

# Correlational Analysis Between Service Quality and Patient Satisfaction in the Radiology Installation of Sanjiwani Gianyar Hospital

Service Quality in  
Health Sector

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945

Submitted:  
8 JUNE 2023

Accepted:  
5 NOVEMBER 2023

## ABSTRACT

The effect of radiology service quality on patient satisfaction on urology ultrasonography (ultrasound) examination at Radiology Installation Sanjiwani Regional Hospital, Gianyar aims to determine the effect of Radiology Service Quality on Patient Satisfaction on Urological Ultrasound Examination at Radiology Installation Sanjiwani Regional Hospital, Gianyar. This type of research uses quantitative research methods with a survey approach conducted at Sanjiwani Hospital in Gianyar Radiology Installation in April 2019. The population of this study is all outpatients who receive Urological Ultrasonography examination services with the sample of this research are 30 outpatients who get the Urological Ultrasonography examination. The results of the study were then analyzed by using the first SPSS test, which is valid, reliable, normality, and spearman. From the results of this study indicate that patients who have received Radiology services on Urology Ultrasonography (USG) examination expressed very satisfied as much as 18%, expressed satisfaction as much as 72% and stated quite satisfied as much as 10%, it can be concluded that 90% of patients who received Ultrasonography services (USG) Urology at Radiology Installation at Sanjiwani Regional Hospital, Gianyar, said he was satisfied.

**Keywords:** Service quality, Patient satisfaction, Health management, Correlational analysis

## ABSTRAK

Pengaruh mutu pelayanan radiologi terhadap kepuasan pasien pada pemeriksaan ultrasonografi (usg) urologi di Instalasi Radiologi RSUD Sanjiwani Gianyar bertujuan untuk mengetahui Pengaruh Mutu Pelayanan Radiologi Terhadap Kepuasan Pasien Pada Pemeriksaan Ultrasonografi Urologi Di Instalasi Radiologi RSUD Sanjiwani Gianyar. Jenis penelitian ini menggunakan metode penelitian kuantitatif dengan pendekatan survey yang di lakukan di Instalasi Radiologi RSUD Sanjiwani Gianyar pada bulan April 2019. Populasi penelitian ini adalah semua pasien rawat jalan yang mendapatkan pelayanan pemeriksaan Ultrasonografi Urologi dengan sampel penelitian ini adalah 30 pasien rawat jalan yang mendapatkan pemeriksaan Ultrasonografi Urologi. Hasil penelitian selanjutnya dianalisa data dengan menggunakan uji SPSS yang pertama uji valid, uji reliabel, uji normalitas dan uji spearman. Dari hasil penelitian ini menunjukkan bahwa pasien yang telah mendapatkan pelayanan Radiologi pada pemeriksaan Ultrasonografi (USG) Urologi menyatakan sangat puas sebanyak 18%, menyatakan puas sebanyak 72% dan menyatakan cukup puas sebanyak 10%, maka dapat disimpulkan bahwa 90% pasien yang mendapatkan

**JIMKES**

Jurnal Ilmiah Manajemen  
Kesatuan  
Vol. 11 No. 3, 2023  
pp. 945-950  
STIE Kesatuan  
ISSN 2337 – 7860

**Kata kunci:** *Kualitas pelayanan, Kepuasan pasien, Manajemen kesehatan, Analisis korelasional*

## INTRODUCTION

Ultrasound examination (USG) is an examination that is a tool that uses ultra sound waves for imaging (creating an image display) of an object exposed to ultra sound, this technique is useful for examining organs (Agarwal et al., 2021; Bhargava, 2020; Rafailidis et al., 2020; Tadeusiewicz, 2008). Obstetric sonography is commonly used during pregnancy (Campbell, 2013; Chudleigh, 2004; Levina, 2006; Shainker et al., 2021). *Ultrasound* or *ultra* sound is a sound wave with a frequency of more than 20,000 Hz (Buddemeyer, 1975; Leighton, 2007; Moyano et al., 2022). This examination is non-invasive, causing no pain to the patient.

Patients are the most important individuals in the hospital, so consumers and product targets in a consumer decision process will not stop until the process of receiving services. Patients will evaluate the services received (Boshoff & Gray, 2004; Herzlinger, 2006; Sampson & Froehle, 2006). The results of the evaluation process will result in a feeling of satisfaction or dissatisfaction. Satisfaction is a person's pleasure that comes from comparing pleasure with activities and a product with expectations (Baumeister et al., 2013; Liu et al., 2020; Oliver, 2014; Tien et al., 2021). Low patient satisfaction will have an impact on the number of hospital visits, while the attitude of officers towards patients will also have an impact on patient satisfaction where patient needs continue to increase, as well as demands for the quality of services provided (Engel et al., 2020). The Directorate General of Medical Services of the Ministry of Health of the Republic of Indonesia states that the patient satisfaction target for outpatients is  $\geq 90\%$  and the patient satisfaction target for Radiology services is  $\geq 80\%$ , from the SPO (*Operational Service Standards*) (Ismainar, 2015) available at Sanjiwani Gianyar Hospital it is known that the patient waiting time from registration until the patient obtains the results is 3 hours, but in practice it is not in accordance with the established standards.

The study aims to assess the influence of M&A activities on companies' overall financial performance and competitive advantage. It utilizes the PRISMA methodology and a literature review approach to analyze secondary data from various sources, including books, e-books, journals, and current news. The study seeks to provide insights into the relationship between M&A and financial performance, with the goal of contributing to a comprehensive understanding of the effects of M&A activities on company performance in the Indonesian market.

## METHODS

This study uses quantitative methods with a survey approach. The population of this study were all outpatients who received Urological Ultrasound examination services, while the sample of this study was 30 outpatients who received Urological Ultrasound examination. The first step in preparing a patient satisfaction questionnaire and stationery. After the patient finishes the Urological Ultrasound examination, the author explains the purpose and how to fill out the questionnaire. Data collection is done by giving questionnaires to patients, and the results of the questionnaire respondent data are described in the form of diagrams and then analyzed using SPSS. To determine the Quality of Radiology Services on Urological Ultrasound Patient Satisfaction.

Based on the research objectives, namely to determine the effect of the quality of radiology services on patient satisfaction at the Urological Ultrasound examination at the Radiology Installation of Sanjiwani Gianyar Hospital, data analysis was carried out using the SPSS program with valid test, reliability test, normality test and spearman test.

**RESULTS AND DISCUSSION**

Data was obtained by distributing questionnaires filled in directly by patients or represented by the patients' families who had received urological ultrasonography (USG) services at the Radiology installation of Sanjiwani Gianyar Hospital. Based on a sample size of 30 patients who had received Urological Ultrasonography (USG) services at the Radiology installation of Sanjiwani Gianyar Hospital for two weeks from April 29, 2019 to May 10, 2019. So, to find out a clear description of the results of the research conducted, you can see the general description of the respondents in Table 1.

Table 1. Distribution of respondents

Distribution	Percentage	Distribution	Percentage
<b>Age</b>		<b>Payment type</b>	
34 – 45	11	JKN	
46 – 56	17	ASKES/BPJS	100
57 – 67	20	General	
68 – 78	25	<b>Service Quality</b>	
79 – 89	27	Very good	16
<b>Gender</b>		Good	77
Male	90	Not so good	7
Female	10	Not good	
<b>Education</b>		Very not good	
Elementary school	29	<b>Patient Satisfaction</b>	
Junior high school	32	Very satisfied	16
Senior high school	29	Satisfied	72
Bachelor	10	Quite satisfied	12
<b>Occupation</b>		Less satisfied	
Farmer	43		
Housewife	10		
Self-employed	27		
Civil servant	13		
Other	7		

In this study, statistical tests were carried out which are shown as follows. The results of the normality test between service quality and patient satisfaction levels can be seen in Table 2.

Table 2. Normality Test Results

	$\rho$ value	Description
Quality of Service	< 0.000	Abnormal distribution
Patient Satisfaction	< 0.014	Abnormal distribution

Based on Table 2 data normality test using the *Kolmogorov-Smirnov* test, the results of the service quality data normality test are <0.001 (p-value <0.05), it can be concluded that the service quality data is not normally distributed; therefore, the Spearman statistical test is used. From the test of the 14 questions, namely 10 questions about quality and 2 questions, namely 4 satisfaction questions, the valid test obtained 10 items of value (2-tailed) <0.05, so it was concluded that out of 14 questions 10 were declared valid.

Table 3. Reliability Test Results

	Cronbach's alpha
Patient Satisfaction	0.695

Based on Table 3, the decision criteria showed that if the *Cronbach Alpha* reliability coefficient value is > 0.6, then the instrument is declared reliable. From the test above, the *Cronbach Alpha* reliability coefficient value for Patient Satisfaction is = 0.695 > 0.6.

After conducting statistical tests using the Spearman test with an error rate ( $\alpha$ ) = 0.00 for the patient satisfaction factor, the results obtained  $\rho$  value of 0.000 and  $r$  of 0.390 because  $\rho$  value <0.05, then  $H_0$  is rejected, and  $H_a$  is accepted. Table 4 shows that  $r$  is positive, it means that patients who have performed Urology Ultrasonography (USG)

examination are satisfied with radiology services at the Ultrasonography examination at the Radiology Installation of Sanjiwani Gianyar Hospital.

**Table 4.** Spearman Test Results

Correlation	$\rho$ value	R	Description
Quality of service- patient satisfaction	0.000	0.390	Accepted

Based on the above results, there is an Effect of Radiology Service Quality on Patient Satisfaction at the Urology Ultrasonography (USG) Examination at the Radiology Installation of Sanjiwani Gianyar Hospital that for patient satisfaction as many as 18% stated that they were very satisfied, 72% stated that they were satisfied and 10% stated that they were quite satisfied after getting the service. This means that most patients who are respondents feel their expectations are met for a service that has been provided.

### CONCLUSION

Based on the results of the research on the Effect of Radiology Service Quality on Patient Satisfaction at the Urology Ultrasonography (USG) examination at the Radiology Installation of Sanjiwani Gianyar Hospital, it can be concluded that patient satisfaction at the Urology Ultrasonography (USG) examination is satisfied so that patients who have received services state as much as 16% stated that they were very satisfied, 72% stated that they were satisfied and 1% said they were quite satisfied, it can be concluded that 72% of patients who received Ultrasound (USG) services stated that they were satisfied.

From this study, there are recommendations for the Radiology Installation of Sanjiwani Gianyar Hospital. Satisfaction of radiology patients on ultrasonography examination (USG) Urology in Radiology Installation Sanjiwani Gianyar Hospital is good but still need to improve the quality and service again so that patients who get services from feeling satisfied can feel very satisfied.

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