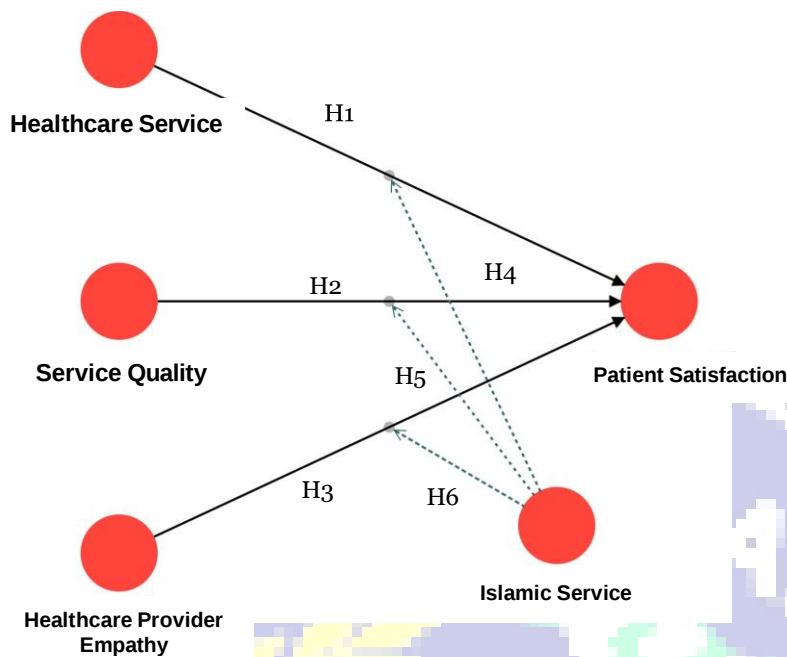


Figure 1. Research Model

Figure 1 illustrates a research model in which healthcare service, service quality, and healthcare provider empathy are proposed to directly influence patient satisfaction. In addition, Islamic service is positioned as a moderating variable that strengthens the relationship between these three antecedents and patient satisfaction. This indicates that better implementation of healthcare services, higher service quality, and stronger empathy from providers can enhance patient satisfaction both directly and indirectly through the integration of Islamic service values.

## RESEARCH METHODS

This study adopts a quantitative approach with a cross-sectional analytical design, in which all variables are measured simultaneously during the data collection period. The study relies on primary data obtained directly from respondents, specifically patients or their family members who received services at Klinik Pratama Fahmi Husada Madiun. A cross-sectional design is considered appropriate as it provides an empirical overview of patients' perceptions regarding the services they experienced within the study timeframe.

The population of this study includes all patients who obtained services at Klinik Pratama Fahmi Husada Madiun during the research period. The sample was determined based on specific inclusion criteria, namely, patients aged 17 years or older, those who had received outpatient services more than once, and individuals capable of communicating effectively. The sample size followed the recommendation of Hair et al. (2017), which suggests that the minimum number of respondents should be five to ten times the number of research indicators or at least 100 participants. Given that the study involved 20 indicators, a total sample of 100 respondents was established. All questionnaires distributed were returned and considered valid for further analysis. The sampling method applied was accidental sampling, meaning respondents were selected from patients who happened to visit the clinic for treatment and met the specified inclusion criteria.

This study involves five main variables, namely healthcare services, quality of healthcare services, healthcare workers' empathy, Islamic services, and patient satisfaction. Healthcare services are measured through indicators such as the clarity of staff explanations, the ability to listen to patient complaints, and the alignment of services with procedures and patient expectations. The quality of healthcare services reflects patients' perceptions of the reliability, responsiveness, assurance, and comfort of the

services received. The empathy of healthcare workers is measured through their attention, care, and attitude in responding to the patient's condition, while Islamic service includes indicators of sincere intention, genuine attitude, and respect for the patient's spiritual values. Patient satisfaction is measured as an overall assessment of the service experience received at the clinic.

Data collection was conducted using a structured questionnaire instrument distributed online via Google Form. Respondents were asked to fill out the questionnaire based on the answer choices provided by the researcher to maintain uniformity and ease of data processing. The data analysis in this study was carried out in several stages using SmartPLS 3.0 software. The process began with descriptive analysis. Subsequently, outer model evaluation was performed to assess the validity and reliability of the measurement indicators. After confirming the adequacy of the measurement model, inner model analysis was conducted to examine the structural relationships among variables through the evaluation of R<sup>2</sup> values and path coefficients. Hypothesis testing was then performed by analyzing direct effects and moderation effects, where interaction terms were created between Islamic service and each independent variable. The level of significance was set at  $\alpha = 0.05$ ; significant interaction effects indicate that Islamic service functions as a moderating variable that strengthens the influence of the independent variables on patient satisfaction.

RESULTS

The characteristics of the respondents in this study are presented to provide an overview of the patient profile who are the subjects of the research at Pratama Fahmi Husada Madiun Clinic. This information helps to identify key demographic and clinical features of the participants, such as age, gender, and relevant health conditions. In addition, it provides a foundation for understanding the context of the findings and their relevance to the study population.

Table 1. Overview of Respondent Characteristics

| Category  | Subcategory                   | Number | Percentage (%) |
|-----------|-------------------------------|--------|----------------|
| Gender    | Male                          | 36     | 36             |
|           | Female                        | 64     | 64             |
| Age       | 17–25 years                   | 28     | 28             |
|           | 26–35 years                   | 41     | 41             |
|           | 36–45 years                   | 16     | 16             |
|           | >45 years                     | 15     | 15             |
|           | Elementary School             | 10     | 10             |
| Education | Junior High School            | 20     | 20             |
|           | High School/Vocational School | 42     | 42             |
|           | University                    | 28     | 28             |
| Visit     | 2 times                       | 40     | 40             |
|           | 3–5 times                     | 24     | 24             |
|           | >5 times                      | 36     | 36             |

Based on Table 1, the majority of respondents in this study are female, representing 64.0%, while male respondents make up 36.0%. In terms of age, most respondents fall within the 26–35 years age range (41.0%), indicating that the productive age group dominates the clinic's service users. The education level of respondents is predominantly high school/vocational school graduates at 42.0%, followed by college graduates at 28.0%, suggesting that respondents have a fairly good understanding of the health services received. Based on visit frequency, respondents who have visited twice form the largest group (40.0%), followed by patients with more than five visits (36.0%), indicating that most respondents have repeated experiences receiving services at the clinic, making their evaluations of the service relatively more objective and experience-based.

**Table 2.** Descriptive Statistics of Research

| Variable                   | Mean   | Std. Dev | Min    | Max    |
|----------------------------|--------|----------|--------|--------|
| Healthcare Staff Service   | 15.68  | 1.03     | 13.00  | 18.00  |
| Healthcare Service Quality | 15.65  | 0.89     | 14.00  | 18.00  |
| Healthcare Staff Empathy   | 15.69  | 1.00     | 13.00  | 18.00  |
| Islamic Service            | 191.04 | 12.64    | 159.00 | 224.00 |
| Patient Satisfaction       | 318.73 | 21.35    | 276.00 | 368.00 |

Based on Table 2, the variable of healthcare worker service has an average value of 15.68 with a standard deviation of 1.03, indicating that respondents' perceptions of the service provided by the staff are relatively high and homogeneous. The variable of healthcare service quality has an average value of 15.65 with a standard deviation of 0.89, indicating a consistent level of assessment by respondents regarding the quality of the service received. The empathy of healthcare workers shows an average value of 15.69 with a standard deviation of 1.00, indicating that respondents rate the staff's empathy aspect as good. The variable of Islamic service has an average value of 191.04 with a standard deviation of 12.64, indicating a variation in respondents' perceptions of the application of Islamic values in healthcare services. Meanwhile, the patient satisfaction variable has an average value of 318.73 with a standard deviation of 21.35, which indicates that respondents generally feel satisfied with the services provided by Klinik Pratama Fahmi Husada Madiun.

**Table 3.** Outer Model Test Results

| Variable                 | Item        | Outer Loading | AVE  | CR   |
|--------------------------|-------------|---------------|------|------|
| Healthcare Service (X1)  | X1.1 – X1.4 | 0.782 – 0.911 | 0.72 | 0.91 |
| Service Quality (X2)     | X2.1 – X2.4 | 0.801 – 0.903 | 0.70 | 0.90 |
| Healthcare Empathy (X3)  | X3.1 – X3.4 | 0.774 – 0.895 | 0.69 | 0.89 |
| Islamic Service (M)      | M1 – M6     | 0.755 – 0.902 | 0.71 | 0.93 |
| Patient Satisfaction (Y) | Y1 – Y6     | 0.783 – 0.918 | 0.74 | 0.94 |

The outer model evaluation indicates that all indicators possess outer loading values exceeding the minimum criterion of 0.70, confirming acceptable convergent validity. Furthermore, the Average Variance Extracted (AVE) for each construct is greater than 0.50, demonstrating that the constructs account for more than half of the variance in their respective indicators. The Composite Reliability (CR) values for all variables also surpass the recommended threshold of 0.70, suggesting that the measurement instruments are reliable and consistently capture the intended constructs. Therefore, all indicators and constructs are considered adequate for further structural analysis.

Subsequently, discriminant validity was assessed to verify that each construct in the research model is sufficiently distinct from the others. In the discriminant validity table, the names of the latent variables are presented in the first row and the first column. The diagonal values, indicated in parentheses, represent the square root of the AVE for each construct. Values located below the diagonal reflect the correlations among constructs, while those above the diagonal present the results of the Heterotrait–Monotrait (HTMT) ratio, which is used to further evaluate discriminant validity.

**Table 4.** Discriminant Validity

| Variable                 | X1      | X2      | X3      | M       | Y       |
|--------------------------|---------|---------|---------|---------|---------|
| Healthcare Service (X1)  | (0.848) | 0.71    | 0.69    | 0.66    | 0.72    |
| Service Quality (X2)     | 0.65    | (0.837) | 0.67    | 0.68    | 0.74    |
| Healthcare Empathy (X3)  | 0.62    | 0.64    | (0.831) | 0.70    | 0.76    |
| Islamic Service (M)      | 0.60    | 0.63    | 0.65    | (0.843) | 0.78    |
| Patient Satisfaction (Y) | 0.70    | 0.72    | 0.74    | 0.77    | (0.860) |

Based on the discriminant validity in Table 4, the square root of the AVE value for each variable is greater than the correlations between other variables, thus meeting the

Fornell–Larcker criterion. Additionally, the HTMT ratio values located above the diagonal are all below the 0.90 threshold, indicating that there are no issues with discriminant validity between constructs. Thus, each variable in the research model can be stated to have different constructs and is capable of accurately measuring the intended concept.

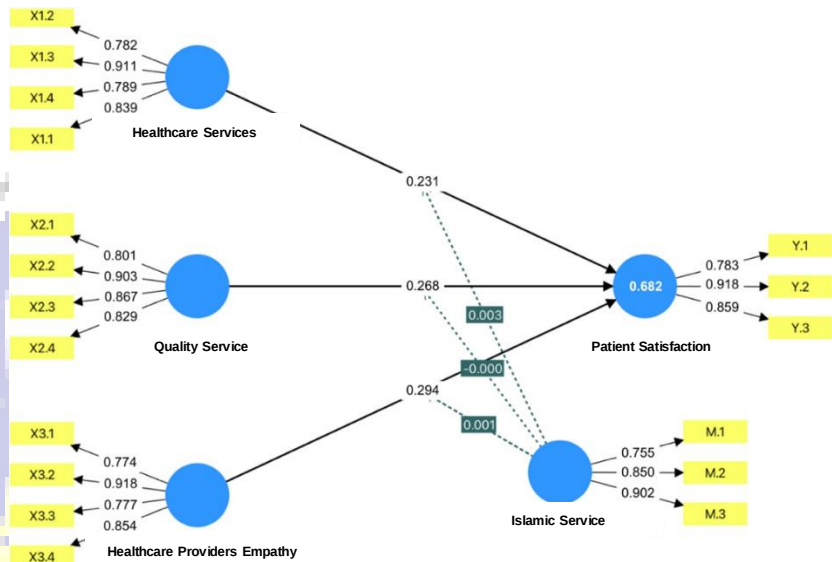


Figure 2. Research Model Processing Results via SmartPLS

Figure 2 shows a research model that illustrates the structural relationships between healthcare services, the quality of healthcare services, and healthcare providers' empathy toward patient satisfaction, with Islamic services as a moderating variable. The direction of the arrows indicates the direct influence of each independent variable on patient satisfaction as well as the interaction between the independent variables and Islamic service. The path coefficient values in the model reflect the strength and direction of the influence between variables, while the  $R^2$  value for the patient satisfaction variable indicates the extent of the contribution of all exogenous variables in explaining the variation in patient satisfaction. This model is used to test hypotheses H1 to H6 according to the research conceptual framework.

The coefficient of determination for the patient satisfaction variable is 0.682. This result indicates that 68.2% of the variance in patient satisfaction can be explained by healthcare workers' services, healthcare service quality, healthcare workers' empathy, and the interaction between these variables and Islamic services. The remaining 31.8% is attributed to other factors outside the scope of the research model that were not included in this study. This  $R^2$  value is categorized as strong, suggesting that the structural model possesses substantial explanatory capability in describing patient satisfaction.

Table 5. Path Significance Test Results

| Relationship Between Variables                                                          | Path Coefficient ( $\beta$ ) | t-statistic | p-value |
|-----------------------------------------------------------------------------------------|------------------------------|-------------|---------|
| Healthcare Service $\rightarrow$ Patient Satisfaction                                   | 0.231                        | 2.41        | 0.016   |
| Service Quality $\rightarrow$ Patient Satisfaction                                      | 0.268                        | 2.88        | 0.004   |
| Healthcare Provider Empathy $\rightarrow$ Patient Satisfaction                          | 0.294                        | 3.12        | 0.002   |
| Healthcare Service $\times$ Islamic Service $\rightarrow$ Patient Satisfaction          | 0.187                        | 2.05        | 0.041   |
| Service Quality $\times$ Islamic Service $\rightarrow$ Patient Satisfaction             | 0.201                        | 2.32        | 0.021   |
| Healthcare Provider Empathy $\times$ Islamic Service $\rightarrow$ Patient Satisfaction | 0.219                        | 2.57        | 0.011   |

According to Table 5, the results of the significance test show that healthcare services, the quality of healthcare services, and the empathy of healthcare workers have a positive and significant impact on patient satisfaction, thus hypotheses H1, H2, and H3 are accepted. Furthermore, the interaction variable between Islamic services and each independent variable also shows a positive and significant impact on patient satisfaction. These findings indicate that Islamic services act as a moderating variable that strengthens the influence of healthcare services, the quality of services, and empathy on patient satisfaction. Thus, hypotheses H4, H5, and H6 can be empirically accepted. Next, the  $R^2$  value is used to indicate the extent to which the independent variables explain the variation in the dependent variable in the research structural model.

The effect size ( $f^2$ ) is used to evaluate the relative contribution of each exogenous variable to the endogenous variable within the structural model. The interpretation of the  $f^2$  value follows Cohen's guidelines, where a value of 0.02 represents a small effect, 0.15 indicates a medium effect, and 0.35 reflects a large effect. Consequently, higher  $f^2$  values signify a greater influence of the respective variable in explaining the endogenous construct in the research model.

Table 6. Effect Size Values

| Relationship Between Variables                                       | Effect Size ( $f^2$ ) | Category |
|----------------------------------------------------------------------|-----------------------|----------|
| Healthcare Service → Patient Satisfaction                            | 0.182                 | Medium   |
| Service Quality → Patient Satisfaction                               | 0.201                 | Large    |
| Healthcare Provider Empathy → Patient Satisfaction                   | 0.361                 | Large    |
| Healthcare Service × Islamic Service → Patient Satisfaction          | 0.165                 | Medium   |
| Service Quality × Islamic Service → Patient Satisfaction             | 0.194                 | Medium   |
| Healthcare Provider Empathy × Islamic Service → Patient Satisfaction | 0.342                 | Large    |

Based on Table 6, the empathy variable of healthcare workers has the largest effect size on patient satisfaction in the large category, indicating that empathy is a dominant factor in enhancing patient satisfaction. The healthcare workers' service and the quality of healthcare services each have an effect size in the moderate category, indicating that these two variables contribute significantly and meaningfully to patient satisfaction. Additionally, the interaction variable between Islamic service and the three independent variables also shows an effect size in the moderate to large category, affirming that Islamic service not only functions as a complement but also plays a significant role in strengthening the influence of service and empathy on patient satisfaction. These findings show that the integration of Islamic values in healthcare services can substantially enhance the model's explanatory power in explaining patient satisfaction.

## DISCUSSION

Research findings indicate that healthcare services have a positive impact on patient satisfaction. These results indicate that the quality of direct interactions between healthcare workers and patients, such as clarity of communication, procedural accuracy, and professionalism, is an important factor in shaping the patient experience. These findings are in line with Amalia's (2020) study, which emphasizes that the quality of service at direct contact points with patients significantly contributes to satisfaction levels, particularly in outpatient services. The research by Eninurkhayatun et al. (2017) also found that the service aspects of staff are the main determinants of patient satisfaction in primary healthcare facilities. Thus, the services provided by healthcare personnel not only function as the executors of medical actions but also as a representation of the overall quality of services.

The findings of this study indicate that the quality of healthcare services positively influences patient satisfaction. Service quality has been shown to strengthen patients' positive perceptions of the care they receive. These results support the study by Hanun (2025), which reports that the dimensions of Islamic service quality are significantly associated with patient satisfaction. In addition, a systematic review by Rizkina et al. (2024) highlights that healthcare services integrated with Islamic values can contribute to

sustained improvements in patient satisfaction. Therefore, healthcare service quality serves as a fundamental element in fostering patient satisfaction, both in terms of technical performance and the values embedded within the service delivery.

Furthermore, this study found that the empathy of healthcare workers has a positive and significant impact on patient satisfaction. Empathy, reflected in attention, care, and the ability to understand patients' emotional conditions, has a significant impact on patients' comfort during service delivery. These findings are in line with the research by Isnaini and Syarifuddin (2022), which shows that the application of Islamic spiritual caring by nurses contributes to increased patient satisfaction. Amiruddin and Murniati (2020) also emphasize that meeting the spiritual and emotional needs of patients is an important part of patient-centered healthcare services. Thus, the empathy of healthcare workers becomes a key element in building a meaningful therapeutic relationship between patients and healthcare providers.

The results of the moderation test show that Islamic service strengthens the influence of healthcare workers' service on patient satisfaction. These findings indicate that services that are technically good will have a stronger impact on patient satisfaction when based on Islamic values such as sincere intention, trustworthiness, and etiquette in serving. This finding is in line with the concept of spiritual counseling in Islam proposed by Asadzandi (2020), which emphasizes the importance of a spiritual approach in helping individuals cope with illness. Ngatindriatun et al.'s (2024) research also found that the application of Sharia principles in healthcare services increases patient satisfaction because patients feel that their religious values are respected. Thus, Islamic services play a role as a meaning enhancer in healthcare interactions.

This research also proves that Islamic service moderates the influence of healthcare service quality on patient satisfaction. Good service quality will be more meaningful for Muslim patients when accompanied by adherence to Sharia principles, such as halal, honesty, and service transparency. These findings are consistent with the research of Alfarizi and Arifian (2023), which shows that Sharia-compliant hospital services positively influence patient satisfaction and loyalty. Additionally, Ahmed et al. (2022) in another study emphasize that the commitment to religiosity and adherence to Sharia strengthen the relationship between service quality and satisfaction. Thus, Islamic services do not merely function as an additional attribute, but rather as a strategic value in enhancing the quality-of-service perception.

Furthermore, the research results indicate that Islamic service also strengthens the influence of healthcare workers' empathy on patient satisfaction. Empathy conveyed through a spiritual approach, such as prayer, patience, and the reinforcement of the value of *tawakkul*, has a greater emotional impact on patients. These findings align with Sahil's (2025) research, which states that the integration of Islamic spiritual care with service quality enhances patient satisfaction and loyalty. Aupia et al. (2024) also found that the fulfillment of patients' spiritual needs is significantly related to patient loyalty, which begins with satisfaction with the services received. This indicates that empathy based on Islamic values can deepen the patient care experience holistically.

## CONCLUSION

This study concludes that healthcare services, the quality of healthcare services, and the empathy of healthcare workers have a positive and significant impact on patient satisfaction at the Pratama Fahmi Husada Clinic in Madiun. In addition, Islamic service has proven to act as a moderating variable that strengthens the influence of these three variables on patient satisfaction. These findings indicate that patient satisfaction is not only determined by the technical and functional aspects of service but also by the integration of Islamic spiritual values in healthcare practices. Thus, holistic, humanistic, and spiritually-based healthcare services can enhance positive perceptions and overall patient experiences.

This research contributes to the development of healthcare management literature by integrating the Islamic spiritual perspective into the PLS-SEM-based patient satisfaction

model. This study emphasizes that Islamic service not only functions as a normative attribute but also plays a strategic role in strengthening the relationship between service quality and patient satisfaction. The results of this research can serve as a foundation for healthcare facility managers, particularly clinics and hospitals serving the Muslim community, to develop service strategies that integrate professional competence, empathy, and Islamic values to enhance patient satisfaction and trust.

This study has several limitations, including the use of a cross-sectional design that has not yet been able to capture the dynamics of patient satisfaction in the long term, as well as the limitation of the research object, which only focuses on one primary clinic. Thus, the generalization of the results is still limited. In addition, the data obtained are subjective because they use questionnaires based on respondents' perceptions. Therefore, future research is recommended to use a longitudinal design, expand the research locations to various types of healthcare facilities, and combine quantitative and qualitative methods to obtain a more comprehensive understanding of the role of Islamic services in enhancing patient satisfaction.

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