Factors Affecting Inpatient Satisfaction in Hospitals: A Literature Review

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ABSTRACT: Patient satisfaction is one of the indicators that must be considered in healthcare services. The level of patient satisfaction can reflect the quality of service, which impacts healthcare services in increasing the number of patient visits. This study aims to review articles or journals resulting from research on factors influencing inpatient satisfaction in hospitals. The method used in this study is a literature review sourced from the Google Scholar and PubMed databases for the period 2020-2025. The selection of literature was carried out based on inclusion and exclusion criteria determined by the researchers. This review stage includes identifying research problems, searching for literature, presenting data, and evaluating data. Based on the collected journals, it was found that the patient characteristics influencing patient satisfaction are age, education, occupation, education, gender, and distance of residence. The dimensions of service quality according to the SERVQUAL theory, namely tangible, reliability, responsiveness, assurance, and empathy, significantly influence patient satisfaction. Factors influencing patient satisfaction in service provision include the performance of doctors and nurses, hospital facilities and environment, and service costs. One of the efforts to evaluate and improve the quality of hospital services, especially for inpatients, is by considering the combination of patient characteristics, institutional structure, and the quality of service dimensions through the SERVQUAL method. Therefore, service improvement strategies must be designed holistically and based on the real needs of patients.

KEYWORDS: Inpatient, Hospital, Literature review, Patient satisfaction.

INTRODUCTION

Basically, patient satisfaction is something that yields very varied results, as it is related to each individual's expectations/perceptions. The level of satisfaction itself will fall into the fulfilled category if the service provided meets or falls into the category of what the patient expected. The level of patient satisfaction is measured alongside the assessment of other aspects of healthcare service quality. Improvement in comfort, politeness, and communication leads to better quality of healthcare services, and the outcome of all this will end well (Aulia & Thabrani, 2019). According to Kotler et al., in Swastika et al., (2021), there are several ways to measure customer or patient satisfaction, including complaint and suggestion systems, customer satisfaction surveys, ghost shopping, and lost customer analysis. In healthcare services, patients are consumers, and it is important to know patient satisfaction in hospitals because patient satisfaction is part of service quality, relates to hospital marketing, relates to service improvement, and serves as a data source that can be used for evaluation purposes.

According to the Regulation of the Minister of Health of the Republic of Indonesia Number 3 of 2020, a hospital is a health service institution that provides comprehensive individual health services, including inpatient, outpatient, and emergency services, which can be established by the central government, local government, or private entities. Hospitals provide health services that function in the administration of individual health care efforts, whether promotive, preventive, curative, or rehabilitative, carried out by local governments and/or the community. One of the indicators of hospital service quality is patient satisfaction. However, not all hospitals can meet those standards. The fact that hospital services are still not good exists, especially in terms of the varying attitudes from hospital staff towards the services provided. the speed, accuracy of service, as well as the friendly and communicative attitude of the medical staff, are some of the demands made by patients regarding hospital services (Susilawati & Suryadi, 2023).

Based on the Regulation of the Minister of Health of the Republic of Indonesia No. 129 of 2008 concerning the Minimum Service Standards for Hospitals, it is stated that the standard for customer satisfaction with inpatient services is ≥ 90%. The results of the study by Erlindai et al. (2022) on inpatient satisfaction at RSUD Dr. RM. Djoelham Binjai showed that the factors of physical

evidence (tangibles), reliability, responsiveness, assurance, and empathy had satisfaction levels above 60% and below 80%, meaning the hospital's service level is below the standards set by the Ministry of Health of the Republic of Indonesia.

The research conducted by Lintresa et al. (2021) on inpatient satisfaction at Bina Kasih General Hospital Medan found that, based on the correlation coefficient values, the service cost factor is the most dominant factor influencing inpatient satisfaction, followed by the empathy factor, performance factor, and price level factor. Therefore, to improve patient satisfaction, it is expected that the hospital management should pay attention to and explain to patients all types of service costs or additional costs (costs when the doctor makes a visit, medication costs for patient recovery) in handling patient complaints. Additionally, the research by Maryana et al. (2022) found that there is a significant relationship between reliability, responsiveness, tangibles, assurance, and empathy with inpatient satisfaction at RSUD Depati Bahrin Sungailiat. Based on the aforementioned background, there are differences in the results regarding the factors that influence inpatient satisfaction. Therefore, the researchers conducted a literature review to provide results related to the factors that are associated with inpatient satisfaction in hospitals. By understanding these factors, it is hoped that appropriate policy recommendations and strategies can be developed to improve patient satisfaction in hospitals. This study aims to review articles or journals resulting from research on factors influencing inpatient satisfaction in hospitals.

METHODS

The type of research is a literature review. The data sources used are from the Google Scholar and PubMed databases within the period of 2019-2024. The search keywords used in the Google Scholar database were factors affecting inpatient satisfaction in hospitals, and for the PubMed database, the keyword used was inpatient satisfaction. The results found were 40 publications, of which 23 relevant ones were selected. This selection was made by reviewing the titles, abstracts, and their relation to patient satisfaction with inpatient services at hospitals. Articles are selected if they meet the inclusion criteria, which are topic relevance, availability in full text, no cost, and research using quantitative cross-sectional design. The exclusion criteria are literature review studies related to the COVID-19 pandemic and qualitative data research. The COVID-19 pandemic is excluded on the basis that large-scale restrictions limit patients in providing satisfaction feedback on services, and qualitative research can offer different interpretations, especially in observation and interview methods. The results of the article selection based on searches in the Google Scholar and PubMed databases can be illustrated in the PRISMA Flow Chart:
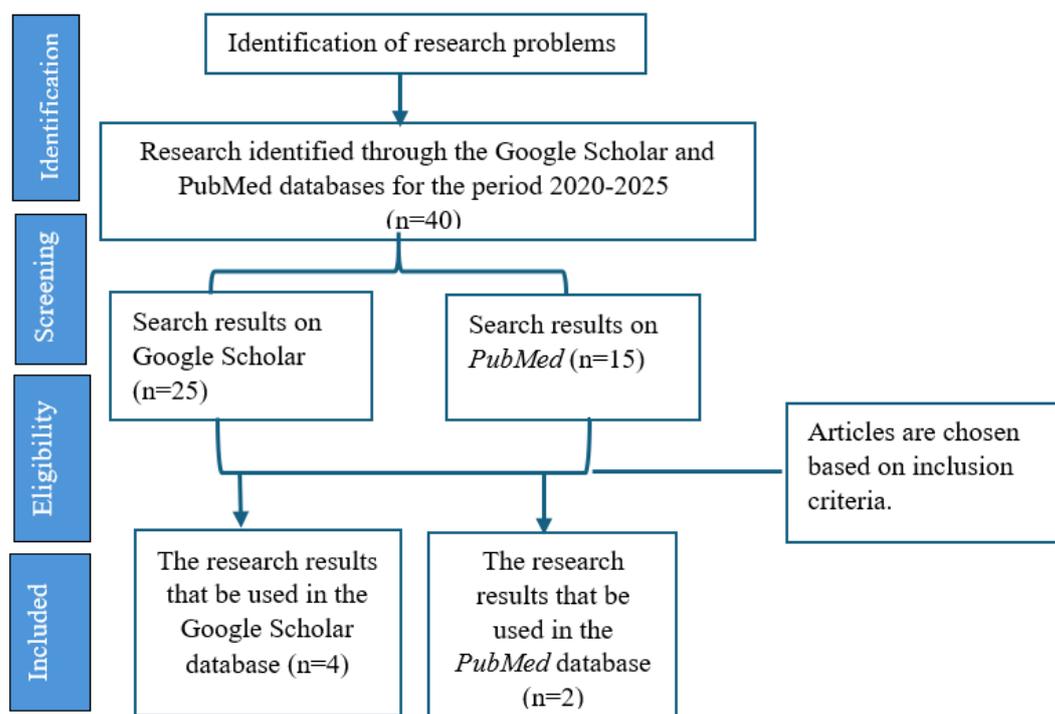

Figure 1. PRISMA *Flow Chart*

RESULTS

Of the 6 selected sources, 4 sources are from Google Scholar and 2 sources are from PubMed, so the results of the literature review obtained are listed in the table below:

Table 1. Literature review based on research design, population, sample, sampling technique, and statistical test

No	First author, year	Research design	Population	Sample	Sampling technique	Statitical analysis
1	Widiastuti et al., 2024	Cross sectional	Patients who were hospitalized in the surgical ward of Rumah Sakit Islam Jakarta Cempaka Putih in 1 month	128 respondents	Stratified random sampling	Chi-square test dan logistic regression test
2	Lampus et al., 2023	Cross sectional	All inpatients at RSUP Prof. Dr. R. D. Kandou Manado during the period of October – November 2023	419 respondents	Simple random sampling	Logistic regression test
3	Kiswanto et al., 2023	Cross sectional	Inpatients at RSUD Kota Karanganyar in the medical room Mawar 1 and the surgical rooms Cempaka 2 and 3 for 1 month.	107 respondents	Simple random sampling	Uji spearman rank, uji anova
4	Juwita et. al, 2020	Cross sectional	The population consists of 185,390 BPJS cardholders who were treated in the inpatient ward at RSUDZA, Banda Aceh since 2016.	383 respondents	Simple random sampling	ANOVA statistical test and Logistic regression test
5	Liu et al., 2024	Cross sectional	All inpatients at the tertiary referral hospital in Sichuan Province, China during the study period	271 respondents	Simple random sampling	Deskriptive, comparative and regression analysis
6	Hu et al, 2020	Cross sectional	The population consisted of 20,300 patients in 131 tertiary hospitals in China from December 2017 to January 2018.	20.300 respondents	Purposive sampling	Kruskal-Wallis, Mann-Whitney tests and Logistic regression test

Table 2. Literature Review Based on Respondent Characteristics

Demographic characteristics	Author					
	Widiastuti (2024)	Lampus (2023)	Kiswanto (2023)	Juwita (2020)	Liu (2021)	Hu (2020)
Gender						
Male	56 (43.8%)	172 (41.10%)	74 (69.2%)	202 (52.7%)	577 (39.6%)	8246 (40.62%)
Female	72 (56.3%)	247 (58.90%)	33 (30.8%)	181 (47.3%)	881 (60.4%)	12054 (59.38%)

Age	Mean= 46.7 (Min-Max=17-84)	Aged <20 (n=16; 3.8%) Aged 20-29 (n=103; 24.6%) Aged 30-44 (n=170; 40.6%) Aged 45-59 (n=102; 24.3%) Aged ≥60 (n=28; 6.7%)	Aged 20-30 (n=3; 2.8%) Aged 31-40 (n=15; 14.02%) Aged 41–50 (n=36; 33.64%) Aged 51–60 (n=53; 49.53%)	Aged >60- (n=107; 27.9%) Aged 25–60 (n=119; 31.1%) Aged 18-24 (n=157; 41%)	Aged 18-60 (n=877; 60.2%) Aged >60 (n=581; 39.8%)	Aged 18-35 (n=6844; 33.71%) Aged 35-65 (n=9580; 47.19%) Aged >65 (n=3876; 919.09%)
Education						
Lower (Elementary/ Secondary school)	36 (28.2%)	41 (9.8%)	30 (28%)	180 (47%)	634 (43.5%)	7328 (36.1%)
Higher (Senior high school/college)	92 (71.9%)	378 (90.2%)	77 (72%)	203 (53%)	823 (56.5%)	12972 (63.9%)
Working status						
Yes	50 (39.1%)	417 (99.5%)	*N/A	355 (92.7%)	* N/A	* N/A
No	78 (60.9%)	2 (0.5%)	* N/A	28 (7.3%)	* N/A	* N/A

* N/A: Not Available

Table 3. Literature review based on factors influencing inpatient satisfaction in hospitals

Bivariate / Multivariate analysis	Author					
	Widiastuti (2024)	Lampus (2023)	Kiswanto (2023)	Juwita (2020)	Liu (2020)	Hu (2020)
Patient characteristics						
Age	p-value (0.550)	* N/A	* N/A	p-value (0.007)	p-value (0.300)	p-value (<0.001)
Gender	p-value (0.361)	* N/A	* N/A	* N/A	P-value (0.630)	p-value (0.022)
Education	1. p-value (0.172) 2. p-value (0.161)	* N/A	* N/A	p-value (0.047)	p-value (0.670)	p-value (0.004)
Working status	p-value (0.61)	* N/A	* N/A	* N/A	* N/A	* N/A
National Health Insurance	1. p-value (0.000) 2. p-value (0.004)	* N/A	* N/A	* N/A	p-value (0.030)	p-value (<0.001)

Class of room	* N/A	* N/A	* N/A	*p-value* (0.240)	* N/A	* N/A
Hospital type	* N/A	* N/A	* N/A	* N/A	P-value (0.001)	P-value (<0.001)

Service Quality Dimensions						
Tangible	* N/A	1. *p-value* (0.000) 2. *p-value* (0.003)	1. *p-value* (0.000) 2. *p-value* (0.178)	*p-value* (0.737)	* N/A	* N/A
Reability	* N/A	1. *p-value* (0.000) 2. *p-value* (0.001)	1. *p-value* (0.000) 2. *p-value* (0.000)	*p-value* (0.129)	* N/A	* N/A
Responsivenes	* N/A	1. *p-value* (0.000) 2. *p-value* (0.014)	1. *p-value* (0.000) 2. *p-value* (0.464)	*p-value* (0.092)	* N/A	* N/A
Assurance	* N/A	1. *p-value* (0.000) 2. *p-value* (0.991)	1. *p-value* (0.000) 2. *p-value* (0,938)	*p-value* (0.575)	* N/A	* N/A
Empathy	* N/A	1. *p-value* (0,000) 2. *p-value* (0.999)	1. *p-value* (0,010) 2. *p-value* (0,396)	*p-value* (0.230)	* N/A	* N/A

*N/A: Not Available; 1 = Bivariate analysis; 2 = Multivariate analysis

DISCUSSION

1. Patient characteristics

A. The Influence of Age on Inpatient Satisfaction

Age is one of the most frequently used demographic characteristics in patient satisfaction analysis, as several studies indicate that age differences affect patients' needs, expectations, perceptions, and evaluations of the quality of hospital services. This study analyzes research findings that evaluate the relationship between age and the level of satisfaction of inpatients at hospitals. Based on the research results by Widiastuti (2024) at the Islamic Hospital Jakarta Cempaka Putih with a sample size of 128 inpatient respondents participating in the National Health Insurance, it was found that there was no significant relationship between age and patient satisfaction (p-value = 0.778). Meanwhile, Liu et al. (2020) in their study at a district-level hospital in Beijing, showed that there is no significant relationship between age and overall satisfaction (p-value = 0.300). From both studies, elderly patients showed lower satisfaction levels regarding the hospital environment aspects, and age can have a domain-specific influence, although it is not always significant overall. Additionally, age is not the main determinant in shaping patient satisfaction with nursing services. However, the results of the above study contradict the research conducted by Juwita (2020) on inpatients at regional general hospitals in Banda Aceh, which found that age has a significant influence on patient satisfaction (p-value 0.007). Additionally, a study by Hu et al. (2019) involving over 20,000 inpatients in 131 tertiary hospitals in Chinese cities, showed that age significantly correlates with patient satisfaction (p-value < 0.001), with elderly patients giving higher satisfaction scores compared to younger age groups. This indicates that age not only plays a role in the perception of service quality but also reflects the dynamics of patient expectations and experiences with the healthcare system. Patients in the older age group tend to show higher satisfaction, which can be attributed to lower expectations or higher tolerance towards the limitations of hospital services.

B. The Influence of Gender on Inpatient Satisfaction

Gender is one of the sociodemographic characteristics commonly used in patient satisfaction research. This factor is often assumed to influence differences in perception, preferences, and levels of satisfaction with healthcare services. However, based on the results of the literature review, the influence of gender on patient satisfaction shows varied findings. Research by Widiastuti (2024) states that there is no significant relationship between gender and inpatient patient satisfaction (p-value of 0.361). This study involved inpatient JKN participants and emphasized that both men and women showed relatively similar levels of satisfaction with the nursing services provided. Similar results were also found in the study by Liu et al. (2020), which showed that gender does not significantly affect overall patient satisfaction (p-value = 0.630). Nevertheless, this study notes that the gender variable has an influence in certain specific domains, such as satisfaction with hospitalization costs, where female patients tend to be more satisfied than male patients.

However, the results of this study differ from the research by Hu et al. (2019), which showed that gender significantly affects patient satisfaction (p-value = 0.022), with female patients tending to give higher satisfaction scores compared to male patients. The researchers attribute this result to the possibility that women value interpersonal communication and empathetic approaches from healthcare professionals more, making them more likely to feel satisfied if these aspects are met during hospitalization.

C. The Influence of Education Level on Inpatient Satisfaction

Education is an important indicator in assessing a person's ability to understand health information, evaluate service quality, and determine expectations regarding hospital services. Therefore, the level of education often becomes the main variable in patient satisfaction analysis. However, research results on the influence of education on patient satisfaction show varied findings. Research by Widiastuti (2024) shows that the level of education does not significantly affect patient satisfaction, with bivariate test results showing a p-value of 0.165 and multivariate test results showing a p-value of 0.161. This study concludes that differences in educational background do not cause significant differences in the perception of the quality of service received by inpatients. Liu et al. (2020) in their study at a district-level hospital in Beijing showed that education level does not have a significant impact on overall satisfaction (P-value = 0.670). However, in the hospital administration domain, it was found that patients with higher education levels tend to be more satisfied, particularly regarding procedures and administrative efficiency.

On the other hand, the research conducted by Juwita (2020) found that education has a significant impact on inpatient patient satisfaction, with a p-value of 0.047. In line with the research by Hu et al. (2020) in their study at a tertiary hospital in China, it also states that the level of education is significantly related to patient satisfaction, with a p-value of 0.004. This study states that patients with higher levels of education tend to have higher standards and expectations regarding healthcare services. If the service does not meet their expectations, it is likely that their satisfaction will be lower, they will tend to be more critical in evaluating hospital services, more aware of their rights as patients, and more sensitive to the discrepancies between their expectations and the actual service received. These findings highlight the importance of effective and educational communication for patients of various educational backgrounds.

D. The Influence of Work on Inpatient Patient Satisfaction

The results of Widiastuti's (2024) study show that employment does not have a significant impact on inpatient patient satisfaction (p-value = 0.605). Most respondents in this study were not employed (60.9%), and the analysis results indicate that employment status does not determine differences in perceptions of nursing service quality or the level of satisfaction experienced. This study contradicts the findings of Liu et al. (2024), which stated that patients with an occupation as farmers were nearly four times more likely to be satisfied with their inpatient care compared to private sector employees (OR=3.702; 95% CI=1.047–13.087).

Employment status is often associated with income levels, access to information, and lifestyle, which can indirectly influence patients' perceptions and expectations of hospital services. However, based on this literature review, the influence of occupation on patient satisfaction shows relatively weak consistency, and patients who are unemployed or have jobs that are not as employees tend to be more flexible with their time and more tolerant of service delays.

E. The Influence of Insurance Status on Inpatient Satisfaction

The status of health insurance participation, particularly in national schemes such as the National Health Insurance (JKN) in Indonesia or the Urban Employees Basic Medical Insurance (UEBMI) in China, plays an important role in determining access, perception, and patient satisfaction with hospital services. Insurance ownership affects perceptions of fairness, efficiency, and

comfort in receiving inpatient services. In the study by Widiastuti (2024), the status of JKN membership and the quality of JKN implementation were found to significantly affect patient satisfaction, with bivariate test results showing a p-value of 0.000 and multivariate test results showing a p-value of 0.004. Patients who receive good JKN service benefits tend to be more satisfied with the nursing services they receive. This reflects the important role of the quality of JKN program implementation in shaping positive patient perceptions.

Research by Liu et al. (2020) also shows that insurance status has a significant impact on inpatient patient satisfaction, particularly in the domain of care costs. In the study, patients enrolled in the Urban Employees Basic Medical Insurance (UEBMI) scheme showed higher satisfaction levels compared to patients without insurance or those enrolled in schemes with limited coverage (p-value < 0.05). Insurance with broader coverage provides financial security and speeds up the service process, which in turn enhances the overall patient experience. Furthermore, Hu et al. (2019) in a study at a tertiary hospital in China found that the type of insurance is one of the significant determinants of patient satisfaction, with a p-value < 0.001. Patients with better insurance coverage feel more valued and receive more equitable and transparent services. This research emphasizes the importance of designing a fair and inclusive insurance system as part of patient-centered healthcare reform.

F. The Influence of Room Classes on Inpatient Satisfaction

The class of care is a structural indicator in hospital services that is directly related to comfort, physical facilities, privacy, and access to medical personnel. In the healthcare system, especially in hospitals that receive patients with tiered insurance schemes such as the National Health Insurance (JKN), the class of care becomes one of the determinants of patients' perceptions and satisfaction with the services received. Based on the literature review in Table 3, the study that included statistical test results on the care class variable, namely by Juwita (2020), which showed that the care class did not have a significant effect on inpatient patient satisfaction, with a p-value of 0.240. This indicates that although there are differences in facilities between classes, patients' perceptions of service quality are not determined by the room class.

G. The Influence of Hospital Type on Inpatient Satisfaction.

Liu et al. (2020) research shows that the type of hospital significantly affects patient satisfaction, with a p-value of 0.001. In this study, patients treated in traditional Chinese hospitals showed higher satisfaction in terms of medical care and costs, but tended to be less satisfied with the hospital's environmental conditions. On the other hand, modern general hospitals offer better facilities, but may fall short of meeting patient expectations in terms of personal approach and service culture. This is consistent with the research by Hu et al. (2020), which also found that the type of hospital has a significant impact on patient satisfaction (p-value < 0.001). More than 20,300 patients in 131 tertiary hospitals in China concluded that patients are more satisfied in specialist hospitals and large hospitals, especially those with a higher number of beds and a high nurse-to-bed ratio. The type of hospital is an important factor that influences the quality of service and patient experience.

This aspect can be seen from the ownership of the hospital, such as government or private. The classification of services also serves as a differentiator, such as primary, secondary, and tertiary hospitals. In addition, the specialization of hospitals, such as general or specialized, also affects patient satisfaction. In patient satisfaction studies, the type of hospital is often linked to the availability of resources. This factor also affects the efficiency of services and the professionalism of medical staff.

2. Service Quality Dimensions
A. The Influence of Tangibles on Inpatient Satisfaction

Tangible is one of the dimensions of service quality that emphasizes the physical aspects of hospital services, such as room cleanliness, available facilities, and the appearance of healthcare staff. This dimension is often considered the first indicator that patients notice when assessing the overall quality of service. Therefore, tangibles play an important role in creating a positive first impression of hospital services. The results of Lampus's (2023) study indicate that the tangible dimension has a significant impact on patient satisfaction, both through bivariate analysis (p=0.000) and multivariate analysis (p=0.003). This study reinforces those adequate physical facilities, room comfort, and the cleanliness of the hospital environment can enhance patients' positive perception of service quality. This indicates that visual aspects and environmental comfort can shape patients' initial trust in healthcare providers.

Similar findings were also shown in Kiswanto's (2023) research, which recorded significant results in the bivariate analysis (p=0.000), but not significant in the multivariate analysis (p=0.178). This difference indicates that the influence of tangibles on patient satisfaction tends to be strong when analyzed separately, but can be overshadowed by other more dominant variables in the multivariate model. This reflects that tangibles are important, but not the only factor determining overall satisfaction. On the contrary, the research by Juwita (2020) conducted in a regional government hospital showed insignificant results in the bivariate analysis (p=0.737). In this study, patients prioritized interpersonal factors, such as empathy and communication, over the physical aspects of the service. These results indicate that patients' expectations regarding physical facilities can be more flexible depending on the local social and economic context.

Research by Lampus et al. (2023) also supports the view that tangibles contribute to the formation of the impression of healthcare professionals' professionalism, as well as providing a sense of safety and comfort during treatment. Meanwhile, a study by Kiswanto and Murtopo (2023) at RSUD Karanganyar found that the tangible dimension significantly affects patient satisfaction, particularly in terms of the completeness of facilities and the cleanliness of patient beds.

B. The Influence of Reliability on Inpatient Satisfaction

Reliability is a dimension that reflects the ability of healthcare professionals to provide services consistently, accurately, and as promised. This dimension shows the extent to which the hospital is able to meet patients' needs in a timely and responsible manner. In the context of healthcare services, reliability becomes crucial as it is directly related to patients' trust in medical staff and the hospital system. Research conducted by Lampus (2023) shows that the dimension of reliability has a significant impact on patient satisfaction, both in bivariate analysis (p value = 0.000) and multivariate analysis (p value = 0.001). Moreover, according to this study, reliability is the most influential variable on overall patient satisfaction, even more dominant than other dimensions. This is supported by multivariate results showing the highest significance value and the largest contribution to patient satisfaction. Similar findings were also obtained in Kiswanto's (2023) research, which recorded significant results in both bivariate (p value = 0.000) and multivariate (p value = 0.000) tests. This study reinforces that reliability is one of the dominant factors in shaping patient satisfaction, particularly in aspects such as the timeliness of service delivery, clarity of medical information, and consistency of care actions during hospitalization. However, Juwita's (2020) research reported different results, with a p-value of 0.129 indicating no significant influence between reliability and patient satisfaction. This may be due to the social context or patient expectations towards regional hospitals in Banda Aceh, which might prioritize the dimensions of empathy or interpersonal communication over the technical reliability aspects of the service.

C. The Influence of Responsiveness on Inpatient Satisfaction

Responsiveness is an important dimension of service quality that indicates the willingness and ability of healthcare personnel to assist patients quickly and provide prompt and responsive service. This dimension illustrates the hospital's sensitivity to patients' needs in situations that require immediate attention and attentive service. Based on the data in Table 3, Lampus's (2023) research shows that the responsiveness dimension has a significant impact on patient satisfaction in both bivariate analysis (p=0.000) and multivariate analysis (p=0.014). These results reinforce that the speed in responding to patients' needs, the promptness of nurses and doctors, and the ability of medical staff to provide immediate service play a crucial role in creating a sense of satisfaction during patients' hospital care. This is in line with the SERVQUAL model, which states that responsiveness is one of the dimensions most easily observed by patients during the service process.

Meanwhile, Kiswanto's (2023) research also noted that responsiveness had a significant impact in the bivariate analysis (p=0.000), but not significant in the multivariate analysis (p=0.464). This study states that patients feel more valued when healthcare staff can respond to questions or complaints quickly, and are able to explain medical procedures directly and clearly. In inpatient care, this responsiveness often becomes a determinant of patients' perceptions of the professionalism and readiness of healthcare institutions. However, in this study, when other factors are included in the multivariate model, the influence of responsiveness can be overshadowed by other more dominant dimensions such as reliability or empathy.

Nevertheless, the significant findings in the bivariate analysis affirm that in direct interactions, the speed and accuracy of responses are highly valued by patients. Unlike the two studies mentioned above, Juwita's (2020) research results indicate that responsiveness does not have a significant effect on patient satisfaction, with a p-value of 0.092. This study indicates that in regional

hospitals, patients may have more flexible expectations regarding service speed, or they may consider other aspects such as empathy and assurance to be more important than responsiveness.

D. The Influence of Assurance on Inpatient Satisfaction

Assurance or guarantee is a dimension of service quality that reflects the competence, politeness, and ability of medical staff to provide a sense of safety to patients during their treatment. This dimension is closely related to patients' trust in healthcare professionals and hospital institutions, especially in terms of professional skills and calming communication. In Table 3, the results of Lampus's (2023) study show that the assurance dimension significantly affects patient satisfaction in the bivariate analysis ($p=0.000$), but not significantly in the multivariate analysis ($p=0.991$). This difference indicates that assurance is important in the initial perception of patients, but its influence can be overshadowed by other variables such as reliability when all dimensions are analyzed together. This indicates that the sense of safety and trust in medical personnel is important, but not the only determining factor for overall satisfaction.

Kiswanto's (2023) research also yielded similar results, where assurance showed a significant influence in the bivariate test ($p=0.000$), but not significant in the multivariate test ($p=0.938$). These results reinforce previous findings that although patients feel more satisfied with services provided politely and professionally, other dimensions such as reliability and empathy can more significantly determine the final satisfaction level. On the other hand, Juwita's (2020) research found that assurance does not have a significant impact on patient satisfaction, with a p-value of 0.575. In the context of government hospitals in Banda Aceh, patient assessments may be more focused on other factors such as service affordability and emotional attention rather than the professional formality of healthcare staff. The assurance dimension has a positive and significant impact on patient satisfaction. From several studies mentioned above, it is emphasized that the competence of healthcare professionals, polite communication, and the sense of safety derived from a professional appearance are important determinants in the perception of service quality.

E. The Influence of Empathy on Inpatient Satisfaction

Empathy is a dimension of service quality that describes the individual attention of healthcare professionals towards patients, including the ability to listen, understand the emotional needs of patients, and show genuine concern. In inpatient care, empathy becomes a very important aspect because it is directly related to the psychological comfort of patients during the healing process.

The results of Lampus's (2023) study indicate that the empathy dimension has a significant influence in the bivariate analysis ($p=0.000$), but not in the multivariate analysis ($p=0.999$). This indicates that although empathy has a strong direct influence on patient satisfaction, its impact can be overshadowed when analyzed alongside other dimensions such as reliability or responsiveness. This means that empathy is perceived as important by patients, but it is not always the main determinant in more complex models. Kiswanto's (2023) research also showed a similar pattern, with significant results in the bivariate analysis ($p=0.010$), but not significant in the multivariate analysis ($p=0.396$). These findings reinforce that empathy is important in shaping initial patient satisfaction, but it does not always become a dominant factor when combined with other service indicators that are technical or systemic in nature.

Meanwhile, Juwita (2020) reported that the empathy dimension did not have a significant effect on patient satisfaction, with $p=0.230$. This research was conducted in a government hospital in Banda Aceh, which allows for differences in patient expectations regarding emotional aspects compared to physical aspects or service reliability. Nevertheless, the aspect of empathy is still considered important, especially in building a personal relationship between patients and service providers. Research by Kiswanto and Murtopo (2023) yielded more positive results regarding the empathy dimension. They found that empathy has a significant impact on patient satisfaction and showed that the attention and care demonstrated by healthcare professionals can enhance patient comfort and trust during hospitalization. Empathy plays a significant role in shaping a positive patient experience. Moreover, when patients feel heard and valued, they are more likely to overlook the system's limitations and remain satisfied.

CONCLUSION

Based on the results of the literature review, it can be concluded that inpatient patient satisfaction is influenced by various factors that are demographic, structural, and service attribute in nature. Patient characteristic variables such as age, gender, education, occupation, and insurance participation status show varying influences depending on the institutional context and individual expectations of healthcare services. Some studies show that patient demographic characteristics affect patient satisfaction, while others reveal differences influenced by social, cultural, and hospital policy factors.

Age and gender show an inconsistent relationship with patient satisfaction. In several studies, elderly patients tend to show higher levels of satisfaction, while gender does not always serve as a significant differentiator. Education and occupation also contribute differently depending on the level of expectations and the patient's capacity to understand the quality of the services provided. Meanwhile, insurance status such as participation in JKN or other national insurance schemes has been proven to significantly influence patients' perceptions and experiences of hospital services.

From the structural side of the hospital, the class of care and the type of hospital play a role in shaping patient satisfaction. Although the class of care is not always significant in all studies, the type of hospital, which includes ownership, specialization, and service capacity, shows a significant relationship with satisfaction levels. Hospitals that have adequate facilities, human resource support, and efficient management tend to achieve higher satisfaction scores.

The dimensions of service quality based on the SERVQUAL model show that each dimension contributes differently to patient satisfaction. Tangible dimensions such as cleanliness and comfort of the physical environment play an important role in creating patients' initial perceptions. The reliability dimension shows the most dominant influence because it relates to the consistency and accuracy of the service. Responsiveness is considered important because it demonstrates the promptness and readiness of healthcare personnel in directly responding to patients' needs.

The dimensions of assurance and empathy are also important components, although in some studies their influence is not dominant. Assurance reflects professional competence and polite communication, while empathy reflects personal attention that builds an emotional connection between patients and healthcare providers. In practice, the integration of all these dimensions synergistically can create a high-quality and satisfying inpatient experience for patients.

Thus, efforts to improve the quality of hospital services need to consider the combination of patient characteristics, institutional structure, and the quality-of-service dimensions. Patient satisfaction evaluation cannot be separated from the social and operational context of the hospital. Therefore, service improvement strategies must be designed holistically and based on the real needs of patients.

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