

ANALYSIS OF THE RELATIONSHIP BETWEEN SANITATION HYGIENE, FOOD QUALITY, AND SERVICE QUALITY TOWARDS INPATIENT SATISFACTION LEVEL IN FOOD PROVISION AT WAVA HUSADA HOSPITAL KEPANJEN

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Abstract

Background: This study examines patient satisfaction with hygiene and sanitation, food quality, and service quality in the food service at Wava Husada Hospital in Kepanjen. Hospital food quality plays a crucial role in supporting patient recovery, in addition to medication. Food tailored to the patient's condition serves as a supporting factor for healing. Furthermore, food and room cleanliness also influence comfort and accelerate the recovery process. **Methods:** The research used a quantitative descriptive approach, using the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) to measure patient satisfaction, and the Spearman correlation test to determine the relationship between variables. Data were obtained through questionnaires distributed to patients who had received food service at the hospital. **Results:** The study showed a CSI score of 81.3%, indicating that patients were very satisfied with hygiene and sanitation, food quality, and service quality. However, based on the IPA analysis, seven out of 35 aspects needed further attention to improve service quality. Spearman's correlation test showed no significant relationship between sanitation hygiene, food quality, and service quality and patient satisfaction ($p\text{-value} > 0.05$). **Conclusion:** Patient satisfaction is very high, although improvements are needed in several areas to provide optimal service.

Keywords : Hygiene sanitation, Food Quality, Service Quality, Patient Satisfaction, Hospital

INTRODUCTION

Food is a fundamental human need to meet nutritional requirements for survival, growth, and development. In the context of healthcare, food is not only a source of energy but also an essential component of the patient's healing process. The advancement of science and technology, along with increasing public awareness in the post-pandemic era, has emphasized the demand for healthy, safe, and nutritionally adequate food tailored to individual needs.

Hospital nutrition services are an integral part of healthcare, providing not only meals but also supporting medical therapy. Foodservice management in hospitals includes activities ranging from menu planning to distribution, aiming to assist patient recovery through appropriate diets. Patient satisfaction with nutrition services is influenced by food quality, service quality, and staff attitudes. Another critical factor is hygiene and sanitation, as contaminated food may cause illness or foodborne poisoning.

The quality of hospital foodservice depends on nutritional adequacy, taste, cleanliness, and professional service. Patients expect humane and responsive care, which highlights the importance of both service quality and food hygiene. Therefore, food processing that complies with health and sanitation standards is a vital requirement in hospital nutrition services.

Wava Husada Hospital in Kepanjen, which has developed into a type B hospital with full accreditation, continues to improve its service quality and facilities. The increasing number of patient visits makes it necessary for the hospital to evaluate food quality, service quality, and hygiene sanitation. Such evaluation is crucial to ensure optimal service delivery, enhance patient satisfaction, and strengthen its reputation as a high-quality referral hospital (Wava Husada Hospital, 2017)

METHODS

This research is a quantitative study with a descriptive design. Data collection used observational methods. The study design was cross-sectional, meaning that the independent and

dependent variables were measured simultaneously (Irmawati and Nurhaedah, 2017). This study was conducted from July 1–31, 2024, at Wava Husada Hospital, Jalan Panglima Sudirman No. 99A, Ketawang, Ngadilangkung, Kepanjen District, Malang Regency, East Java 65163.

The population in this study was 100 inpatients in July 2024. The sample size was determined using the Slovin formula. The sampling technique used purposive sampling. Independent Variables: Hygiene and Sanitation, Food Quality, Service Quality. Dependent Variable: Patient Satisfaction. Patient characteristics data were obtained by respondents completing a questionnaire, including name, age, gender, and occupation. Data on hygiene and sanitation, food quality, and service quality were obtained by respondents completing a questionnaire provided by the researcher.

The data obtained from the questionnaire were then checked and corrected for completeness, and presented as a percentage (%). Data processing was performed using SPSS Statistics 26, presented in a frequency distribution table, and then analyzed descriptively (Prakoeswa *et al.* 2023).

RESULTS AND DISCUSSION

A. Discussion of the CSI and IPA Method

This study at Wawa Husada Hospital Kepanjen evaluated patient satisfaction with food quality, service quality, and hygiene-sanitation. Using the **Customer Satisfaction Index (CSI)**, the overall satisfaction level reached **81.3%**, categorized as satisfied. However, the **Importance Performance Analysis (IPA)** revealed several gaps between patient expectations and actual performance.

In Quadrant I, seven aspects were identified as priorities requiring improvement: food taste, color combination, texture, provision of snacks, suitability with dietary needs, completeness of cutlery, and provision of tissues. Although satisfaction in these aspects exceeded 80%, they remain crucial factors that directly influence patient satisfaction and therefore need enhancement.

Quadrant II contained aspects considered both important and well-performed, such as appropriate portion size, proper cooking, complete nutrition (carbohydrates, proteins, fats), freshness, timeliness of meal delivery, food safety, and hygienic serving practices. These elements must be maintained as they play a key role in determining patient satisfaction. Findings are consistent with Abdelhafez *et al.* (2012), who emphasized that food quality—including taste, freshness, appearance, and nutritional value—strongly affects satisfaction. Similarly, Zalukhu *et al.* (2020) showed that good food hygiene increased patient satisfaction by 2.8 times, while Mentziou *et al.* (2014) highlighted patient concerns over hygiene, with 90.8% recommending the use of gloves during food service.

In Quadrant III, aspects such as diet explanations, patient counseling, and motivational support were rated less important with relatively low performance, as many patients relied on

food from outside the hospital and were indifferent to these services. In Quadrant IV, elements such as staff neatness, proper use of uniforms, and timely collection of cutlery exceeded expectations but were not perceived as highly important by patients, suggesting possible inefficiencies in resource allocation.

Overall, patients expressed high satisfaction with foodservice quality, yet improvements in taste, texture, and menu variation remain necessary. It is recommended that dietitians and foodservice staff conduct regular monitoring and evaluation, provide modified menus tailored to patient needs, and prioritize critical aspects identified in Quadrant I to achieve more optimal patient satisfaction.

B. Statistical Analysis Results

Tabel.1 Hasil Uji SPSS Korelasi Spearman

Pasangan Variabel	Koefisien Korelasi (rho)	Signifikansi (p-value)	Keterangan
Kualitas Makanan - Kepuasan Pasien	-0,039	0,702	Tidak signifikan
Kualitas Pelayanan - Kepuasan Pasien	0,154	0,127	Tidak signifikan
Hygiene Sanitasi - Kepuasan Pasien	0,110	0,277	Tidak signifikan

Sumber: Data Primer RS Wawa Husada 2024

Based on the results of the Spearman correlation analysis, it was found that there was no significant relationship between food quality, service quality, and sanitation hygiene on patient satisfaction. All three independent variables had a significance value (Sig. 2-tailed) greater than 0.05, which means the alternative hypothesis (H1) was rejected and H0 was accepted.

1. Hygiene Sanitation

The correlation value for hygiene and sanitation of 0.110 with a significance level of 0.277 indicates an insignificant relationship. This means there is no significant relationship between hygiene and patient

satisfaction. Although hygiene and sanitation are important factors in hospital food safety, patients may not directly pay attention to this aspect during their treatment, as most sanitation processes occur behind the scenes, such as in the nutrition facility kitchen.

Therefore, patients only perceive aspects of hygiene and sanitation from what they experience during treatment or in front of a screen, such as clean toilets with sufficient water, sterile eating utensils, and sinks equipped with hand soap.

This aligns with the findings of Putri *et al.* (2020), who stated that patient perceptions of sanitation are often low unless there are direct complaints such as food poisoning.

2. Food Quality

Food quality had a correlation value of -0.039 with a significance level of 0.702, indicating an insignificant relationship. This means there is no significant relationship between food quality and patient satisfaction. This low correlation is due to patients' perceptions of hospital food, which is generally considered standard and does not significantly influence overall satisfaction levels.

Research by Wulandari & Fitria (2021) also showed that although food quality is important, patients prioritize medical aspects such as doctor service or recovery.

3. Service Quality

Food service showed a correlation value of 0.154 with a significance value of 0.127, which is also insignificant. This

means there is no significant relationship between service quality and patient satisfaction. Service quality is considered a routine part of the hospital that does not significantly impact the overall patient experience, unless a major problem occurs. Sari *et al.* (2022) found that patients were more concerned with nursing care or the speed of medical treatment than with nutrition services.

4. Influential Factors

These results indicate that patient satisfaction is more likely influenced by factors other than these three variables, such as:

- a) Quality of medical staff communication
- b) Treatment room facilities
- c) Speed of service
- d) Interaction with nurses and doctors

Therefore, although food and sanitation are important aspects of service quality, their impact on satisfaction may not be perceptually dominant for patients.

CONCLUSIONS

1. Hygiene and Sanitation has a correlation value of 0.110 with a significance level of 0.277, indicating no significant relationship between hygiene and sanitation and patient satisfaction.
2. Food Quality shows a correlation value of -0.039 with a significance level of 0.702, indicating no significant relationship between food quality and patient satisfaction.
3. Service Quality has a correlation value of 0.154 with a significance level of 0.127, also indicating no significant relationship between

food service and patient satisfaction.

4. The results of the recapitulation of patient satisfaction assessment using the CSI (Customer Satisfaction Index) method showed a result of 81.3% (satisfied), meaning that patients were satisfied with the hygiene and sanitation, food quality and quality of service provided by Wavva Husada Hospital Kepanjen. Based on the IPA (Importance Performance Analysis) method, it shows that there are 7 attributes out of a total of 35 attributes that are considered important by patients, but their performance is not in accordance with patient desires and needs to be given top priority for improvement.

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