

## **Determination of Service Quality, Facilities, Infrastructure, Competence on Loyalty Mediated by Patient Satisfaction at M.Sani Hospital, Karimun Regency**

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### **Abstract**

This study shows that the people of Karimun Regency tend to choose neighboring countries or Batam City to obtain better healthcare services. This is due to several factors, such as a decline in the number of patient visits to RSUD Muhammad Sani from January to March 2024. This quantitative research aims to examine the influence of these factors on patient loyalty. The results indicate that service quality has a significant direct effect on patient loyalty, although it does not significantly impact patient satisfaction. Conversely, infrastructure and competence do not have a significant effect on patient loyalty but do show a significant influence on patient satisfaction. Employee competence does not have a significant direct impact on patient loyalty but significantly affects patient satisfaction. Furthermore, the findings reveal that patient satisfaction cannot mediate the influence of service quality, infrastructure, and competence on patient loyalty. Therefore, to improve patient loyalty, RSUD Muhammad Sani needs to directly enhance service quality, while improvements in infrastructure and employee competence have a greater impact on increasing patient satisfaction, which is ultimately expected to contribute to overall patient loyalty. Future research could be expanded by broadening the scope of the study, increasing the sample size, and including variables that could determine loyalty and satisfaction at RSUD Muhammad Sani in Karimun Regency, thereby establishing a state-of-the-art foundation for subsequent research..

**Keywords:** *Quantitative; Co;mpetence; Satisfaction; Loyalty; Infrastructure*

## **INTRODUCTION**

General Regional Hospital (RSUD) Muhammad Sani is geographically close to several government and private hospitals within the same province. It is also close to some renowned hospitals in Malaysia and Singapore, which have more complete and advanced healthcare facilities. This situation has naturally led to a cultural trend among the community, where people in Karimun Regency tend to choose neighboring countries or Batam City as alternatives for the healthcare services they need. This phenomenon aligns with findings from data that indicate issues with patient satisfaction regarding service quality, facilities, and employee competence. These issues include complaints about long waiting times, less friendly service staff, responses from service personnel that do not meet customer expectations, inadequate waiting room conditions, and a lack of trust in the capabilities of RSUD Muhammad Sani staff. Furthermore, data also shows a decline in the number of patient visits, indicating a decrease in patient loyalty to RSUD Muhammad Sani in Karimun Regency. According to several experts, the quality of service, facilities, and competence influences patient satisfaction and loyalty. Patient satisfaction can even mediate the relationship between service quality, facilities, and employee competence on patient loyalty.

Based on phenomena and expert theories, as well as the commitment of the Karimun Regency government to strive to improve access to healthcare services for all residents of Karimun Regency, and at the same time fulfill the mandate of laws and ministerial regulations regarding the necessity of enhancing the quality of public services (Admin, 2009) periodically and continuously, a scientific study will be conducted on the relationship between service quality, facilities and infrastructure, employee

competence, and patient satisfaction with patient loyalty, which will later be used as a basis for recommendations and references in improving patient loyalty

According to Gary Armstrong is (Ida Nur Hidayah, 2024) A customer is defined as any individual or household that purchases or acquires goods or services for personal consumption. According to the Indonesian Dictionary (KBBI), a customer is a person who frequently buys or uses something, and so on. From these definitions, it can be said that a patient is a customer or consumer of health service products or users. Meanwhile (Udayana dkk., 2023) Saying that loyalty is vital for the long-term sustainability of an organization, as loyal customers (patients) can provide benefits to the organization. It is concluded that patient loyalty in this study refers to the loyalty or behavior of patients at RSUD Muhammad Sani, Kabupaten Karimun, who consistently or repeatedly use the products or services over a long period. According to Griffin in (Wirawan Andi Andika, Sjahruddin Herman, 2019) The indicators for measuring loyalty are; 1) Using the services repeatedly and regularly; 2) Using services across different lines; 3) Referring the services to others; 4) Showing resistance to competitors' offers; 5) Refusing to use alternative services offered by competitors.

According to (Atmaja, 2018) Service quality is understood as the activities carried out by a company to meet consumer (patient) expectations, and it is understood as the activities conducted by the company to meet consumer (patient) expectations, and service quality is understood as the activities carried out by a company to meet consumer (patient) expectations. According to (Yulindawati dkk., 2022) service quality affects satisfaction, retention, repeat purchases, loyalty, communication, and subsequently profitability and the company's ability to maintain relationships and acquire new customers (patients). It is concluded that service quality refers to the extent of RSUD Muhammad Sani's ability to meet patient expectations or satisfaction. According to Kotler, as cited in (Sumarsid, 2022) indicators of service quality include: physical evidence, empathy, reliability, responsiveness, and assurance.

Infrastructure (facilities and infrastructure) is the tool needed to drive management activities to achieve organizational goals (Win & Syahniar, 2022). The opinion aligns with the views of several other researchers, such as Robbin in (Rahayu & Nurhayati, 2022) Those who say that facilities are also referred to as infrastructure designed to make work easier. According to (Hamtheldy dkk., 2023) Facilities are tools that make it easier for users to perform their activities. According to Aldi (Faisal Akbar dkk., 2021) Facilities are means to enhance and facilitate the implementation of functionalities and represent individual components of a product that can be easily expanded or reduced without altering the quality and service model. According to Aldi (Suhardi dkk., 2022) facilities are a collection of physical resources or equipment provided by a service provider with the aim of supporting the process of delivering services to users, whether consumed or not. It can be concluded that infrastructure consists of a collection of physical resources or equipment provided by RSUD Muhammad Sani, intended to support the process of delivering services to patients. This refers to Sharon's theory (Fahmi dkk., 2021) here is the translation of the indicators of facilities: 1) Completeness, 2) Functionality, 3) Accessibility, 4) Availability; 5) Cleanliness and maintenance.

Competence is the foundational basis of a person's characteristics and refers to the way of behaving and thinking that balances situations and supports them over time (Sari Fatika Cindy dkk., 2023). According to (Sony Eko Adisaputro, 2020) competence is a fundamental trait or part of a person's personality that consists of the knowledge and skills allowing them to perform a job based on the knowledge and skills they have acquired. It is concluded that competence in this research is the ability possessed by the RSUD Muhammad Sani service staff with all the knowledge and skills they have. The indicators of competence in this research refer to the opinions of (Bofrizewear, 2023) 1) Knowledge and Abilities; 2) Expertise and Skills; 3) Willingness and Initiative; 4) Ability to Identify Problems and Solutions; 5) Friendliness and Courtesy

According to Rivai & Wahyudi in (Udayana dkk., 2023) satisfaction is when patients feel pleased with the goods or services consumed or used and repeat the consumption or use of those goods or services. According to (Fahlefi, 2021) client satisfaction is the position of consumer desires after comparing the alignment or difference between client expectations and the actual perception/service received. According to (Setiawati, 2022). customer satisfaction (patient satisfaction) is the degree of feeling or function between perceived performance and individual expectations. According to (Widagdo dkk., 2020) satisfaction is the reaction and assessment of the public regarding the perceived quality of service. It can be concluded that patient satisfaction is the condition felt by patients when comparing the alignment or misalignment between their expectations and the perceived service. Indicators of patient

satisfaction refer to the opinions of Tjiptono in (Nida Salma Fahriani & Intan Rike Febriyanti, 2022) Namely: service, cost, promotion, location, service, and facilities.

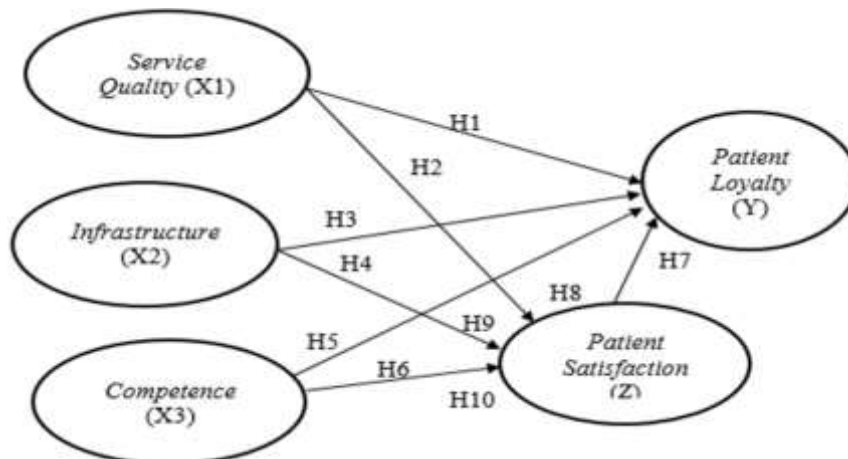


Figure 1. Research Model of Relationships Between Variables

## RESEARCH METHODS

This study uses a quantitative approach by distributing questionnaires to patients of RSUD Muhammad Sani who visited from January to March 2024. The research population consists of the average daily patient visits during that period, excluding infectious patients, totaling 348 patients. The sample was taken using the Slovin formula with a 95% confidence level and a 5% margin of error, resulting in 186 respondents with the following equation:  $n = N/1 + (Nxe^2)$

Where N is the sample size, N is the population, and  $e^2$  is the percentage of error (error rate) in sampling that is still acceptable. This study involves three independent variables: Service Quality (X1), Facilities and Infrastructure (X2), and Competence (X3), as well as an intervening variable Patient Satisfaction (Z) and a dependent variable Patient Loyalty (Y). Primary data is collected through observation, interviews, and questionnaires, while secondary data is obtained from literature research related to these variables. The data analysis technique used is Partial Least Square (PLS) because it is considered simpler yet still provides accurate results.

## RESULT and DISCUSSION

### Validity and Reliability test results

Figure 2 shows that not all variables have values greater than 0.7. According to (Duryadi, 2021) if the outer loading value is greater than 0.7, it meets the criterion for convergent validity, and an outer loading value greater than 0.5 can be tolerated as long as construct validity and reliability are already indicated in green.

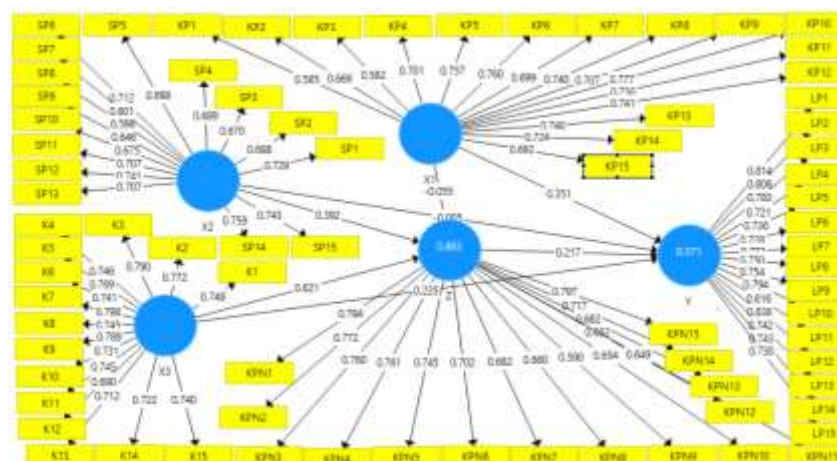


Figure 2. Outer Model Test Results Phase One (Source: Output Smart PLS, 2024)

Then the results of the construct validity and reliability test, without including the smallest values for the items produced by the construct of Infrastructure (X2), namely SP7 and SP8, because the item values produced by the Infrastructure construct (X2) are still marked in red, can be seen in the following table 1:

**Table 1. Construct Reliability and Validity Second Stage (Source: Output Smart PLS)**

|                         | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------|------------------|-------|-----------------------|----------------------------------|
| Kualitas Pelayanan (X1) | 0.929            | 0.932 | 0.938                 | 0.503                            |
| Sarana Prasarana (X2)   | 0.918            | 0.920 | 0.930                 | 0.505                            |
| Kompetensi (X3)         | 0.944            | 0.945 | 0.951                 | 0.562                            |
| Kepuasan Pasien (Z)     | 0.929            | 0.933 | 0.938                 | 0.504                            |
| Loyalitas Pasien (Y)    | 0.951            | 0.953 | 0.956                 | 0.592                            |

In the table above, it is shown that the item values produced by the Infrastructure Construction (X2), Service Quality (X1), Competence (X3), Patient Satisfaction (Z), and Patient Loyalty (Y) have met the standard of convergent validity, indicated by the green color. Therefore, they are considered valid, and no re-measurement is required, allowing progress to the next stage (Duryadi, 2021). The results of the Discriminant Validity test, by examining the cross-loading factor values from several subsequent stages without including items that do not meet the criteria, such as KP1, KP2, KP3, KP4, SP3, SP9, SP10, SP11, K12, K13, KPN7, KPN8, KPN9, KPN10, KPN11, KPN12, and KPN13, can be seen in the following table 2:

**Table 2. Advanced Cross Loading Value (Source: Output Smart PLS, 2024)**

|      | X1    | X2    | X3    | Z     | Y     |
|------|-------|-------|-------|-------|-------|
| KP5  | 0.747 | 0.536 | 0.637 | 0.537 | 0.588 |
| KP6  | 0.765 | 0.567 | 0.665 | 0.577 | 0.576 |
| KP7  | 0.702 | 0.526 | 0.618 | 0.545 | 0.512 |
| KP8  | 0.758 | 0.505 | 0.603 | 0.528 | 0.499 |
| KP9  | 0.737 | 0.444 | 0.599 | 0.514 | 0.497 |
| KP10 | 0.782 | 0.562 | 0.641 | 0.600 | 0.602 |
| KP11 | 0.751 | 0.543 | 0.608 | 0.539 | 0.551 |
| KP12 | 0.752 | 0.636 | 0.590 | 0.527 | 0.511 |
| KP13 | 0.754 | 0.619 | 0.646 | 0.543 | 0.529 |
| KP14 | 0.735 | 0.637 | 0.613 | 0.560 | 0.483 |
| KP15 | 0.712 | 0.543 | 0.603 | 0.581 | 0.641 |
| SP1  | 0.547 | 0.751 | 0.628 | 0.655 | 0.492 |
| SP2  | 0.634 | 0.711 | 0.642 | 0.605 | 0.516 |
| SP4  | 0.548 | 0.740 | 0.551 | 0.557 | 0.429 |
| SP5  | 0.534 | 0.735 | 0.566 | 0.558 | 0.423 |
| SP6  | 0.551 | 0.719 | 0.593 | 0.591 | 0.455 |
| SP12 | 0.563 | 0.723 | 0.649 | 0.625 | 0.512 |
| SP13 | 0.507 | 0.720 | 0.592 | 0.582 | 0.461 |
| SP14 | 0.567 | 0.793 | 0.672 | 0.664 | 0.484 |
| SP15 | 0.539 | 0.789 | 0.619 | 0.677 | 0.515 |
| K1   | 0.682 | 0.636 | 0.754 | 0.618 | 0.529 |
| K2   | 0.640 | 0.665 | 0.785 | 0.684 | 0.518 |
| K3   | 0.686 | 0.690 | 0.800 | 0.709 | 0.569 |
| K4   | 0.629 | 0.672 | 0.761 | 0.701 | 0.567 |
| K5   | 0.649 | 0.682 | 0.777 | 0.698 | 0.554 |
| K6   | 0.652 | 0.663 | 0.752 | 0.680 | 0.551 |
| K7   | 0.669 | 0.664 | 0.804 | 0.718 | 0.583 |
| K8   | 0.601 | 0.577 | 0.755 | 0.693 | 0.514 |
| K9   | 0.666 | 0.560 | 0.796 | 0.704 | 0.573 |
| K10  | 0.597 | 0.587 | 0.728 | 0.621 | 0.561 |
| K11  | 0.630 | 0.581 | 0.721 | 0.690 | 0.579 |
| K14  | 0.567 | 0.606 | 0.706 | 0.675 | 0.489 |
| K15  | 0.568 | 0.593 | 0.751 | 0.694 | 0.498 |
| KPN1 | 0.566 | 0.699 | 0.697 | 0.810 | 0.516 |



|       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|
| KPN2  | 0.625 | 0.729 | 0.725 | 0.812 | 0.561 |
| KPN3  | 0.538 | 0.697 | 0.687 | 0.784 | 0.490 |
| KPN4  | 0.601 | 0.609 | 0.727 | 0.789 | 0.513 |
| KPN5  | 0.591 | 0.598 | 0.720 | 0.786 | 0.493 |
| KPN6  | 0.469 | 0.520 | 0.624 | 0.729 | 0.453 |
| KPN14 | 0.586 | 0.619 | 0.680 | 0.738 | 0.586 |
| KPN15 | 0.641 | 0.693 | 0.759 | 0.812 | 0.616 |
| LP1   | 0.607 | 0.465 | 0.582 | 0.536 | 0.814 |
| LP2   | 0.559 | 0.507 | 0.537 | 0.527 | 0.807 |
| LP3   | 0.518 | 0.482 | 0.514 | 0.523 | 0.783 |
| LP4   | 0.459 | 0.456 | 0.478 | 0.457 | 0.719 |
| LP5   | 0.485 | 0.494 | 0.523 | 0.515 | 0.734 |
| LP6   | 0.508 | 0.469 | 0.523 | 0.442 | 0.727 |
| LP7   | 0.638 | 0.569 | 0.663 | 0.578 | 0.771 |
| LP8   | 0.576 | 0.448 | 0.576 | 0.519 | 0.750 |
| LP9   | 0.694 | 0.543 | 0.660 | 0.585 | 0.755 |
| LP10  | 0.579 | 0.481 | 0.563 | 0.542 | 0.795 |
| LP11  | 0.616 | 0.529 | 0.541 | 0.533 | 0.817 |
| LP12  | 0.617 | 0.509 | 0.566 | 0.540 | 0.839 |
| LP13  | 0.490 | 0.426 | 0.469 | 0.458 | 0.743 |
| LP14  | 0.513 | 0.456 | 0.474 | 0.470 | 0.744 |
| LP15  | 0.537 | 0.560 | 0.539 | 0.557 | 0.731 |

In the table, it is shown that all items have a construct standard value greater than 0.7, and the loading values for all targeted constructs are higher compared to other values. This indicates that all manifest variables are valid and can explain their latent variables, so there is no need for retesting (Duryadi, 2021). The output results of the Composite Reliability test can be seen in the following table 3:

**Table 3. Construct Reliability and Validity Advanced Stage (Source: Output Smart PLS, 2024)**

|                         | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------|------------------|-------|-----------------------|----------------------------------|
| Kualitas Pelayanan (X1) | 0.920            | 0.921 | 0.932                 | 0.556                            |
| Sarana Prasarana (X2)   | 0.898            | 0.900 | 0.917                 | 0.552                            |
| Kompetensi (X3)         | 0.939            | 0.940 | 0.947                 | 0.580                            |
| Kepuasan Pasien (Z)     | 0.910            | 0.911 | 0.927                 | 0.613                            |
| Loyalitas Pasien (Y)    | 0.951            | 0.953 | 0.956                 | 0.592                            |

In the table above, it is shown that all variable values in the Cronbach's Alpha reliability test and composite reliability have values above 0.7, and AVE has values greater than 0.5. It is concluded that the tested variables are good, valid, and reliable, so structural model testing can be conducted (Duryadi, 2021) **Results of Inferential Analysis with Structural Model (Inner Model).**

**Table 4. R Squares (Source: Output smart PLS, 2023)**

|                     | R Square | R Square Adjusted |
|---------------------|----------|-------------------|
| Kepuasan Pasien (Z) | 0.832    | 0.830             |
| Loyaitas Pasien (Y) | 0.583    | 0.574             |

In the table, it is shown that the R-Squared value for education is 0.832, which means that 83.2% of patient satisfaction is influenced by the variables of service quality, facilities and infrastructure, and competence, while 16.8% is influenced by other factors outside the studied variables. The R-Squared value for patient loyalty is 0.583, indicating that 58.3% of patient loyalty is influenced by the variables of service quality, facilities and infrastructure, competence, and patient satisfaction, while 41.7% is influenced by other factors outside the studied variables. The goodness of the model can be seen in the following table 5

**Table 5. Model Fit/Model Goodness of Fit/NFI Value (Source: Output Smart PLS, 2024)**

|        | Saturated Model | Estimated Model |
|--------|-----------------|-----------------|
| SRMR   | 0.065           | 0.065           |
| d_ ULS | 6.793           | 6.793           |

|            |          |          |
|------------|----------|----------|
| d_G        | 4.411    | 4.411    |
| Chi-Square | 3737.635 | 3737.635 |
| NFI        | 0.634    | 0.634    |

From the data, an NFI value of 0.634, which is close to 0.67, indicates a strong model fit. Therefore, after meeting the above criteria, it can be concluded that the model can proceed to the next test, which is hypothesis testing.

**Results of Hypothesis Testing for Direct Effects**

According (Duryadi, 2021) if the correlation coefficient value of variable X to Y with T-Statistic value (T-statistic > 1.96) and P-Value less than < 0.05), then it can be concluded as significant. The results of the Path Coefficient test with Bootstrapping can be seen in the following table 6:

**Table 6. Path Coefficient / Path Coefficient (Source: Output Smart PLS, 2024)**

|        | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ((O/STDEV)) | P Values     |
|--------|---------------------|-----------------|----------------------------|--------------------------|--------------|
| X1 > Y | 0.449               | 0.452           | 0.084                      | 5.371                    | <b>0.000</b> |
| X1 > Z | -0.082              | -0.077          | 0.075                      | 1.089                    | <b>0.277</b> |
| X2 > Y | 0.029               | 0.033           | 0.111                      | 0.260                    | <b>0.795</b> |
| X2 > Z | 0.283               | 0.284           | 0.065                      | 4.346                    | <b>0.000</b> |
| X3 > Y | 0.155               | 0.168           | 0.190                      | 0.816                    | <b>0.415</b> |
| X3 > Z | 0.733               | 0.727           | 0.071                      | 10.334                   | <b>0.000</b> |
| Z > Y  | 0.183               | 0.169           | 0.121                      | 1.509                    | <b>0.132</b> |

**H1:** There is a significant direct determination of service quality on patient loyalty.

The correlation coefficient value for the direct effect of service quality on patient loyalty is with a T-Statistic value of 5.371 and a P-Value of 0.000. With a T-Statistic value of 5.371, which is greater than (>1.96), and a P-Value of 0.000, which is less than (<0.05), it is significant. Therefore, H1 is accepted. It is concluded that there is a significant direct determination of service quality on patient loyalty.

**H2:** There is a significant direct determination of service quality on patient satisfaction.

The correlation coefficient value for the direct effect of service quality on patient satisfaction is with a T-Statistic value of 1.089 and a P-Value of 0.277. With a T-Statistic value of 1.089, which is less than (<1.96), and a P-Value of 0.277, which is greater than (>0.05), it is not significant. Therefore, H2 is rejected. It is concluded that there is no significant direct determination of service quality on patient satisfaction

**Determinants of Infrastructure on Patient Loyalty**

**H3:** There is a significant direct determination of infrastructure on patient loyalty.

The correlation coefficient value of infrastructure directly on patient loyalty has a T-Statistic value of 0.260 and a P-Value of 0.795. A T-Statistic value of 0.260 is less than (<1.96), and a P-Value of 0.795 is greater than (>0.05), which indicates that it is not significant. Therefore, H3 is rejected. It is concluded that there is no significant direct determination of infrastructure on patient loyalty.

**Determination of Facilities and Infrastructure on Patient Satisfaction**

**H4:** There is a significant direct determination of facilities and infrastructure on patient satisfaction.

The correlation coefficient value of facilities and infrastructure directly on patient satisfaction has a T-Statistic value of 4.346 and a P-Value of 0.000. Since the T-Statistic value of 4.346 is greater than (>1.96) and the P-Value of 0.000 is less than (<0.05), it is significant. Therefore, H4 is accepted. It is concluded that there is a significant direct determination of facilities and infrastructure on patient satisfaction.

**Determination of Competence on Patient Loyalty**

**H5:** There is a significant direct determination of competence on patient loyalty.

The coefficient correlation value of competence directly on patient loyalty has a T-Statistic value of 0.816 and a P-Value of 0.415. Since the T-Statistic value of 0.816 is less than 1.96, and the P-Value of 0.415 is greater than 0.05, it is not significant. Therefore, H5 is rejected. It is concluded that there is no significant direct determination of competence on patient loyalty.

### Competency Determination on Patient Satisfaction

**H6: There is a significant direct determination of competency on patient satisfaction.**

The correlation coefficient value of competency directly on patient satisfaction has a T-Statistic value of 10.334 and a P-Value of 0.000. With a T-Statistic value of 10.334, which is greater than ( $> 1.96$ ), and a P-Value of 0.000, which is less than ( $< 0.05$ ), it is significant. Therefore, H6 is accepted. It can be concluded that there is a significant direct determination of competency on patient satisfaction.

### Determination of Patient Satisfaction on Patient Loyalty

**H7: There is a significant direct determination of patient satisfaction on patient loyalty.**

The correlation coefficient value of patient satisfaction directly on patient loyalty has a T-Statistic value of 1.509 and a P-Value of 0.132. Since the T-Statistic value of 1.509 is less than 1.96, and the P-Value of 0.132 is greater than 0.05, it is not significant. Therefore, H7 is rejected. It is concluded that there is no significant direct determination of patient satisfaction on patient loyalty.

### Results of Indirect Effect Test

According to (Duryadi, 2021) if the correlation coefficient of variable X on Y through Z has a T-Statistic value (T-statistic  $> 1.96$ ) and a P-Value less than 0.05, it can be concluded as significant. The results of the Specific Indirect Effects test using Bootstrapping can be seen in the following table 7:

**Table 7. Specific Indirect Effects**

|            | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics ((O/STDEV)) | P Values     |
|------------|---------------------|-----------------|----------------------------|--------------------------|--------------|
| X1 > Z > Y | -0.015              | -0.016          | 0.020                      | 0.734                    | <b>0.463</b> |
| X2 > Z > Y | 0.052               | 0.050           | 0.039                      | 1.312                    | <b>0.190</b> |
| X3 > Z > Y | 0.134               | 0.123           | 0.091                      | 1.473                    | <b>0.141</b> |

### The Determination of Service Quality on Patient Loyalty Mediated by Patient Satisfaction

**H8: There is a significant determination of service quality on patient loyalty mediated by patient satisfaction.**

The value of service quality on patient loyalty mediated by patient satisfaction has a T-statistic of 0.734 and a P-Value of 0.463. With a T-Statistic of 0.734, which is less than ( $< 1.96$ ), and a P-Value of 0.463, which is greater than ( $> 0.05$ ), the result is not significant. Therefore, H8 is rejected. It is concluded that there is no significant determination of service quality on patient loyalty mediated by patient satisfaction at Muhammad Sani Regional General Hospital in Karimun Regency, and it has a negative influence, meaning that patient satisfaction is not able to mediate the impact of service quality on patient loyalty significantly.

### Determination of Facilities and Infrastructure on Patient Loyalty Mediated by Patient Satisfaction

**H9: There is a significant determination of facilities and infrastructure on patient loyalty mediated by patient satisfaction.**

The value of facilities and infrastructure on patient satisfaction mediated by patient satisfaction has a T-statistic of 1.312 and a P-Value of 0.190. With a T-Statistic of 1.312, which is less than 1.96, and a P-Value of 0.190, which is greater than 0.05, it is not significant. Therefore, H9 is rejected. It is concluded that there is no significant determination of facilities and infrastructure on patient loyalty mediated by patient satisfaction at RSUD Muhammad Sani in Karimun Regency, or that patient satisfaction is not able to mediate the impact of facilities and infrastructure on patient loyalty significantly.

### The Determination of Competence on Patient Loyalty Mediated by Patient Satisfaction

**H10:** There is a significant determination of service competence on patient loyalty mediated by patient satisfaction.

The value of competence on patient loyalty mediated by patient satisfaction shows a T statistic of 1.473 and a P-Value of 0.141. With a T-Statistic of 1.473, which is less than 1.96, and a P-Value of 0.141, which is greater than 0.05, the result is not significant. Therefore, H10 is rejected. It is concluded that there is no significant determination of service competence on patient loyalty mediated by patient satisfaction at RSUD Muhammad Sani, Karimun Regency, or that patient satisfaction is not able to mediate competence in its influence on patient loyalty significantly and positively.

### **Discussion: Determining the Quality of Service on Patient Loyalty**

Regarding the decrease in the quarterly average number of patient visits from January to March 2024 and complaints about long waiting times, unfriendliness of service staff, and inadequate responses from service staff not meeting customer expectations, if we refer to the findings of this study, which conclude that there is a significant determination of service quality directly affecting patient loyalty and showing a positive influence, it can be interpreted that the decrease in the number of patient visits is not due to service quality issues, such as complaints about long waiting times, unfriendliness of service staff, or responses from service staff not meeting customer expectations. Alternatively, it may mean that the patients experiencing these issues were not included in this study. It is recommended that the head of RSUD Muhammad Sani, Karimun Regency, ensure that waiting times, friendliness, and responses from service staff align with patient expectations, including by simplifying service processes and creating training programs related to the professional ethics of service staff.

### **Discussion on the Determination of Service Quality on Patient Satisfaction**

In relation to complaints regarding service quality, facilities and infrastructure, and employee competence, which have led to a decrease in patient visits or patient loyalty, if we refer to the results of this study which conclude that there is no significant direct determination of service quality on patient satisfaction with a negative influence pattern, it can be interpreted that complaints related to service quality negatively affect patient satisfaction. It is recommended that the head of Muhammad Sani Regional Public Hospital in Karimun Regency simplify the service process and create training programs related to professional ethics for service personnel that are oriented towards patient satisfaction.

### **Discussion on the Determination of Facilities and Infrastructure on Patient Loyalty**

In relation to complaints regarding the inadequate condition of the waiting room and the tendency of potential patients to choose neighboring countries or the city of Batam as alternatives to receive the healthcare they need due to more comprehensive and advanced healthcare facilities, referring to the research findings that conclude there is no significant direct determination of facilities and infrastructure on patient loyalty, but showing a positive influence, it can be interpreted that the inadequate condition of facilities and infrastructure, especially the waiting room, has not had a good impact on patient loyalty. As a result, patients are opting for neighboring countries or the city of Batam as alternatives to obtain the healthcare they need, as these places have more complete and advanced healthcare facilities. It is recommended that the head of RSUD Muhammad Sani in Karimun Regency make efforts to improve existing facilities and infrastructure, particularly in the waiting room, to meet patient needs.

### **Discussion on the Determination of Facilities and Infrastructure on Patient Satisfaction**

Regarding complaints related to facilities and infrastructure, such as issues with the waiting room conditions, this study concludes that there is a significant direct determination of facilities and infrastructure on patient satisfaction with a positive influence. This means that the condition of the facilities and infrastructure has a positive impact on patient satisfaction. Alternatively, it could be that the community group providing the feedback was not included as respondents in this study. It is recommended that the head of RSUD Muhammad Sani Karimun District work on acquiring facilities, especially in the waiting rooms, to focus on the needs and satisfaction of patients.

### **Discussion on the Determination of Competence Towards Patient Loyalty**



Regarding the feedback suggesting a lack of confidence in the abilities of the employees at RSUD Muhammad Sani, based on the results of this study which conclude that there is no significant direct determination of competence on patient loyalty, it can be interpreted that the employees' competence has not yet positively impacted patient loyalty, or that patient trust in employees' abilities has not positively affected patient loyalty. It is recommended that the head of RSUD Muhammad Sani in Karimun Regency create training programs or seminars that could enhance patient trust in the competence of the employees.

### **Discussion on Competency Determination and Patient Satisfaction**

Regarding the complaints about a lack of trust in employee capabilities, referring to the research conclusion that there is a positive impact of competency on patient satisfaction, it can be interpreted that employee competency has positively influenced patient satisfaction. This dissatisfaction might be due to patients lacking information about employee competencies. It is recommended that the head of RSUD Muhammad Sani Kabupaten Karimun develop a training program or seminar aimed at enhancing employee competencies with a focus on improving patient satisfaction.

### **Discussion on Patient Satisfaction Determinants Towards Patient Loyalty**

This discussion addresses issues related to patient satisfaction, which are indicated by complaints about service quality, facilities, and staff competence, leading to a decrease in patient visits or loyalty. Based on this study's results, which conclude that there is no significant direct determination of patient satisfaction on patient loyalty, it can be interpreted that despite these issues, patient satisfaction already has a positive impact on patient loyalty. It is recommended that the head of RSUD Muhammad Sani Kabupaten Karimun strive to enhance patient satisfaction by simplifying service processes, improving facilities in waiting areas according to patient needs, and implementing training programs related to professional ethics and staff competence focused on patient satisfaction and increasing patient loyalty.

### **Service quality determination on patient loyalty is mediated by patient satisfaction.**

This is related to the issue of patient loyalty at RSUD Muhammad Sani Karimun Regency, which is indicated by a decline in the average number of patient visits per quarter. This decline is partly due to the cultural tendency among the people of Karimun Regency to choose neighboring countries or Batam City as an alternative for receiving the healthcare they need. Referring to the results of this study, which concludes that patient satisfaction is unable to mediate the impact of service quality on patient loyalty significantly and has a negative effect, it can be interpreted that the current service quality conditions do not significantly affect patient loyalty and have a negative impact on patient loyalty, or patient satisfaction is unable to mediate the effect of infrastructure on its impact on patient loyalty significantly. It is recommended that the head of RSUD Muhammad Sani Karimun Regency work towards improving service quality by simplifying service processes oriented towards patient satisfaction and enhancing loyalty.

### **Discussion on the Determination of Facilities and Infrastructure on Loyalty Mediated by Patient Satisfaction**

This discussion addresses the issue of patient loyalty at RSUD Muhammad Sani, Karimun Regency, indicated by a decline in the average number of patient visits per quarter. This decrease is partly due to a local culture in Karimun Regency where people tend to choose neighboring countries or Batam City as alternatives for their healthcare needs. Referring to the findings of this study, which conclude that patient satisfaction does not significantly mediate the effect of facilities and infrastructure on patient loyalty, and the effect is not significantly positive, it can be interpreted that the current facilities and infrastructure have not significantly influenced patient loyalty. It is recommended that the head of RSUD Muhammad Sani, Karimun Regency, strive to improve facilities and infrastructure, including upgrading waiting areas to meet patient needs and enhance patient loyalty.

### **Discussion on Competency Determination and Patient Loyalty Mediated by Patient Satisfaction**

Related to the issue of patient loyalty at RSUD Muhammad Sani Karimun Regency, which is indicated by a decrease in the average number of patient visits per quarter, partly due to the culture

among Karimun Regency residents who tend to choose neighboring countries or Batam City as alternatives for the healthcare they need. Referring to the results of this study, which concludes that patient satisfaction is not able to mediate the effect of competency on patient loyalty significantly and positively, it can be interpreted that the current employee competency conditions do not significantly and positively impact patient loyalty. It is recommended that the head of RSUD Muhammad Sani Karimun Regency work on increasing patient satisfaction, for example, by creating training programs related to professional ethics and employee competency, focusing on patient satisfaction and improving patient loyalty.

## CONCLUSION

This study finds that there is a significant direct determination of service quality on patient loyalty at RSUD Muhammad Sani Kabupaten Karimun, but no significant determination of service quality on patient satisfaction. Additionally, infrastructure does not show a significant determination of patient loyalty but does have a significant determination of patient satisfaction. Competence does not have a significant direct effect on patient loyalty but does have a significant effect on patient satisfaction. Patient satisfaction does not show a significant direct effect on patient loyalty. Moreover, patient satisfaction cannot mediate the effects of service quality, infrastructure, and competence on patient loyalty significantly at RSUD Muhammad Sani Kabupaten Karimun.

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