

An Analysis Of Inpatient Satisfaction At Maria Walanda Maramis Regional General Hospital

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Abstract.

*Patient satisfaction serves as a critical indicator of hospital service quality and overall performance. In Indonesia, government hospitals are required to adhere to public service standards, including routine evaluation through the Community Satisfaction Index (IKM). This study examines patient satisfaction among inpatients at RSUD Maria Walanda Maramis, North Minahasa, using four core service quality dimensions: system and procedure clarity, service completion time, staff competence, and infrastructure. To analyze the relationship between selected service quality variables and the level of patient satisfaction in a Type C public hospital. **Methods:** This research employed a quantitative, cross-sectional design involving 95 inpatients selected using simple random sampling. Data were collected via a structured questionnaire adapted from Permenpan RB No. 14/2017. Bivariate analysis using the Chi-square test was conducted to determine the significance of associations, and Odds Ratios (OR) were calculated to measure the strength of influence of each variable on satisfaction. **Results:** All four independent variables showed significant associations with patient satisfaction ($p < 0.05$). The strongest influence was found in the clarity of service systems and procedures ($OR = 14.0$), followed by infrastructure ($OR = 4.219$), staff competence ($OR = 3.889$), and turnaround time ($OR = 3.372$). Infrastructure received the highest percentage of positive responses (72.6%), while staff competence received the lowest (51.6%). **Conclusion:** Patient satisfaction at RSUD Maria Walanda Maramis is significantly influenced by administrative clarity, service efficiency, human resource competence, and facility quality. Enhancing procedural transparency and investing in continuous staff development are crucial strategies for improving hospital service quality and public perception.*

Keywords: Patient Satisfaction; Public Hospital; Service Quality; Infrastructure; Staff Competence; Turnaround Time and RSUD Maria Walanda Maramis.

I. INTRODUCTION

The social evolution in healthcare expectations has profoundly transformed how public institutions deliver services. Since the issuance of Regulation No. 14/2017 by the Indonesian Ministry of State Apparatus Empowerment and Bureaucratic Reform (Permenpan RB), the measurement of public satisfaction has shifted from broad generalities to precise performance indicators. In the hospital sector, these changes have reinforced the need for standardized, timely, and patient-oriented services, especially in inpatient care settings [1]. Over the past two decades, patient satisfaction has become a key benchmark in evaluating hospital service quality. Factors such as service procedures, turnaround time, staff competence, and the availability of infrastructure are considered major determinants in satisfaction surveys [2][3]. These aspects reflect not only operational efficiency but also institutional accountability in meeting public expectations. At the regional level, RSUD Maria Walanda Maramis a major referral hospital in North Minahasa has experienced fluctuations in inpatient usage, peaking at a 60.4% Bed Occupancy Rate (BOR) in mid-2024 [4]. Despite this operational load, the 2019 Community Satisfaction Index (IKM) survey reported a suboptimal score of 75.51, categorized as “poor” under the former evaluation framework using 14 indicators from 2004.

Moreover, this survey had not yet adopted the newer nine-indicator model introduced in Permenpan RB No. 14/2017 [5]. Previous studies in similar contexts, such as those conducted by Arnindiah & Safriantini in Palembang and Halawa et al. in Medan, confirm that tangible service elements, particularly ease of procedures and staff responsiveness, strongly affect satisfaction [6][7]. However, none have specifically

addressed inpatient satisfaction at RSUD Maria Walanda Maramis using the most current evaluation standards. This study aims to fill that gap by analyzing the correlation between four key variables (1) service systems and procedures, (2) service turnaround time, (3) staff competence, and (4) infrastructure and the overall inpatient satisfaction at RSUD Maria Walanda Maramis. Insights from this study are expected to contribute to evidence-based improvements in hospital service quality and institutional performance in line with national health reform strategies [8].

II. METHODS

The analytical approach in this study was selected to ensure precision, reliability, and relevance to service quality assessment in hospital settings. Following established health service evaluation standards, a validated and standardized instrument based on Permenpan RB No. 14/2017 was used to assess inpatient satisfaction across four core service dimensions. Each technique used—survey collection, data coding, statistical analysis—was tailored to ensure minimal bias and optimal clarity in interpreting patient perceptions. All procedures adhered to ethical research standards, including informed consent and data anonymization protocols.

Survey Instrument

The primary instrument was a structured questionnaire adapted from Permenpan RB No. 14/2017, comprising nine core service satisfaction indicators. This study focused on four indicators most relevant to inpatient services: system-mechanism-procedure, service completion time, service provider competence, and infrastructure. The questionnaire utilized a Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied). Validity and reliability of the instrument were pre-tested using a sample of 20 patients from a comparable Type C hospital (RSUD Anugerah Tomohon), producing Cronbach's alpha values exceeding 0.70 across all variables.

Study Design

A cross-sectional analytic observational design was implemented. The study population consisted of all inpatients at RSUD Maria Walanda Maramis between January and March 2025 (N = 1,728). The sample size was determined using Slovin's formula with a 10% margin of error, yielding a final sample of 95 respondents. Sampling was conducted using a simple random sampling technique to ensure representativeness across age, gender, and ward distribution.

Data Collection and Processing

Questionnaires were distributed and collected manually following the acquisition of informed consent. Respondents completed the forms independently under supervision, with trained enumerators available for clarification. Data processing included manual editing, coding, and tabulation. Each variable's responses were aggregated and converted to categorical satisfaction indicators using cut-off scoring (≥ 13 = satisfied; <13 = not satisfied).

Statistical Analysis

All data analyses were conducted using IBM SPSS Statistics version 25.0. Descriptive statistics (frequency, percentage) were used to map variable distributions. Bivariate relationships were analyzed using the chi-square test (χ^2) to determine statistical significance ($p < 0.05$). Odds ratios (OR) were calculated to assess the strength of association between service quality dimensions and patient satisfaction. Data integrity checks were performed to ensure consistency and reduce risk of bias.

III. RESULTS AND DISCUSSION

Improving healthcare service quality in public hospitals requires evidence-based insight into patient experience. In this study, inpatient satisfaction at RSUD Maria Walanda Maramis was examined through four primary dimensions: service procedures, completion time, staff competence, and hospital infrastructure. Each of these indicators reflects both systemic efficiency and patient-centered care. The outcomes of this study, based on field data from 95 respondents, are presented and analyzed below.

Service Systems, Mechanisms, and Procedures

A total of 53.7% of respondents reported that the hospital's service flow and procedural clarity were “easy to follow”. This variable demonstrated the strongest statistical relationship with overall patient satisfaction. The chi-square test revealed a highly significant association between the clarity of service procedures and satisfaction levels ($p = 0.000$), with an odds ratio (OR) of 14.0. This indicates that patients who perceived the procedure as clear were 14 times more likely to report satisfaction.

Turnaround Time of Services

61.1% of participants rated the hospital's service completion time as “fast”. The association between this factor and patient satisfaction was statistically significant ($p = 0.005$; OR = 3.372), indicating that patients who perceived services as prompt were more than three times as likely to be satisfied.

Staff Competence

51.6% of respondents described healthcare personnel as competent. The statistical analysis revealed a significant correlation between perceived staff competence and patient satisfaction ($p = 0.002$; OR = 3.889). This result underscores the importance of clinical professionalism, communication skills, and decision-making capacity in enhancing patient confidence and outcomes.

Hospital Infrastructure (Facilities and Amenities)

Infrastructure quality was rated positively by 72.6% of respondents. Statistically, this dimension showed a significant relationship with satisfaction ($p = 0.003$; OR = 4.219), confirming that patients who viewed the hospital facilities as adequate were over four times more likely to be satisfied with the overall service.

Table 1. Summary of Statistical Results

Variable	% Positive Response	p-value	Odds Ratio (OR)
System & Procedure	53.7%	0.000	14.0
Turnaround Time	61.1%	0.005	3.372
Staff Competence	51.6%	0.002	3.889
Infrastructure	72.6%	0.003	4.219

According to Table 1, The analysis revealed that all four independent variables service procedures, service completion time, staff competence, and infrastructure had statistically significant associations with patient satisfaction. Among them, service procedures emerged as the most influential factor, with 53.7% of patients rating this aspect positively and a p-value of 0.000, indicating a very strong relationship. The odds ratio (OR) of 14.0 suggests that patients who found the service system and procedures clear and accessible were 14 times more likely to be satisfied with the overall hospital experience. The second most influential factor was hospital infrastructure, where 72.6% of respondents expressed satisfaction.

With a p-value of 0.003 and OR of 4.219, the data suggest that patients who perceived the physical environment and amenities as adequate were more than four times as likely to be satisfied. Turnaround time, rated positively by 61.1% of respondents, also demonstrated a significant correlation with satisfaction ($p = 0.005$; OR = 3.372), indicating that timely service delivery considerably enhances the patient experience. Lastly, staff competence was rated positively by 51.6% of patients. The statistical relationship between this variable and satisfaction was significant ($p = 0.002$) with an odds ratio of 3.889, suggesting that perceived professionalism and skillfulness of healthcare personnel substantially contribute to patient satisfaction.

Fig 1. Positive Patient Responses by Service Dimension

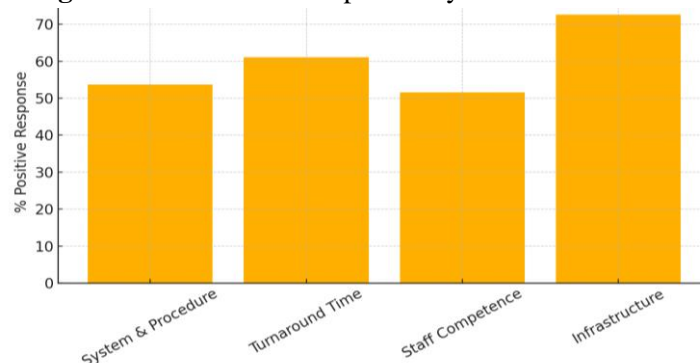


Figure 1 illustrates the percentage of inpatients who provided positive evaluations across four key dimensions of service quality at RSUD Maria Walanda Maramis. The highest proportion of satisfaction was observed in the infrastructure category, with 72.6% of respondents expressing favorable opinions regarding the hospital's physical environment, facilities, and amenities. This suggests that patients generally perceived the hospital's environment as comfortable and adequately equipped to meet their needs. The turnaround time for services followed, with 61.1% of respondents indicating that they received care within an acceptable or prompt timeframe. This highlights operational efficiency as a contributing factor to positive patient experience.

Interestingly, service system and procedure clarity—despite being a strong predictor of satisfaction—was only rated positively by 53.7% of participants, indicating that nearly half of the patients still experienced confusion or perceived complexity in navigating hospital services. The lowest positive response was recorded in the dimension of staff competence, with only 51.6% of patients affirming that healthcare personnel demonstrated sufficient professionalism and skill. This result signals a potential gap in interpersonal communication, clinical confidence, or consistency of care delivery. Overall, the figure underscores the multidimensional nature of patient satisfaction, suggesting that while infrastructure is well-regarded, improvements in staff training and administrative clarity could further elevate patient perceptions.

Fig 2. Odds Ratios for Each Service Variable

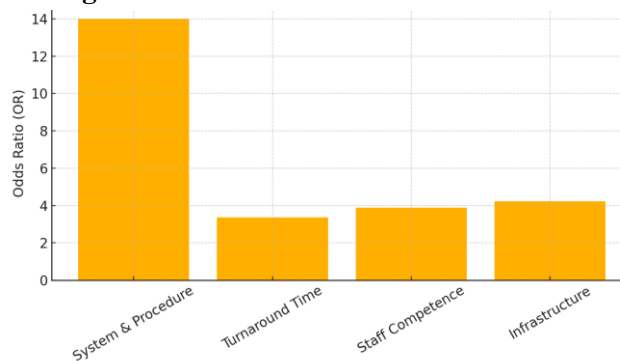


Figure 2 presents the odds ratios (OR) for the association between each service quality dimension and overall patient satisfaction. The highest odds ratio was observed in the “System, Mechanism, and Procedure” variable, with an OR of 14.0, indicating that patients who found the hospital's procedures easy to understand and follow were 14 times more likely to report satisfaction. This finding emphasizes the significant impact of administrative clarity and efficient procedural design on patient experience. The second most influential factor was infrastructure, with an OR of 4.219, showing that patients who viewed the hospital's physical facilities as adequate were more than four times more likely to be satisfied. This highlights the importance of environmental factors in shaping patients' perception of care quality. The variables staff competence and turnaround time had ORs of 3.889 and 3.372, respectively. These values suggest that patients who felt they were treated by skilled and responsive healthcare workers, and who experienced prompt service delivery, were significantly more likely to report satisfaction—approximately three to four times more likely compared to those who had negative experiences in these areas. Overall, the data underscore that while all four dimensions significantly contribute to satisfaction, improving procedural simplicity offers the greatest potential impact on patient perceptions of hospital care. The findings of this study reinforce the notion that patient satisfaction in hospital settings is a multidimensional construct, shaped not only by clinical outcomes but also by a combination of non-clinical factors—including administrative efficiency, responsiveness, interpersonal communication, and physical environment.

This multifactorial nature of satisfaction is widely supported in health service literature [1][2]. In particular, the study revealed a remarkably strong relationship between the clarity of service systems/procedures and patient satisfaction, with an odds ratio of 14.0, the highest among all tested variables. This result indicates that when patients perceive hospital administrative processes as simple, transparent, and predictable, their trust and satisfaction increase substantially. This finding is consistent with previous studies by Pasulu [3] and Halawa et al. [4], which emphasized the critical role of procedural ease

and accessibility in promoting positive perceptions of hospital care. Given RSUD Maria Walanda Maramis's position as a regional referral hospital, ensuring administrative simplicity and clear service protocols is essential not only for improving individual patient experiences but also for enhancing institutional credibility and public utilization rates. Inefficient or overly complex procedures can serve as barriers to care, particularly among elderly patients or those with limited health literacy, ultimately undermining public confidence in the healthcare system [5].

The analysis also highlighted that timeliness of service and staff competence play essential roles in shaping satisfaction outcomes. With odds ratios of 3.372 and 3.889 respectively, both variables demonstrated statistically significant associations with patient satisfaction. Patients are more likely to express satisfaction when services are delivered promptly and healthcare personnel are perceived as knowledgeable, empathetic, and capable. These findings support the conclusions of Kartika [6] and Laeliah & Subekti [7], who stressed the importance of response time and staff professionalism in hospital performance evaluations. Although infrastructure was already highly rated by patients—receiving a positive response from 72.6% of participants—it still emerged as a significant factor (OR = 4.219), underscoring the continuous need for investment in hospital facilities. Well-maintained, clean, and adequately equipped environments contribute to a sense of safety and well-being, which, in turn, enhance patient trust and institutional reputation [8]. Furthermore, physical conditions have been linked not only to satisfaction but also to actual clinical outcomes in some studies [9]. To improve overall performance indicators such as the Community Satisfaction Index (IKM) and Bed Occupancy Rate (BOR), RSUD Maria Walanda Maramis must adopt an integrative quality improvement strategy. This involves simplifying internal processes, enhancing staff training, reducing waiting times, and maintaining high standards for infrastructure and cleanliness. Such efforts are aligned with national healthcare reforms under Permenpan RB No. 14/2017, which advocate for patient-centered, transparent, and measurable public service standards [10].

IV. CONCLUSION

This study concludes that inpatient satisfaction at RSUD Maria Walanda Maramis is significantly shaped by a combination of systemic and experiential factors, including clarity of service procedures, service completion time, staff competence, and infrastructure quality. Among these, the clarity of service systems and procedures emerged as the most influential factor, with patients who experienced clear and accessible processes being 14 times more likely to express satisfaction. This finding highlights the urgent need for the hospital to streamline administrative workflows, reduce procedural complexity, and enhance communication with patients. Additionally, timely service delivery and staff professionalism were shown to substantially influence patient perception. Ensuring that patients receive responsive care from competent and empathetic healthcare providers is essential for fostering trust and loyalty.

Although the hospital's infrastructure was rated highly, continuous maintenance and improvements remain necessary to meet evolving patient expectations and uphold care standards. Taken together, these findings underscore the importance of a holistic approach to healthcare quality improvement, one that prioritizes not only clinical outcomes but also the quality of administrative procedures and the healthcare environment. Strengthening these dimensions can significantly improve institutional performance indicators such as the Community Satisfaction Index (IKM) and Bed Occupancy Rate (BOR), while also enhancing the hospital's reputation as a leading referral center in North Minahasa. Future efforts should focus on policy-driven service reforms, routine evaluation mechanisms, and staff capacity building to ensure sustainable improvements in patient satisfaction and service excellence.

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