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ANALYSIS OF HOSPITAL MANAGEMENT STRATEGIES FOR NATIONAL HEALTH INSURANCE USING THE TOTAL QUALITY MANAGEMENT METHOD

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Abstract

The success of the National Health Insurance (JKN) program is highly dependent on the ability of hospitals to implement adaptive management to changing community needs. This study aims to analyze the management strategy of Graha Bunda Hospital in facing JKN challenges through the implementation of Total Quality Management (TQM). The research uses an explanatory non-experimental quantitative approach with a focus on four main elements of TQM, namely patient focus, teamwork, continuous system improvement, and education and training. Data was collected through the distribution of questionnaires to 150 medical and paramedical staff. The results of the analysis using multiple linear regression showed that three of the four independent variables, namely patient focus ($p = 0.002$), continuous system improvement ($p = 0.014$), and education and training ($p = 0.008$), had a significant influence on hospital management strategies. Meanwhile, the teamwork variable showed statistically insignificant results ($p = 0.089$). A determination coefficient value (R^2) of 0.62 indicates that the four TQM variables together are able to explain 62% of the variation in hospital management. The results of this study confirm that the application of TQM principles contributes positively to improving hospital quality management in the JKN era. Focusing on patients has been proven to be influential in improving the quality of health services, education and training that strengthens the competence of health workers, as well as efforts to improve the system that is sustainable as the foundation for improving services. Hospital management strategies that integrate TQM principles can help improve operational efficiency, strengthen prevention efforts, and provide services that are more responsive to patient needs. The consistent implementation of TQM can be a strategic approach for hospitals in answering the challenges of implementing JKN effectively. The success of the National Health Insurance (JKN) program is highly dependent on the ability of hospitals to implement adaptive management to changing community needs. This study aims to analyze the management strategy of Graha Bunda Hospital in facing JKN challenges through the implementation of Total Quality Management (TQM).

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Introduction

Effective hospital management has a close relationship with the National Health Insurance (JKN) system, which aims to provide affordable and quality health services for the entire population (Kang et al., 2020). Good hospital management

ensures resource optimization and operational efficiency, so that it can offer services at an affordable cost without sacrificing quality (Abdalkareem et al., 2021). With efficient cost management, hospitals can set lower rates for JKN participants, in line with the goal of increasing access to health services (Zhu et al., 2019). The availability of adequate medical facilities and personnel is an important factor in ensuring equitable services for all JKN participants, ensuring that every individual gets the health services they need without accessibility barriers (Ahmed et al., 2021).

Quality-oriented management also supports the fulfillment of health service standards that have been set, so that patients receive the best care in accordance with applicable regulations (Elhadi et al., 2020; Setiani et al., 2024). The effectiveness of hospital management is the key to JKN's success in providing fair and quality health services for the entire population. By optimizing resources, ensuring equitable distribution of facilities, and increasing strategic partnerships, hospitals can contribute to improving the accessibility and quality of health services in the JKN system. In addition, strategies such as addressing spatial accessibility, equitable allocation of resources, and strengthening partnerships between various stakeholders are the main steps in increasing the effectiveness of the JKN system in the long term (Ahmed et al., 2021).

Hospital management strategies have a significant impact on the quality of healthcare services provided to the community, especially in improving operational efficiency, resource management, and reducing waste (Siagian et al., 2025). The quality of health services is the main key in meeting the needs and satisfaction of patients, where the performance of medical personnel plays a major role in shaping patients' perception of the quality of services received. A good management strategy also has an impact on the financial sustainability of the hospital, where efficient budget management and the creation of additional sources of income help the hospital in maintaining long-term financial stability (Ansyori, 2023).

Compliance with applicable health regulations and the implementation of Good Corporate Governance are important aspects in ensuring that service standards and patient safety are maintained (Halawa et al., 2022). In evaluating the quality of health services, patient satisfaction is the main benchmark, which is influenced by various factors such as caring nurses, quality of food services, service waiting times, and therapeutic communication of nurses (Ihsan et al., 2018; Lestari, 2022; Puspa et al., 2019). Other aspects such as the quality of physiotherapy services, the cleanliness of the hospital environment, the quality of food, the food service system, and the attitude and performance of staff also affect the level of patient satisfaction (Scott, 2022; Rosen et al., 2018). With an effective and quality-oriented management strategy, it not only increases the competitiveness of hospitals, but also ensures optimal health services for the community (Nafi'a, 2021).

Patient loyalty is also an important factor in hospital management, where service quality, hospital image, value, and patient satisfaction play a role in shaping their loyalty to the hospital (Oktoriani, 2023). Improving the quality of service is key to improving patient satisfaction, which ultimately impacts their loyalty to the hospital (Haryanto et al., 2020). An effective hospital management strategy focuses not only on operational efficiency and financial sustainability, but also on improving the quality of services as well as establishing long-term relationships with patients (Almuida et al., 2023; Rahmadiliyani & Faizal, 2018). Continuous innovation and development are crucial elements in ensuring that hospitals remain relevant and able to provide cutting-edge healthcare services (Zakiah et al., 2020).

One of the strategies that can be applied in improving hospital management is Total Quality Management (TQM), which is a comprehensive management approach that focuses on improving quality in all operational aspects. When applied in hospital management, TQM is able to improve effectiveness and efficiency through a patient-centered approach, allowing hospitals to better understand patient needs and respond better to feedback (Kamaruddin et al., 2021). TQM encourages the implementation of data-driven systems to monitor and measure hospital performance, requiring improvements and innovations in various aspects of operations, such as human resource management, facilities, and clinical processes. With the implementation of TQM, it not only improves the quality of service, but also strengthens patient loyalty and the competitiveness of hospitals in the long term (Al-Saffar & Obeidat, 2020).

The collaborative approach in TQM improves service quality, patient satisfaction, and builds a work environment oriented towards continuous improvement. (Wassan et al., 2022) As a modern management strategy, TQM helps organizations meet quality standards and compete in a competitive environment. In hospitals, TQM has been proven to increase patient satisfaction and the effectiveness of health services. By emphasizing a focus on patients, teamwork, continuous improvement, and education and training, TQM contributes to improving the quality of service and sustainability of hospitals (Ali et al., 2022).

The implementation of TQM in hospitals relies on solid teamwork and continuous system improvement. Effective teamwork optimizes resources, integrates processes, and enables rapid

responses to challenges, especially in environments involving a wide range of healthcare professions, administrative staff, and patients and their families (Rosen et al., 2018). This multidisciplinary collaboration ensures safer, comprehensive, and patient-centered care. Continuous system improvement is the basic principle of TQM, encouraging hospitals to continuously improve efficiency and quality of service through cycles of evaluation and innovation. The success of this strategy depends on an adaptive team, with strong interpersonal interactions and a system capable of adapting to change to achieve better service standards (Ali et al., 2022).

Education and training play an important role in building an organizational culture that is oriented towards quality and innovation. Proper training on best practices, the latest technologies, and clinical knowledge ensures that medical personnel are prepared for the ever-evolving challenges of healthcare (Rosen et al., 2018). The implementation of collaborative medical and pharmacy education also shows positive results through an approach tailored to the local context (Hadjri & Perizade, 2019).

Previous research by Andika et al. (2022) shows that Total Quality Management (TQM) is a customer-oriented approach that encourages systematic and continuous improvement to meet quality standards (Andika et al., 2023). Analyzed the application of TQM in BPJS inpatients at Royal Prima Hospital Medan and found a strong relationship between teamwork and periodic system improvement and patient satisfaction.

Graha Bunda Hospital is a class C general hospital located in Idi Rayeuk, East Aceh Regency, with ownership by a social organization. The hospital has a capacity of 137 beds and recorded a Bed Occupancy Rate (BOR) of 88.3% in 2021, indicating a high bed occupancy rate. In addition, the hospital serves 8,342 patients discharged (alive and dead) with a total of 44,173 days of treatment. Other indicators such as Average Length of Stay (ALOS) of 4 days and Bed Turn Over (BTO) of 61 times show the high frequency of bed use in one period.

This study aims to analyze hospital management strategies in supporting the implementation of National Health Insurance (JKN) through the Total Quality Management (TQM) approach at Graha Bunda Hospital. By focusing on the four main elements of TQM, namely patient focus, teamwork, continuous system improvement, and education and training, this research is expected to provide insight into how hospitals can improve service quality and operational efficiency in supporting the JKN program. The findings of this study will be the basis for formulating solutions to various challenges faced by Graha Bunda Hospital, such as patient overload and limited human resources (HR), as well as making a significant contribution to the continuous improvement of the hospital's managerial system. Thus, this research is an important step in supporting the sustainability of hospital operations in the JKN era and ensuring optimal services for the community.

Method

This study used an explanatory non-experimental quantitative design to identify relationships between variables without researcher intervention. Data was collected through surveys using questionnaires that were systematically compiled to obtain information related to the variables studied. This design aims to explain the cause-and-effect relationship or correlation between variables with statistical analysis, so that the results can provide in-depth insights and become the basis for further research or decision-making. This research was carried out at Graha Bunda Hospital. The time used in the study was carried out in May-July 2024.

The population in this study is all medical staff and paramedics at Graha Bunda Hospital which totals 150 people. Samples are taken using the total sampling technique, where the entire population is sampled because the number is certain and limited (Suharsimi, 2018). This technique is used to ensure all population characteristics are represented in the study. The inclusion criteria in this study include permanent medical staff and paramedics who have worked for at least 1 year at Graha Bunda Hospital and are willing to fill out a questionnaire. Meanwhile, the exclusion criteria are honorary personnel or short-term contracts and respondents who do not fill out the questionnaire completely. The application of this criterion aims to obtain data that is more accurate, relevant, and can reflect the perceptions and real experiences of health workers who are directly involved in the hospital management system.

This research instrument includes validity and reliability tests to ensure the validity and consistency of the measurement instruments. The validity test was carried out by the product moment correlation method to assess the relationship between the statement items in the questionnaire using SPSS, with validity criteria based on the comparison of r calculation and r table. The reliability test is performed using Cronbach's Alpha coefficient, where the instrument is considered reliable if the alpha value ≥ 0.6. This study measures independent variables consisting of patient focus, teamwork, continuous system improvement, and education and training, while the dependent variable is hospital management. The research instrument is in the form of a questionnaire with a Likert scale to measure respondents' perception of various indicators that have been determined. The number of items tested in this

questionnaire was 24 items, which were divided into four sections according to the variables measured: patient focus (6 items), teamwork (6 items), continuous system improvement (6 items), and education and training (6 items).

The data analysis in this study includes descriptive analysis to describe the data based on the average, highest, and lowest values. The classical assumption test was carried out through the normality test (Kolmogorov-Smirnov), the multicollinearity test (VIF and Tolerance), and the heteroscedasticity test (scatterplot). Multiple linear regression analysis was used to test the influence of the variables Patient Focus, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management. The hypothesis test was carried out with a t-test (partial influence), an F test (simultaneous influence), and a determination coefficient (R^2) to assess how much an independent variable can explain the dependent variable. All analyses are performed using the help of SPSS software. This research has obtained official permission from the management of Graha Bunda Hospital and guarantees the confidentiality of respondent data in accordance with the ethical principles of research. In addition, this research has also passed the ethics approval process from the Health Research Ethics Committee of Universitas Prima Indonesia with code of ethics number: 122/KEPK/UNPRI/III/2025.

Results

Validity Test Analysis

The validity test with Pearson's Product Moment correlation technique was carried out on the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management. The questionnaire was tested on 30 respondents of medical staff and paramedics at the hospital, and all items were declared valid. With n = 30, a table r of 0.361 is obtained (Ghozali, 2018), and all items have a calculated r greater than the r table, thus meeting the validity criteria:

Table 1. Validity Test Results

Yes	Variable	Items	R Count	R Table	Information
1	Focus on Patients	X1.1	0.740	0,361	
		X1.2	0.727	0,361	
		X1.3	0.878	0,361	Valid
		X1.4	0.876	0,361	
		X1.5	0.767	0,361	
		X1.6	0.876	0,361	
2	Teamwork	X2.1	0.790	0,361	
		X2.2	0.775	0,361	
		X2.3	0.781	0,361	
		X2.4	0.836	0,361	Valid
		X2.5	0.807	0,361	
		X2.6	0.725	0,361	
3	Continuous System Improvement	X3.1	0.681	0,361	
		X3.2	0.794	0,361	
		X3.3	0.819	0,361	
		X3.4	0.899	0,361	Valid
		X3.5	0.733	0,361	
		X3.6	0.724	0,361	
4	Education and Training	X4.1	0.755	0,361	
		X4.2	0.673	0,361	
		X4.3	0.654	0,361	
		X4.4	0.755	0,361	Valid
		X4.5	0.732	0,361	
		X4.6	0.701	0,361	
5	Hospital Management	Y1.1	0.716	0,361	
		Y1.2	0.775	0,361	
		Y1.3	0.894	0,361	
		Y1.4	0.776	0,361	Valid
		Y1.5	0.812	0,361	
		Y1.6	0.882	0,361	

Source: Primary Data

Based on Table 1, it can be seen that the value of r calculated on the score of the top number of each question item is greater than the r of the table (r table = 0.361), and it can be said that each question item result of the average questionnaire result is greater than 0.361 and can be declared valid.

Reliability Test Analysis

From the results of the reliability test on all variables to 30 respondents of medical staff and paramedics at the hospital, using Alpha Cronbach's statistical test formula using SPSS, the results of the reliability test of all variables were obtained, as follows:

Table 2. Reliability Test Results

Yes	Variable	Cronbach's Alpha Standard	*Cronbach's Alpha*	Information
1	Focus on Patients	0,60	0,936	Reliable
2	Teamwork	0,60	0,925	Reliable
3	Continuous System Improvement	0,60	0,917	Reliable
4	Education and Training	0,60	0,887	Reliable
5	Hospital Management	0,60	0,932	Reliable

Source: Primary Data

Based on Table 2, the results of the reliability test showed that the Cronbach's Alpha value for all variables exceeded the standard of 0.60 (>0.60).

The research variables were declared reliable and could be used for further analysis.

Normality Test Analysis

The normality test aims to determine whether the analyzed data has a normal distribution. In this study, the normality test was carried out to ensure that the distribution model of the research variables corresponded to the normal distribution. Before testing a hypothesis, it is important to verify that the sample is from a normally distributed population. The test was performed with the Kolmogorov-Smirnov test, in which the data is considered to be normally distributed if the significance value ≥ 0.05.

Table 3. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		150
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.1930603 8
Most Extreme Differences	Absolute	.085
	Positive	.085
	Negative	-.060
Test Statistic		.085
Asymp. Sig. (2-tailed)		.101c

Source: Primary Data

The results of the normality test with the Kolmogorov-Smirnov Test showed that the research variable had a significance value of 0.101. Since this value is greater than alpha 5% (sig > 0.05), it can be concluded that the data is normally distributed.

Multicollinearity Test Analysis

The multicollinearity test in this study shows that there is no multicollinearity, as shown in the following table. This is evidenced by the value of the Variance Inflation Factor (VIF) which is below the tolerance limit, so that the free variables in the model do not have excessive correlation.

Table 4. Hail Multicollinearity Test

Coefficient			
		Collinearity Statistics	
Type		Tolerance	VIVID
1	(Constant)		
	Focus on Patients	0.732	3.663
	Teamwork	0.822	2.160
	Continuous System Improvement	0.524	9.069
	Education and Training	0.782	2.792

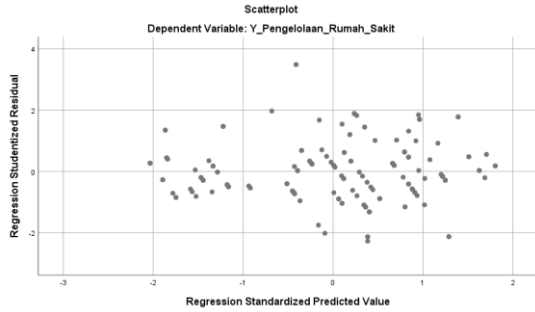
Source: Primary Data

Based on table 4, the multicollinearity test showed that the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management had a VIF value below 10 and a tolerance value above 0.10. Thus, it can be concluded that there is no multicollinearity between free variables.

Heteroscedasticity Test Analysis

Heteroscedasticity tests were performed to identify whether there was an inequality of variance in the regression model between one observation and another. In this study, the test was carried out using a scatterplot. The data is said to not experience heteroscedasticity if the dots on the scatterplot are scattered above and below zero without forming a specific pattern. The results of the heteroscedasticity test for the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management can be seen in the following figure.

Figure 1.. Heteroscedasticity Test Results



Source: Primary Data

The results of the heteroscedasticity test on the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management showed that the dots on the scatterplot were scattered above and below zero without a specific pattern. Thus, it can be concluded that the regression model does not experience heteroscedasticity.

Multiple Linear Regression Analysis

Multiple linear regression analysis was used to measure the influence of independent variables, namely Focus on Patients, Teamwork, Continuous System Improvement, and Education and Training on Hospital Management. The results of the regression test are displayed as follows:

Table 6. Multiple Linear Regression Results

Coefficient						
		Unstandardized Coefficients		Standardized Coefficients		
Type		B	Std. Error	Beta	t	Sig.
1	(Constant)	-0.163	0.084		-1.946	0.054

Focus on Patients	0.241	0.079	0.235	3.041	0.003
Teamwork	0.079	0.082	0.070	0.964	0.336
Continuous System Improvement	0.536	0.099	0.492	5.391	0.000
Education and Training	0.193	0.077	0.186	2.493	0.014

Source: Primary Data

The results of multiple linear regression analysis showed that a constant of -0.163 indicated that if the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training were 0, then Hospital Management would be valued at -0.163. The Patient-Focus regression coefficient of 0.241 shows that every 1 unit increase in this variable will increase Hospital Management by 0.241. The Teamwork variable has a coefficient of 0.079, which means that an increase of 1 unit will increase Hospital Management by 0.079. Meanwhile, Continuous System Improvement had the greatest influence with a coefficient of 0.536, followed by Education and Training with a coefficient of 0.193. To minimize errors in the study, the standard error value was obtained at 0.084.

T Test Analysis

The t-test was performed to test the influence of each independent variable on the dependent variable partially with a significance level of 0.05. If the significance value is less than 0.05, then an alternative hypothesis is accepted, which means the independent variable has a significant influence on the dependent variable.

Table 7. T Test Results

Coefficient					
	Unstandardized Coefficients		Standardized Coefficients		
Type	B	Std. Error	Beta	t	Sig.
1 (Constant)	-0.163	0.084		-1.946	0.054
Focus on Patients	0.241	0.079	0.235	3.041	0.003
Teamwork	0.079	0.082	0.070	0.964	0.336
Continuous System Improvement	0.536	0.099	0.492	5.391	0.000
Education and Training	0.193	0.077	0.186	2.493	0.014

Source: Primary Data

The t-test showed that the variables of Patient Focus, Continuous System Improvement, and Education and Training had a significant influence on Hospital Management, with a significance value of 0.003 each; 0,000; and 0.014 (less than 0.05) and the value of t is calculated to be greater than the t table. On the other hand, the Teamwork variable did not have a significant effect on Hospital Management because the significance value was 0.336 (greater than 0.05) and t calculated was smaller than t table.

Analysis of the F Test

Table 8. F Test Results

NEW ERA					
Type	Sum of Squares	Df	Mean Square	F	Sig.
1Regression	81.992	4	20.498	535.190	.000b
Residual	5.554	145	.038		
Total	87.546	149			

Source: Primary Data

Based on table 8, the results of the F test show that the statistical value of F-calculated is 535.190 with a significance value of 0.000. This indicates that the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training simultaneously affect Hospital Management by medical staff and paramedics at the hospital.

Coefficient of Determination (R2)

The coefficient of determination in linear regression measures the extent to which an independent variable can explain variance in a bound variable. In simple terms, this value is obtained by expressing the Correlation Coefficient (R), which shows the proportion of variation of the bound variable Y that can be explained by the independent variable X. If the value of the determination coefficient $R^{is\ 2=0,}$ then the independent variable does not explain the variation in the bound variable at all. Conversely, if $R^{is\ 2=1,}$ then all the variations in Y are fully explained by X. The results of the determination test of R2 can be seen in the following table

Table 9. Determination Coefficient Result (R2)

Model Summary[b]				
Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.968a	.937	.935	.19571

Source: Primary Data

Based on table 9, the R Square value obtained was 0.937, which means that the variables of Patient Focus, Teamwork, Continuous System Improvement, and Education and Training

contributed 93.7% in explaining the variation in Hospital Management. Meanwhile, 6.3% of the variation was influenced by other factors that were not included in this study model.

Discussion

The Influence of the Patient-Focused TQM Dimension on Hospital Management at Graha Bunda Hospital

The patient-focused Total Quality Management (TQM) dimension has a significant influence on hospital management at Graha Bunda Hospital. The implementation of TQM that puts patients at the center of attention has proven to have a positive impact on improving the quality of health services. With a safe, effective, timely, efficient, and patient-centered approach, hospitals can improve patient satisfaction, which ultimately contributes to patient loyalty and a better hospital reputation (Babu & Thomas, 2021). Focusing on patients also helps reduce medical errors, lower litigation costs, and improve clinical outcomes. Hospital operational efficiency is increasingly increasing through improving service processes, reducing patient waiting times, and more optimal use of resources. On the other hand, employee motivation and involvement also increase, creating a more positive and productive work environment, so that the quality of hospital services is better.

The implementation of patient-oriented TQM allows for more effective data-driven decision-making, so that management can formulate policies based on the actual needs of patients (Abu Daqar & Constantinovits, 2020). Hospitals that apply this principle are also more adaptive to the development of medical technology and innovation in the health sector, making them more reliable and quality service providers (Lepistö et al., 2024). The results of this study show that hospitals that pay more attention to the needs of patients have better management, with increased efficiency in managing time, resources, and facilities. Focusing on patients also creates a more inclusive environment that is responsive to the needs of public health. Thus, Graha Bunda Hospital needs to continue to be committed to improving patient services as part of a sustainable strategy to achieve higher management standards and provide optimal health services.

The Influence of the TQM Dimension of Team Cooperation on Hospital Management at Graha Bunda Hospital

The dimension of Total Quality Management (TQM) in teamwork did not show a significant influence on hospital management at Graha Bunda Hospital. This can be seen from the value of the regression coefficient of 0.079 with a significance value of 0.336, which is greater than 0.05, so the H2 hypothesis is rejected. These findings contradict some previous research that showed that teamwork in healthcare can improve patient safety and create a more positive work environment (Rosen et al., 2018). In addition, Lilis et al. (2018) also found a positive relationship between teamwork and employee performance, emphasizing the importance of collaboration in improving work outcomes (Lilis et al., 2018). Another study by Ekawardani et al. (2023) shows that teamwork factors such as good communication and management support contribute to a culture of patient safety (Ekawardani et al., 2022). At Graha Bunda Hospital, teamwork does not seem to have a significant impact on hospital management, possibly due to other factors such as managerial systems, leadership, or resource allocation that are more dominant in determining the effectiveness of hospital management.

Although teamwork did not have a significant effect on the study, it is important for hospitals to maintain and improve synergy between medical personnel. Some research remains to highlight the important role of teamwork in the healthcare environment. In line with research conducted by Hijayanti (2020), it was found that interpersonal communication and work discipline have a positive impact on employee performance in medical rehabilitation services (Scott, 2020). Rosmayanti (2023) also emphasized that work motivation and teamwork affect the implementation of patient safety practices. In addition, research by David & Ainun (2022) shows that work experience in a team-based environment can improve the performance of nursing staff (David William Marihot & Ainun, 2022). Devery et al. (2022) emphasized that teamwork is indispensable in providing quality end-of-life care in hospitals (Devery et al., 2022). The results of this study did not find a direct relationship between teamwork and hospital management at Graha Bunda Hospital, but further evaluation is needed on how teamwork can be optimized to have a more tangible impact on the effectiveness of hospital management.

The Influence of the TQM Dimension of Continuous System Improvement on Hospital Management at Graha Bunda Hospital

The Total Quality Management (TQM) dimension which focuses on continuous system improvement has proven to have a significant influence on hospital management at Graha Bunda Hospital. The results showed that this variable had a regression coefficient value of 0.536 with a significance value of 0.000 (less than 0.05), and a calculated t value of 5.391 which was greater than the t table (1.655), so that the H3 hypothesis was accepted. This is in line with the research of Sari et al. (2018), which shows that the implementation of TQM with continuous system improvement has a positive impact on improving service quality and operational efficiency of health organizations. In

addition, Deswita et al. (2021) emphasized that continuous system improvement in terms of services, human resources, and work environment is a key factor in maintaining the competitiveness and quality of hospitals. In the context of patient satisfaction, Imran & Ramli's (2019) research revealed that continuous improvement of service quality can build trust and image of hospitals (Imran & Ramli, 2019). This is also reinforced by the findings of Pangemanan et al. (2022), who found that hospital staff competence is closely related to patient satisfaction (Pangemanan et al., 2022). A continuous system improvement strategy not only impacts the internal efficiency of the hospital, but also improves the patient experience and the competitiveness of the hospital.

System improvements in improving service quality are also supported by research by Chairunnisa et al. (2022), which highlights that the physical environment, the quality of medical personnel, and the services provided affect patients' decisions in using hospital services (Chairunnisa et al., 2022). In addition, Herwanda et al. (2018) found that the perception of service quality plays a role in patients' decision to return to dental health services, while Puryanti (2021) emphasized that overall service quality has a significant impact on patient loyalty to the hospital (Puryanti, 2021). Not only that, Rahmawati et al.'s (2022) research revealed that competitive advantage can be a mediating factor between TQM and improving hospital performance. Other studies by Yoga & Endah (2022) and Pratiwi et al. (2023) also highlight the importance of Psychological Capital (PsyCap) in supporting employee engagement and increasing the effectiveness of TQM implementation (Yoga & Endah Andriani, 2022). With the acceptance of the H3 hypothesis, Graha Bunda Hospital needs to ensure that system improvements are not only carried out sporadically, but become part of the organizational culture that continues to adapt to the development of the health world. Implementing continuous evaluation and innovation in hospital management will help improve operational efficiency and provide better quality services for patients.

The Influence of the TQM Dimension of Education and Training on Hospital Management at Graha Bunda Hospital

Education and training as part of Total Quality Management (TQM) have proven to have a significant influence on hospital management at Graha Bunda Hospital. The results showed that this variable had a regression coefficient value of 0.193 with a significance value of 0.014 (less than 0.05) and a calculated t value of 2.493 which was greater than the t table (1.655), so that the H4 hypothesis was accepted. This shows that improved education and training can significantly improve the hospital management system. Harvina et al. (2022) stated that a well-managed learning system can improve the quality of education, while Setiawati et al. (2021) found that training has a positive effect on the performance of hospital employees (Setiawati et al., 2021). In addition, research by Utari et al. (2021) shows that the level of education, training, and work experience plays a role in improving the professionalism of health workers, which ultimately has a positive impact on the quality of hospital services (Scott, 2021). Education and training can help hospitals better manage their operations and improve the quality of a professional and competent workforce.

In addition, education and training also contribute to better staff competencies, which has a direct impact on the effectiveness of hospital management. Map (2022) emphasized that education and training have a positive effect on competence, which then has a significant impact on overall hospital performance. Other factors such as financial literacy also play a role in more effective hospital management, as stated by Novi Ayu & Novi Lailiyul (2022), who found that financial literacy and self-efficacy have an effect on financial management, including in the context of hospitals (Novia Ayu & Novi Lailiyul, 2022). Furthermore, research by Sularmi & Putra (2022) found that education, training, and the work environment have a significant influence on employee performance, while Hadjri & Perizade (2019) affirmed that education has a large role in increasing labor productivity (Hadjri & Perizade, 2019). At Graha Bunda Hospital, it is necessary to continue to develop periodic training programs to strengthen the competence of their human resources. By ensuring that training is carried out on an ongoing basis, hospitals can improve operational efficiency and provide more quality and competitive health services.

The Influence of the Dominant Influence of the Dimension of Total Quality Management Practice on Hospital Management at Graha Bunda Hospital

The results of the analysis of the F test showed that Focus on Patients, Teamwork, Continuous System Improvement, and Education and Training simultaneously affected Hospital Management at Graha Bunda Hospital, with an F value of 535.190 and a significance of 0.000. Thus, the H5 hypothesis is accepted, which means that the simultaneous application of these four factors can improve the effectiveness of hospital management. Total Quality Management (TQM) as a management approach that focuses on improving organizational quality has been proven to have a positive impact in the healthcare sector. Previous research has shown that the application of TQM principles in hospitals can improve operational efficiency, service quality, and patient satisfaction (Zhu et al., 2019). Another study found that TQM

can contribute to improved employee performance, job satisfaction, and organizational commitment in the health sector. The application of TQM in hospital management is an essential strategy to improve the quality of overall health services.

TQM's practice not only improves the quality of hospital services but also contributes to customer satisfaction, productivity, and profitability. TQM has a positive effect on organizational performance through increasing operational efficiency, customer satisfaction, and social responsibility. In addition, the implementation of TQM has been proven to be able to increase the competitiveness of hospitals, both at the national and international levels (Hussain et al., 2023). The effective application of TQM principles also plays an important role in hospital quality management strategies, especially in the face of global challenges such as the COVID-19 pandemic (Mo & Borbon, 2022. The relationship between TQM and job satisfaction suggests that this approach can increase the motivation and commitment of medical staff to organizational goals. Graha Bunda Hospital needs to develop a strategy oriented towards the integration of these four main factors to ensure more effective and efficient hospital management. This holistic approach will not only improve the quality of health services but also improve the overall performance of the hospital, thereby providing benefits to patients, medical personnel, and all parties involved in hospital operations.

Conclusion

Based on the results of the study, the Total Quality Management (TQM) dimension of Patient Focus has a significant influence on hospital management at Graha Bunda Hospital, with a regression coefficient value of 0.241, a significance level of 0.003, and a calculated t value of 3.041 which is greater than the t table (1.655). This shows that the higher the hospital's attention to patient needs and satisfaction, the better the hospital management will be achieved. In contrast, the dimension of Teamwork TQM did not show a significant influence on hospital management, with a significance value of 0.336 and t calculated of 0.964 which was smaller than the t table, so the H2 hypothesis was rejected. This means that the role of teamwork has not made a real contribution to the management of Graha Bunda Hospital. Meanwhile, the TQM dimension of Continuous System Improvement was proven to have a significant influence on hospital management, with a regression coefficient of 0.536, significance of 0.000, and t calculation of 5.391, which exceeded t table. This confirms that continuous system improvement efforts are essential in creating effective management. Furthermore, the dimension of TQM Education and Training also showed a significant influence on hospital management, with a regression coefficient of 0.193, significance of 0.014, and t count of 2.493 which was greater than t table. These findings show that increasing human resource capacity through continuous training has a positive impact on hospital management. Simultaneously, these four TQM variables have a significant influence on hospital management, as shown by the results of the F test, with an F value of 535.190 and a significance of 0.000. These results indicate that the integrated application of TQM principles contributes significantly to improving the effectiveness and quality of management of Graha Bunda Hospital.

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