

The Relationship Between Enabling Factors and the Intention to Return Among Patients Undergoing Conventional Radiological Examinations at Pariaman Regional General Hospital

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Abstrak: Conventional radiology services are a vital medical support in the diagnosis and treatment of patients. Patient return visit rates serve as a key indicator of service quality, which can be influenced by enabling factors such as facilities, service quality, and location. This study aims to analyze the relationship between enabling factors and patients' willingness to return for conventional radiology examinations. The study is a quantitative, analytical, correlational study with a cross-sectional design. It was conducted at the radiology department of Pariama Regional General Hospital. The population consisted of 52 patients who returned for follow-up visits during the period of July–September 2024. The sample consisted of 46 respondents. Data were collected via a questionnaire measured using Likert and Guttman scales, which had been tested for validity and reliability, and were then analyzed using the Chi-Square test. The results showed that the majority of respondents rated the facilities as poor (52.2%) and the service as poor (54.3%), while the location was considered accessible (54.3%). Statistical tests revealed a significant relationship between facilities and service ($p=0.039$) and service ($p=0.018$) and the intention to revisit, whereas location was not associated ($p=0.236$). These results confirm that improving the quality of facilities and service is a key factor in enhancing patient loyalty toward radiology services.

Keywords : Enabling Factors, Interest In Repeat Visits, Conventional Radiology

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INTRODUCTION

Hospitals are healthcare institutions that provide comprehensive individual healthcare services, including outpatient, inpatient, and emergency care. One form of medical support service that plays a crucial role in the diagnosis and treatment process is radiology. Conventional radiology plays a major role in helping doctors diagnose diseases through X-ray imaging examinations. High-quality radiology services support the effectiveness of diagnosis and enhance patient satisfaction with hospital care.



Patient satisfaction with healthcare services can be reflected in patients' willingness to return for follow-up visits. This willingness to return is a form of patient loyalty toward healthcare services previously utilized. Patients who are satisfied are more likely to return to the same facility for a follow-up examination if they require similar services in the future. Conversely, dissatisfaction with aspects of service, facilities, or location accessibility can reduce a patient's desire to return for treatment. Therefore, the willingness to return for follow-up visits serves as a key indicator for assessing the quality of care at a healthcare facility, including the radiology department.

This study is based on Lawrence Green's health behavior theory, which explains that an individual's behavior is influenced by three main factors: predisposing factors, enabling factors, and reinforcing factors. Enabling factors are aspects that facilitate the occurrence of a behavior, including the availability of facilities and infrastructure, the quality of service, and the ease of access to the location. These three aspects significantly determine patients' decisions regarding return visits to healthcare services. Previous research indicates that good facilities and services have a significant association with patients' interest in returning, whereas different results were found regarding the location variable, which does not always have an impact.

Preliminary observations at the Radiology Department of Pariaman Regional General Hospital indicate a decline in the number of return visits by conventional radiology patients during the July–September 2024 period. Some patients expressed dissatisfaction with the available facilities and the perceived quality of service, although the majority considered the department's location to be easily accessible. This situation indicates issues with facility and service quality that may affect patient loyalty. The objective of this study is to examine the relationship between enabling factors and the intention to return for conventional radiology examinations at Pariaman Regional General Hospital.

METHODOLOGY

This study employed a quantitative approach using a correlational analytical method and a cross-sectional design, in which data collection was conducted at a single point in time to examine the relationship between independent and dependent variables. The study was conducted at the Radiology Department of Pariaman Regional General Hospital from November 2024 to July 2025. The study population consisted of 52 individuals, and 46 respondents were selected as the sample using the Slovin formula ($\alpha = 0.05$) and purposive sampling. Inclusion criteria included patients aged 17–65 years, who could read and write, had undergone conventional radiological examinations, and were willing to participate as respondents.

The data collection instrument used a structured questionnaire that had been tested for validity and reliability. The questionnaire consisted of four sections: facilities (5 items), service (10 items), location (5 items), and interest in revisiting (5 items). The measurement scales used were the Likert scale to assess perceptions of facilities, services, and location, and the Guttman scale to assess interest in repeat visits. Validity was tested using Pearson's Product-Moment correlation, while reliability was assessed using Cronbach's Alpha; all variables yielded values above 0.7, indicating reliability.

The data were analyzed using univariate and bivariate methods with SPSS version 26. Univariate analysis was used to describe the frequency distribution of each variable, while bivariate analysis employed the Chi-Square (χ^2) test to examine the relationship between enabling factors (facilities, services, and location) and patients' interest in returning for follow-up visits. Results were considered significant if $p < 0.05$.

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Age, Gender, Service, Facility, Location, and Interest in Return Visits

Gender	<i>f</i>	%
Male	26	56,5
Female	20	43,5
Age	<i>f</i>	%
17 - 25 year	10	21,7
26 - 35 year	8	17,4
36 - 45 year	8	17,4
46 - 55 year	14	30,4
56 - 65 year	6	13,0
Facilities	<i>f</i>	%
Good	22	47,8
Not so good	24	52,2
Service	<i>f</i>	%
Good	21	45,7
Not So Good	25	54,3
Location	<i>f</i>	%
Accessible	25	54,3
Inaccessible	21	45,7
Interest in Returning	<i>f</i>	%
Interested	23	50,0
Not Interested	23	50,0
Total	46	100,0

Table 2. The Relationship Between Facilities and the Intention to Return Among Patients Undergoing Conventional Radiology Examinations at the Radiology Department of Pariaman Regional General Hospital

Facilities	Interest in Returning Visits						<i>P value</i>
	Interested		Not Interested		Total		
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Good	15	68,2	7	31,8	22	100,0	0,039
Not So Good	8	33,3	16	66,7	24	100,0	
Total	23	50,0	23	50,0	46	100,0	

Table 2 shows that of the 46 respondents who perceived the facilities as good, 15 respondents (68.2%) expressed an interest in returning. Meanwhile, of the 24 respondents who perceived the facilities as poor, only 8 (33.3%) expressed an interest in returning. Based on the results of the chi-square test for the

facility category, a p-value of 0.039 was obtained, which is less than 0.05. Thus, the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. This indicates a significant relationship between facilities and interest in returning for a follow-up visit. In other words, the better patients' assessment of the available facilities, the higher their interest in returning for conventional radiology examinations at Pariaman Regional General Hospital.

Table 3. Relationship Between Service Quality and Patients' Interest in Returning for Conventional Radiology Examinations at the Radiology Department of Pariaman Regional General Hospital

Service	Interest in Returning Visits						<i>P value</i>
	Interested		Not Interested		Total		
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Good	15	71,4	6	28,6	21	100,0	0,018
Fair	8	32,0	17	68,0	25	100,0	
Total	23	50,0	23	50,0	46	100,0	

In Table 3, of the 21 respondents who rated the service as good, 15 (71.4%) expressed an interest in returning. Meanwhile, of the 25 respondents who rated the service as poor, only 8 (32%) were interested in returning. Based on the results of the chi-square test for the service category, a p-value of 0.018 (< 0.05) was obtained; therefore, the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. It can thus be concluded that there is no relationship between service quality and interest in returning. This implies that service perceived as good by patients can increase the likelihood of their returning to use radiology services at Pariaman Regional General Hospital.

Table 4. Relationship Between Location and Interest in Returning for Follow-up Visits Among Patients Undergoing Conventional Radiology Examinations at the Radiology Department of Pariaman Regional General Hospital

Location	Interest in Returning Visits						<i>P value</i>
	Interest		Not Interest		Total		
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	
Reached	15	60,0	10	40,0	25	100,0	0,236
Not Reached	8	38,1	13	61,9	21	100,0	
Total	23	50,0	23	50,0	46	100,0	

Table 4. The data show that of the 25 respondents who stated that the radiology facility was accessible, 15 (60%) expressed an interest in returning for another visit. Meanwhile, of the 21 respondents who stated that the location was inaccessible, only 8 (38.1%) expressed an interest in returning to the same facility for a radiology examination. Based on the results of the chi-square test for the location category, a p-value of 0.236 (> 0.05) was obtained; therefore, the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) is rejected. It can thus be concluded that there is no relationship between location and interest in a return visit.

Based on the results of the facility distribution survey at the Radiology Department of Pariaman Regional General Hospital, it was found that of the 46 respondents, 24 (52.2%) stated that the facilities at the Radiology Department of Pariaman Regional General Hospital were subpar, while 22 (47.8%) stated that the facilities were good. According to Tjiptono's (2014) theory cited in this study, facilities are physical

resources that serve as tangible evidence directly experienced by consumers and encompass the condition of facilities, design, and cleanliness. Suboptimal facilities, as identified in this study, can directly shape patients' negative perceptions of the overall quality of care.

These results are supported by a similar study by Rahma (2019), which states that inadequate healthcare facilities are one of the factors that can reduce patient satisfaction. A study by Lestari et al. (2019) also found that the availability of good facilities is significantly associated with the intention to revisit.

This indicates that 24 people were dissatisfied with the condition of the available facilities. Some of the issues they may have found lacking include the comfort of the examination room, the availability of radiology equipment, or uncomfortable patient gowns. Facilities are a crucial component of hospital care as they directly impact patient comfort and first impressions. If facilities are deemed inadequate, patients may feel uncomfortable and be reluctant to return for follow-up examinations at the same facility. Consequently, high-quality facilities can encourage patients to return, whereas subpar facilities may deter repeat visits.

The results of the service evaluation at the Radiology Department of Pariaman Regional General Hospital also showed that, out of 46 respondents, 25 (54.3%) rated the service they received as poor, while 21 (45.7%) rated it as good. The Service Quality (SERVQUAL) theory, which encompasses the dimensions of reliability, responsiveness, assurance, and empathy, serves as a framework for understanding these findings (Wardhani, 2015). The "poor" perception indicates that there is a gap between patients' expectations and the reality of the service they received in one or more of these dimensions, such as the speed of test result delivery or the friendliness of staff.

Previous research by Hidayati et al. (2024) at Pandan Arang General Hospital in Boyolali, however, showed different results, with 95.7% of respondents reporting a positive perception of service quality. This discrepancy indicates that service quality is highly context-specific and depends on the management of each individual hospital.

Based on this, it can be argued that the service at the Radiology Department of Pariaman Regional General Hospital has not yet fully met patients' expectations. Factors such as long wait times for results, a lack of clear communication from healthcare staff, or a lack of empathy are believed to be the main causes of these negative perceptions. Improvements in service dimensions, particularly responsiveness and empathy, are essential to enhance patient satisfaction.

Based on the Location Distribution at the Radiology Department of Pariaman Regional General Hospital, 25 respondents (54.3%) felt that the Radiology Department's location was easily accessible, while 21 respondents (45.7%) felt it was not accessible. Within the theoretical framework of Lawrence Green (as cited in Irwan, 2013), location is one of the enabling factors that facilitates or makes it easier for an individual to engage in a particular behavior, in this case, accessing healthcare services. A strategic and easily accessible location constitutes a competitive advantage held by Pariaman Regional General Hospital.

A study by Sidabukke et al. (2017) also found that an easily accessible location is associated with patients' willingness to return. However, the study also noted that location is not the sole determining factor. These findings suggest that most patients consider the facility's location to be satisfactory, particularly in terms of distance or the availability of transportation to the hospital. A strategic location is usually an added value in healthcare because it facilitates access for patients. However, even if the location is easily accessible, it does not mean that patients will definitely return. If the service and facilities are unsatisfactory, then even a nearby location will not be enough to make patients want to come back. Therefore, a good location must be balanced with good service and facilities so that patients' interest in returning can increase.

The results of the distribution of patient interest in return visits at the radiology department of Pariaman Regional General Hospital show that the number of patients interested in and not interested in

returning for a follow-up visit is equal, at 23 patients each (50%). This indicates that only half of the patients are willing to return for radiological examinations at Pariaman Regional General Hospital, while the rest are not interested in returning. This interest in returning is influenced by the patients' experience during their examination, particularly regarding the comfort of the facilities, the quality of service, and the ease of access to the location. If their experience is rated as good, patients will be interested in returning. However, if the experience is less than pleasant, patients will look for another place that is more comfortable and satisfying. Therefore, these results indicate the need for improvements in service and facilities so that patients feel satisfied and are willing to return.

The results of the study indicate a significant relationship between facilities and patients' interest in returning for follow-up visits, with a p-value of 0.039. This suggests that the better patients' perceptions of the facilities available in the radiology department, the higher the likelihood that they will return for follow-up examinations at the same facility. Facilities are a crucial element in healthcare services, as they directly impact patients' comfort and safety while in the hospital environment. Tjiptono (2014) states that facilities are part of service quality that can be directly experienced by consumers, such as room cleanliness, seating comfort, lighting, ventilation, and available medical equipment. When patients feel that the facilities support comfort and cleanliness, their experience during the examination becomes more positive.

Hasil ini juga diperkuat oleh teori Lawrence Green, yang menyatakan bahwa fasilitas termasuk dalam faktor pemungkin (enabling factors), yaitu faktor yang memungkinkan seseorang untuk melaksanakan perilaku tertentu. Dalam konteks ini, fasilitas memungkinkan atau mempermudah pasien untuk memilih kembali layanan yang sama karena sudah memenuhi standar kenyamanan dan kebutuhan.

A study conducted by Hidayat et al. (2024) showed that there is a relationship between facilities and interest in repeat visits, with a p-value of 0.018 ($p < 0.05$). The study by Lestari et al. (2019) also showed that there is a relationship between facilities and interest in repeat visits, with a Chi-Square test yielding a p-value of 0.027. Of the 90 respondents, 82% of patients who rated the facilities as good expressed an interest in returning, whereas only 30% of the group that rated the facilities as poor expressed an interest in returning. The study conducted by Lestari et al. (2019) also supports these findings, indicating that good facilities positively correlate with patients' interest in returning, particularly regarding diagnostic and outpatient services. Therefore, improvements in physical facilities—such as neat and well-maintained examination rooms and clean, comfortable examination gowns—significantly contribute to fostering patient loyalty.

Service is an equally important aspect in shaping patients' first impressions of a hospital. This study found a significant association between service quality and patients' willingness to return ($p = 0.018$). The data indicates that patients who rated service as "good" were more likely to return compared to those who rated it as "poor." Healthcare service is not merely about the speed of care but also the attitude and behavior of medical staff. Service delivered with empathy, patience, and respect fosters a sense of safety and comfort for patients. In the Sevyqual model, service quality consists of several dimensions, namely tangibles (physical evidence), reliability, responsiveness, assurance, and empathy.

A study conducted by Hidayat et al. (2024) showed that there is a significant relationship between service quality and the intention to return ($p = 0.018 < 0.05$). A study by Lin et al. (2018) reported $p = 0.021$, finding that 80% of patients who felt they received empathetic care expressed an intention to return, compared to 40% of the group who were dissatisfied. This study indicates that a positive perception of care can build patient trust and encourage their interest in using the service again. These findings are consistent with the study by Lin et al. (2018), which stated that the dimensions of empathy and responsiveness have a significant influence on patient satisfaction and intention to return. From the perspective of Green's theory, service also constitutes an enabling factor because it plays a major role in supporting patients' decisions to

return. Poor service, such as delayed test results or a lack of explanation regarding the examination, can be a major barrier to building patient loyalty.

Location is one of the enabling factors that can influence patients' decisions to return to a healthcare facility. Based on the research results shown in Table 4.9, of the 25 respondents who stated that the radiology department was easily accessible, 15 (60.0%) expressed an interest in returning. Meanwhile, of the 21 respondents who rated the location as inaccessible, only 8 (38.1%) expressed an interest in returning for conventional radiology examinations. However, based on the results of the chi-square test, a p-value of 0.236 was obtained, which is greater than 0.05; thus, there is no significant relationship between the perception of location accessibility and patients' interest in returning for follow-up visits.

A strategic and easily accessible location should be a key draw for patients when choosing healthcare services. However, the results of this study indicate that perceptions of location are not necessarily a strong determining factor in shaping the intention to return. This suggests that patients tend to prioritize service quality and facilities—which they experience directly during their visit—over distance or accessibility to the location.

The study by Lestari et al. (2019) yielded a p-value of 0.076, indicating that location has no significant association with the intention to revisit, and most patients cited service quality as the primary factor. These findings are further supported by the research of Sidabukke et al. (2017), which states that while the location of healthcare services can influence patient decisions, it is not always the primary factor. In some cases, patients will still return to a healthcare facility even if the location is not particularly close, provided that their previous experience was deemed positive.

Thus, it can be concluded that an accessible location is insufficient to guarantee patients' interest in returning if service quality and facilities are not yet optimal. Therefore, improving the quality of service and facilities must remain the primary focus in efforts to enhance patient loyalty toward the Radiology Department at Pariaman Regional General Hospital.

CONCLUSIONS

Most respondents rated the facilities (52.2%) and services (54.3%) at the radiology department as poor, particularly regarding the cleanliness of the rooms, the completeness of equipment, and the time taken to receive test results. In contrast, the location was considered accessible by most respondents (54.3%). Patients' interest in returning was evenly split (50% : 50%).

There was a significant association between facilities ($p=0.039$) and service ($p=0.018$) and the intention to return, whereas location showed no significant association ($p=0.236$). Thus, facilities and service are the primary factors influencing patients' intention to return to Pariaman Regional General Hospital.

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