The Influence of Customer Relationship Management on Outpatient Loyalty at Pelamonia Hospital, Makassar

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Abstract. Patient loyalty is one of the core things that hospitals must strive for. This is because increasing patient loyalty can provide long-term benefits. In 2022 it will be 99,413 while in 2023 there will be a drastic decline where the number of outpatient visits will only be 78,989 the decrease in the number of outpatient visits a problem that cannot be left alone by the hospital. The condition of the result number of outpatients can result in reduced income hospital. The primary objective of this study is to examine the relationship between Customer Relationship Management (CRM) and outpatient loyalty at *Hospital TK II Pelamonia Makassar*. Methodologically, the research adopts a quantitative design with a cross-sectional approach, involving a population of 8,284 individuals and a sample of 382 respondents. Data were analyzed using the chi-square test. Results and discussion: in the research indicators continuity marketing, one-to-one, partnering program, technology, people, process, and knowledge and insight are related to outpatient loyalty with a chi-square value of 0.000< 0.05. Based on these results, it is recommended that the hospital strengthen its customer relationship management and service strategies, as organizational success highly depends on the quality of care provided to build and maintain patient loyalty.

Keywords: Customer Relationship Management, Service Marketing Mix, Outpatient Loyalty, Patient Loyalty Drivers, Healthcare Marketing

1 Introduction

Hospitals are institutions that play a vital role in providing comprehensive healthcare services that encompass preventive, curative, rehabilitative, and palliative care. Beyond clinical functions, hospitals also contribute to a nation's socio-economic stability and the achievement of sustainable health goals. In Indonesia, healthcare service management continues to evolve in line with technological developments and the implementation of Law No. 17 of 2023 on Health [1]. This legislation emphasizes that hospitals must provide patient-centered, efficient, and high-quality services, which in turn encourages hospitals to innovate and improve patient engagement.

In recent years, competition among healthcare providers has intensified due to the increasing awareness and expectations of patients regarding service quality and satisfaction [2]. As a result, hospitals need to shift from product-oriented strategies to

M. Nohong et al. (eds.), *Proceedings of the 10th International Conference on Accounting, Management, and Economics (10th ICAME 2025)*, Advances in Economics, Business and Management Research 388,
https://doi.org/10.2991/978-94-6239-709-5_113

relationship-oriented approaches that prioritize patient trust and loyalty. The adoption of Customer Relationship Management (CRM) in the healthcare sector is one of the key strategies to strengthen long-term relationships between hospitals and patients. CRM involves integrating technology, communication, and organizational processes to better understand and respond to patient needs [3]. Chahal and Kumari [4] earlier emphasized that CRM in healthcare is a multidimensional construct encompassing service quality, trust, and patient satisfaction, where the strength of relational bonds directly influences patients' judgments about hospital performance. Their study provided an early foundation for understanding how CRM principles can enhance patient-centered management practices in hospital environments.

Scholars have highlighted that the success of CRM depends on how hospitals manage every stage of the patient journey, from initial contact to post-service follow-up [4]. Lemon and Verhoef [5] argued that understanding the customer experience throughout the entire journey is essential for fostering loyalty and repeat engagement. In this context, electronic CRM (e-CRM) has become increasingly relevant as hospitals digitize their operations. Studies such as Dehghanpouri et al.[6] and Seify et al.[7] found that factors like trust, service quality, and privacy strongly influence the success of e-CRM implementation in healthcare.

Globally, CRM adoption in hospitals has been associated with increased patient satisfaction and loyalty. Baashar et al. [8] identified CRM as a crucial tool for improving hospital performance, while Lei et al.[9] and Gao et al. [10] reported that patient loyalty is directly affected by perceived service quality and satisfaction. In Indonesia, Hariyanti
[2] emphasized that competition among hospitals is increasingly driven by the ability to maintain relationships and deliver consistent service experiences. However, there remains a gap between theoretical CRM frameworks and their practical implementation in developing countries [8, 10].

This study aims to examine the influence of CRM components—continuity marketing, one-to-one marketing, partnering programs, technology, people, process, and knowledge and insight—on outpatient loyalty at Pelamonia Hospital, Makassar. By integrating global CRM theory with local healthcare practices, this research seeks to provide empirical evidence and contribute to the growing body of literature on relationship management in developing-country healthcare systems.

2 Literature Review

2.1 Customer Relationship Management (CRM)

CRM is defined as a strategic process designed to manage interactions with customers and enhance organizational performance through data integration, communication, and personalized service [3, 8]. Kotler and Keller describe CRM as an effort to create, maintain, and enhance strong relationships with customers by providing value and satisfaction. In the healthcare context, CRM aims to strengthen patient relationships by integrating information systems, service processes, and communication strategies [8, 10].

Baashar et al.[8] conducted a systematic review emphasizing that CRM in healthcare improves service quality, operational efficiency, and patient loyalty. Similarly,

Dehghanpouri et al.[6] found that trust and privacy significantly affect e-CRM success through the mediating role of satisfaction. In this regard, CRM implementation allows hospitals to identify patient preferences, provide continuous communication, and adapt services to meet expectations.

2.2 CRM Components in Healthcare

CRM can be divided into several key components that collectively shape relationship quality.

Continuity marketing focuses on maintaining long-term relationships through consistent communication and service follow-ups. One-to-one marketing emphasizes personalized interactions tailored to individual patient needs. Partnering programs involve collaborative relationships between hospitals and patients to enhance engagement and trust. Technology enables data integration, digital interaction, and accessibility to healthcare information. People represent the human aspect of service delivery—empathy, courtesy, and reliability. Process relates to the efficiency of hospital workflows that impact satisfaction and loyalty. Knowledge and insight involve transforming data into actionable information that improves decision-making [3,6,8,10].

2.3 Patient Satisfaction and Loyalty

Patient satisfaction is a psychological response to healthcare experiences, while loyalty reflects the behavioral intention to revisit and recommend services [10, 11]. According to Lei et al. [8], patient satisfaction acts as a bridge between service quality and loyalty. Similarly, Yaghoubi et al.[12] concluded that CRM positively influences hospital performance by improving satisfaction, trust, and loyalty. These relationships are consistent with the customer experience theory proposed by Lemon and Verhoef [5], where consistent experiences across touchpoints create emotional attachment and repeat behavior.

3 Research Methodology

A quantitative methodology was adopted in this study, utilizing a cross-sectional design to assess the linkage between multiple facets of Customer Relationship Management (CRM) and the level of patient loyalty. The cross-sectional design was selected because it enables data collection at a single point in time, thereby facilitating the examination of relationships among the variables under investigation. This approach is considered effective in identifying patterns of relationships between CRM variables and patient loyalty without researcher intervention [3].

The data source used in this study is primary data, obtained through direct data collection from respondents via observation and questionnaires. Primary data was selected because it provides more accurate and relevant information related to patient experiences and the implementation of CRM. The questionnaire used was designed to measure patient perceptions of various CRM components and their level of loyalty toward

the hospital. This instrument consists of questions that refer to the research variables, such as continuity marketing, one-to-one marketing, partnering programs, technology, and patient loyalty, all of which are based on CRM theories previously validated in earlier studies[13].

The study population comprised all outpatients at *Hospital TK II Pelamonia Makassar*, amounting to 99,413 individuals in 2023, with an average of 8,284 patients per month [3]. The sample was determined using the Slovin formula to ensure a representative sample size, resulting in 382 patients. The sampling technique applied is simple random sampling, where sample members are selected randomly without considering strata within the population[3].

The unit of analysis in this study comprises outpatients who have received services from the hospital and provided feedback regarding their experiences with the implementation of different CRM components. The data obtained will be analyzed to determine the relationship between the implementation of CRM (continuity marketing, oneto-one marketing, partnering programs, and technology) and patient loyalty.

This study employed the chi-square test as the analytical method to assess the associations among the variables. The chi-square test was chosen because it can measure the strength of association between two categorical variables and allows the researcher to determine whether there is a significant relationship between CRM implementation and patient loyalty. This technique is commonly used in quantitative research in the healthcare field to identify patterns of relationships between variables[14]. The questionnaire data will be processed using SPSS (Statistical Package for the Social Sciences), a tool that enables efficient and precise statistical analysis. The use of SPSS in this study ensures that the results of the analysis are statistically accountable and yield valid findings.

Through this approach, the study is expected to offer a comprehensive understanding of how CRM components influence patient loyalty and to contribute meaningfully to the advancement of CRM theory within the healthcare sector.

4 Result

In this research, primary data were obtained through questionnaires administered to the staff of *Hospital TK II Pelamonia Makassar*. The characteristics of the respondents were used to understand the diversity of respondents based on age, gender, frequency of visits, last education, occupation, marital status, and insurance type. The data is presented in the tables below.

4.1 Respondent Characteristics

Respondent Characteristics by Age.

The age characteristics of the respondents were based on the *Department of Health of the Republic of Indonesia* standards from 2009, which were used in this study. Respondents were categorized into age groups: late adolescence (17-24 years), early adulthood (26-35 years), middle adulthood (36-46 years), late adulthood (46-55 years), older

adults (56-65 years), and elderly (65 and above). The distribution is shown in the table below:

Table 1. Respondent Characteristics by Age

Age Group	Number (n)	Percentage (%)
17-25 years	64	16.8
26-35 years	48	12.6
36-46 years	77	20.2
46-55 years	70	18.3
56-65 years	62	16.2
65 and above	61	16.0
Total	382	100.0

Source: Data Processed using SPSS (2024)

The findings indicate that, regarding respondent characteristics at *Hospital TK II Pelamonia Makassar* in relation to patient loyalty, the majority were within the 36–45 age group, comprising 77 individuals (20.2%). The smallest group was aged 26–35 years, with 48 respondents (12.6%). These results suggest a link between age and patient loyalty, with the highest proportion found among those aged 36–45 years.

Characteristics by Gender.

The gender distribution of respondents at *Hospital TK II Pelamonia Makassar* can be seen in the table below:

Table 2. Respondent Characteristics by Gender

Gender	Number (n)	Percentage (%)
Male	195	51.0
Female	187	49.0
Total	382	100.0

Source: Data Processed using SPSS (2024)

The results show that gender in the study at *Hospital TK II Pelamonia Makassar* in relation to outpatient patient loyalty showed that the majority of respondents were male (195 respondents or 51.0%), while the smallest group was female (187 respondents or 49.0%). This indicates a relationship between gender and patient loyalty, with males dominating the responses.

Respondent Characteristics by Frequency of Visits.

Respondent characteristics based on the frequency of outpatient visits at *Hospital TK II Pelamonia Makassar* are presented in the table below:

Table 3. Respondent Characteristics by Frequency of Visits

Number of Visits	Number (n)	Percentage (%)

1	59	15.4
2	85	22.3
3	117	30.6
4	85	22.3
5	36	9.4
Total	382	100.0

Source: Data Processed using SPSS (2024)

According to the table, the greatest proportion of respondents was observed among those who reported three visits, comprising 117 participants (30.6%), whereas the smallest proportion corresponded to those reporting five visits, with only 36 respondents (9.4%).

Characteristics by Last Education.

The table below presents the distribution of respondents according to their highest educational attainment at the research site.

Table 4. Respondent Characteristics by Last Education Level

Last Education Level	Number (n)	Percentage (%)
No School	8	2.1
Elementary School (SD)	63	16.5
Junior High School (SMP)	45	11.8
Senior High School (SMA)	140	36.6
Associate Degree (D3)	19	5.0
Bachelor's Degree (S1)	98	25.75
Master's Degree (S2)	8	2.1
Doctorate (S3)	1	0.3
Total	382	100.0

Source: Data Processed using SPSS (2024)

The data indicate that the majority of respondents had completed Senior High School (SMA), with 140 individuals (36.6%), whereas the least represented group held a Doctoral degree (S3), consisting of only 1 respondent (0.3%).

Respondent Characteristics by Occupation.

The table below displays the distribution of respondents' characteristics based on their occupation at the research site.

Table 5. Respondent Characteristics by Occupation

Occupation	Number (n)	Percentage (%)
Farmer	60	15.7
Entrepreneur	77	20.2
Civil Servant (PNS)	53	13.9

Military (TNI)	12	3.1
Unemployed	101	26.4
Others	79	20.7
Total	382	100.0

Source: Data Processed using SPSS (2024)

The results reveal that most respondents at the hospital where the study was conducted had no formal employment, accounting for 101 individuals (26.4%), while the smallest group comprised military personnel, with 12 respondents (3.1%).This shows that the majority of patients with no work experience tend to be more loyal.

Respondent Characteristics by Marital Status.

The table below illustrates the distribution of respondents' characteristics according to marital status at the research site.

Table 6. Respondent Characteristics by Marital Status

Marital Status	Number (n)	Percentage%
Married	293	76,7
Unmarried	89	23,3
Total	382	100,0

Source: Data Processed using SPSS (2024)

According to the table, most respondents were identified as married, representing 293 individuals (76.7%), in contrast to the unmarried category, which constituted a smaller segment with 89 respondents (23.3%).

Respondent Characteristics by Insurance Type.

The table below presents the distribution of respondents' characteristics by type of insurance at the research site.

Table 7. Respondent Characteristics by Insurance

Insurance Type	Number(n)	Percentage %
General	87	22,8
BPJS	295	77,2
Total	382	100,0

Source: Data Processed using SPSS (2024)

According to Table 7, most respondents obtained their health coverage through BPJS, representing 295 individuals (77.2%), in contrast to general insurance, which covered only 87 respondents (22.8%).

4.2 Univariat Analysis

Univariate data was obtained through questionnaires to assess respondents' feedback on continuity marketing, one-to-one marketing, partnering programs, technology, people, processes, and knowledge and insight in relation to patient loyalty at *Hospital TK II Pelamonia Makassar*.

Continuity marketing.

Based on the univariate analysis conducted on continuity marketing, the results can be seen in the table below:

Table 8. Distribution Based on Continuity Marketing for Outpatients

Continuity Marketing	Number (n)	Percentage %
Good	340	89,0
Poor	42	11,0
Total	382	100,0

Source: Data Processed using SPSS (2024)

As presented in the table, continuity marketing was positively perceived by most respondents, totaling 340 of 382 (89.0%), whereas only 42 participants (11.0%) provided negative assessments.

One to One (Personalized Marketing).

The univariate analysis of the one-to-one marketing indicator produced the results presented in the table below:

Table 9. Distribution Based on One-to-One Marketing for Outpatients

One To One	Number (n)	Perscentage%
Good	344	90,1
Poor	38	9,9
Total	382	100,0

Source: Data Processed using SPSS (2024)

As presented in the table, the one-to-one marketing strategy received favorable assessments from the majority of respondents, totaling 344 of 382 (90.1%), while only 38 participants (9.9%) expressed unfavorable evaluations.

Partnering program (Marketing program).

The univariate analysis of the partnering program indicator yielded the results shown in the table below:

Table 10. Distribution of Outpatients Based on the Partnering Program

Partnering Program	Number (n)	Perscentage%
Good	350	91,6
Poor	32	8,4
Total	382	100,0

Source: Data Processed using SPSS (2024)

As indicated by the data, the partnering program was positively evaluated by most respondents, totaling 350 of 382 (91.6%), whereas only 32 participants (8.4%) expressed unfavorable assessments.

Technology.

The univariate analysis of the technology indicator produced the results presented in the table below:

Table 11. Distribution Based on Technology for Outpatients

Technology	Number (n)	Percentage%
Good	345	90,3
Poor	37	9,7
Total	382	100,0

Source: Data Processed using SPSS (2024)

According to the tabulated data, a considerable proportion of respondents, 345 of 382 individuals (90.3%), provided positive assessments of the technology, in contrast to a minority of 37 respondents (9.7%) who evaluated it unfavorably.

People.

Based on the univariate analysis conducted on the people indicator, the results can be seen in the table below:

Table 12. Distribution Based on People for Outpatients

People	Number (n)	Presentase %
Good	345	90,3
Poor	37	9,7
Total	382	100,0

Source: Data Processed using SPSS (2024)

According to table above, a substantial proportion of respondents, 345 of 382 individuals (90.3%), offered positive assessments of the staff, in contrast to a minority of 37 respondents (9.7%) who evaluated them negatively.

Process.

The univariate analysis of the process indicator yielded the results presented in the table below:

Table 13. Distribution Based on Process for Outpatients

Process	Number (n)	Percentage %
Good	345	90,3
Poor	37	9,7
Total	382	100,0

Source: Data Processed using SPSS (2024)

As presented in the table, most respondents, totaling 345 of 382 (90.3%), evaluated the process favorably, while only 37 participants (9.7%) reported negative assessments.

Knowledge and Insight.

The univariate analysis of the knowledge and insight indicator yielded the results displayed in the table below:

Table 14. Distribution of Outpatients According to Knowledge and Insight

Knowlegdge and Insight	Number (n)	Percentage %
Good	346	90,6
Poor	36	9,4
Total	382	100,0

Source: Data Processed using SPSS (2024)

Table 14 indicates that the majority of respondents, 346 out of 382 (90.6%), assessed knowledge and insight positively, whereas a smaller portion, 36 respondents (9.4%), gave a negative assessment.

Patient loyalty.

The univariate analysis of the patient loyalty variable produced the results displayed in the table below:

Table 15. Distribution Based on Patient Loyalty for Outpatients

Patient loyalty	Number (n)	Percentage %
Good	347	90,8
Poor	35	9,2
Total	382	100,0

Source: Data Processed using SPSS (2024)

According to the data presented, a considerable proportion of respondents, 347 out of 382 individuals (90.8%), assessed patient loyalty favorably, in contrast to a minority of 35 respondents (9.2%) who evaluated it unfavorably.

4.3 Analisis Bivariat

Bivariate analysis was performed to identify the variables associated with patient loyalty at *Hospital TK II Pelamonia Makassar*, utilizing the chi-square statistical test through the SPSS application.

Continuity marketing.

The findings of the analysis regarding the continuity marketing indicator in relation to patient loyalty are presented in the table below:

Table 16. The Relationship Between Continuity Marketing and Patient Loyalty

Continuity marketing	Loyalitas pasien				Total		P
	Good		Poor				
	N	%	N	%	N	%	
Good	338	99,4	2	0,6	340	100,0	P = 0,000
Poor	9	21,4	33	78,6	42	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As presented in the table above, the examination of the association between continuity marketing and patient loyalty reveals that 340 respondents evaluated continuity marketing favorably. Within this group, 338 participants (99.4%) also reported positive perceptions of patient loyalty, whereas only 2 (0.6%) expressed negative views. Conversely, among the 42 respondents who rated continuity marketing poorly, 9 (38.2%) demonstrated positive evaluations of patient loyalty, while 33 (78.6%) provided negative assessments.

The chi-square test returned a *p*-value of 0.000 < 0.05, confirming a significant correlation between continuity marketing and outpatient loyalty at this institution.

One to One Marketing

The analysis results for the one-to-one marketing indicator in relation to outpatient loyalty at the research site are presented in the table below:

Table 17. The Relationship One to One Marketing and Patient Loyalty for Outpatients

One to one	Patient Loyalty				Total		P
	Good		Poor				
	n	%	n	%	N	%	
Good	339	98,5	5	1,5	344	100,0	P=0,000
Poor	8	21,1	30	78,9	38	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As indicated in the table, 344 respondents evaluated one-to-one marketing favorably, with 339 (98.5%) also reporting positive patient loyalty and only 5 (1.5%) providing negative assessments. Conversely, among the 38 respondents who rated one-to-one marketing unfavorably, 8 (21.1%) nonetheless expressed positive patient loyalty, while 30 (78.9%) reported negative evaluations.

According to the chi-square analysis, the p-value obtained was 0.000, which falls below the significance level of 0.05. This finding demonstrates a statistically significant relationship between one-to-one marketing and outpatient loyalty within the context of the study site.

Partnering Program

The results of the analysis regarding the partnering program indicator in relation to outpatient loyalty at *Hospital TK II Pelamoniae Makassar* are presented in the table below:

Table 18. The Relationship Partnering Program and Patient Loyalty for Outpatients

Partnering program	Patient Loyalty				Total		P
	Good		Poor				
	n	%	n	%	N	%	
Good	344	93,3	6	1,7	350	100,0	P=0,000
Poor	3	9,4	29	90,6	32	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As presented in the table, 350 respondents evaluated the partnering program positively, with 344 (93.3%) also demonstrating favorable patient loyalty and only 6 (1.7%) reporting poor loyalty. In contrast, within the 32 respondents who assessed the partnering program negatively, 3 (9.4%) still expressed good loyalty, while 29 (90.6%) indicated poor loyalty.

According to the chi-square analysis, the obtained p-value was 0.000, falling below the significance level of 0.05. This finding demonstrates a statistically significant relationship between the partnering program and outpatient loyalty at the research site.

Technology.

The analysis results for the technology indicator in relation to outpatient loyalty at the research institution are shown in the table below:

Table 19. The Relationship Between Technology and Patient Loyalty for Outpatients

Technology	Patient Loyalty				Total		P
	Good		Poor				
	n	%	n	%	N	%	

Good	342	99,1	3	0,9	345	100,0	P=0,000
Poor	5	13,5	32	86,5	37	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

According to the description above, of the 345 respondents who provided positive evaluations of technology, nearly all—342 individuals (99.1%)—also reported positive patient loyalty, with only 3 (0.9%) indicating otherwise. Conversely, among the 37 respondents who evaluated technology unfavorably, 5 (13.5%) still expressed positive loyalty, whereas the majority, 32 (86.5%), rated it poorly.

According to the chi-square results, the p-value obtained was 0.000, lower than the significance level of 0.05. This outcome confirms the presence of a statistically significant relationship between technology and outpatient loyalty at this healthcare service institution.

People.

The results of the analysis regarding the people indicator in relation to patient loyalty are presented in the table below:

Table 20. The Relationship Between People and Patient Loyalty for Outpatients

People	Patient Loyalty				Total		P
	Good		Poor				
	N	%	n	%	N	%	
Good	340	98,6	5	1,4	345	100,0	P=0,000
Poor	7	18,9	30	81,1	37	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As indicated in the table, 345 respondents gave positive evaluations of the staff, with 340 (98.6%) also demonstrating good patient loyalty and only 5 (1.4%) reporting poor loyalty. In contrast, within the 37 respondents who assessed the staff unfavorably, 7 (18.9%) nonetheless expressed good loyalty, while 30 (81.1%) provided poor evaluations.

According to the chi-square test, the obtained p-value was 0.000, lower than the significance level of 0.05. This result demonstrates a statistically significant relationship between staff performance and outpatient loyalty at the hospital where the research was carried out.

Process.

findings of the analysis concerning the process indicator in relation to patient loyalty at *Hospital Pelamonia Makassar* are presented in the table below:

Table 21. The Relationship Between Process and Patient Loyalty for Outpatients

Process	Loyalitas Pasien				Total		P
	Good		Poor				
	n	%	N	%	N	%	
Good	340	98,6	5	1,4	345	100,0	P= 0,000
Poor	7	18,9	30	81,1	37	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As indicated by the results, 345 respondents evaluated the process positively, with 340 (98.6%) also demonstrating good patient loyalty and only 5 (1.4%) reporting poor loyalty. In contrast, among the 37 respondents who assessed the process unfavorably, 7 (18.9%) nonetheless indicated good loyalty, while 30 (81.1%) provided poor ratings.

According to the chi-square results, the obtained p-value was 0.000, lower than the significance level of 0.05. This finding establishes a statistically significant association between process and outpatient loyalty at the hospital where the research took place.

Knowledge and insight.

The analysis results for the knowledge and insight indicator in relation to outpatient loyalty at Hospital Pelamonia Makassar are presented in the table below:

Table 22. The Relationship Between Knowledge and Insight and Patient Loyalty for Outpatients

Knowledge and insight	Loyalitas pasien				Total		P
	Good		Poor				
	n	%	n	%	N	%	
Good	341	98,6	5	1,4	346	100,0	P=0,000
Poor	6	16,7	30	83,3	36	100,0	
Total	347	90,8	35	9,2	382	100,0	

Source: Data Processed using SPSS (2024)

As reflected in the data, 346 respondents evaluated knowledge and insight favorably, with 341 (98.6%) also demonstrating good patient loyalty and only 5 (1.4%) providing poor ratings. Conversely, among the 36 respondents who gave negative evaluations of knowledge and insight, 6 (16.7%) nonetheless reported good loyalty, while 30 (83.3%) assessed it unfavorably.

According to the chi-square test, the obtained p-value was 0.000, lower than the 0.05 significance level. This finding demonstrates a statistically significant relationship between knowledge and insight and outpatient loyalty at the hospital where the research was carried out.

5 Discussion

The results of this study indicate that all seven CRM components—continuity marketing, one-to-one marketing, partnering programs, technology, people, process, and knowledge and insight—positively influence outpatient loyalty at Pelamonia Hospital. These findings are in line with previous studies that highlight the central role of CRM in establishing long-term relationships in healthcare organizations [3, 8, 11].

Continuity marketing showed a strong effect on patient loyalty, confirming that consistent interaction and follow-up enhance satisfaction and trust [9, 10]. This aligns with Dehghanpouri et al.[6], who found that regular communication and service reliability contribute to higher satisfaction. In Pelamonia Hospital's context, maintaining communication through appointment reminders and feedback surveys strengthens patient retention.

One-to-one marketing also plays a significant role, emphasizing personalization and patient-centered communication. Singh et al.[15] and Lemon & Verhoef [5] demonstrated that personalized engagement increases emotional connection and satisfaction, leading to loyalty. Pelamonia Hospital's digital CRM approach through its mobile app and direct communication channels reflects this global trend.

Partnering programs foster collaboration and co-creation between hospitals and patients. This result supports Yaghoubi et al.[12], who stated that active patient involvement improves satisfaction and long-term loyalty. The hospital's educational campaigns and preventive care initiatives represent this collaborative model.

Technology remains a crucial enabler of CRM success. Consistent with Baashar et al. [8] and Seify et al. [7], Pelamonia Hospital's digital platform has simplified appointment systems, improved service accessibility, and enhanced transparency, leading to higher satisfaction.

People and process dimensions also demonstrate a strong association with loyalty. The findings align with Gao et al.[10] and Farrokhi et al. [11], who highlighted that competent staff and efficient procedures foster satisfaction and revisit intentions. Pelamonia's service culture—emphasizing empathy, professionalism, and timely service— illustrates how human and operational factors drive loyalty.

Finally, knowledge and insight emerged as a strategic dimension for sustaining patient relationships. By utilizing patient data analytics, Pelamonia can identify service gaps, understand behavioral patterns, and continuously improve performance—echoing the model proposed by Baashar et al. [8].

In summary, the findings reaffirm that CRM plays a pivotal role in transforming healthcare organizations into patient-oriented institutions. The study's alignment with previous literature strengthens the argument that integrating relational and technological CRM dimensions enhances patient satisfaction and loyalty.

6 Conclusion

This study demonstrates that Customer Relationship Management (CRM) plays a pivotal role in strengthening patient loyalty within hospital settings. By analyzing seven

dimensions—continuity marketing, one-to-one marketing, partnering programs, technology, people, process, and knowledge and insight—at Pelamonia Hospital in Makassar, the research confirms that each dimension contributes significantly to outpatient loyalty. These findings highlight that CRM is not merely an administrative or digital system but a strategic framework that integrates human interaction, organizational processes, and technological innovation to create lasting relationships with patients. The hospital's success in applying these components illustrates how a structured and consistent CRM approach can transform patient experiences into long-term trust and commitment.

From a theoretical perspective, the study reinforces the interconnected relationship between CRM, satisfaction, and loyalty as emphasized in previous literature. The results provide empirical support for the proposition that loyalty emerges not only from service quality but also from the perceived continuity and personalization of patient interactions. This study extends the CRM framework in healthcare by demonstrating that integrating relational and technological elements—such as digital communication, staff empathy, and process efficiency—can generate sustainable satisfaction and behavioral loyalty. Furthermore, affirming that consistent and meaningful engagement across every service stage strengthens the emotional bond between patients and healthcare providers.

Managerially, the findings carry important implications for hospital administrators and policymakers. CRM should be viewed as a long-term institutional commitment rather than a one-time technology investment. Hospitals must foster a culture of empathy and responsiveness among their staff, supported by efficient workflows and digital infrastructure that allow for timely communication and patient feedback. The development of integrated information systems, including patient databases and mobile applications, can enhance transparency, streamline access, and personalize care delivery. Moreover, data-driven insights enable hospitals to anticipate patient needs and continuously improve service quality. These practical implications demonstrate that effective CRM implementation requires alignment between technology, human resources, and management policy.

In the broader context of Indonesia's healthcare transformation under Law No. 17 of 2023[1], this study underscores the importance of adopting CRM as a key mechanism to improve competitiveness, efficiency, and patient trust. The research also opens avenues for future investigation into how digital maturity, organizational culture, and patient engagement mediate the relationship between CRM and hospital performance. Future studies could further explore the integration of CRM with emerging technologies such as artificial intelligence or predictive analytics to optimize patient relationship strategies. Ultimately, this research provides a foundation for positioning CRM not only as a business tool but as a central pillar of patient-centered healthcare that aligns with national and global goals for sustainable health systems.

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