

The Relationship between the Quality of Prolanis Services and the Loyalty of Prolanis Participants at the Kedungwuni II Health Center in 2026

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ABSTRACT

The Chronic Disease Management Program (Prolanis) is a BPJS Kesehatan initiative designed to improve the quality of life of patients with chronic diseases through continuous healthcare services. However, its implementation at primary healthcare facilities remains suboptimal due to low participant activity and service quality, which may affect participant loyalty. This study aimed to analyze the relationship between Prolanis service quality and participant loyalty at Kedungwuni II Public Health Center in 2026. A quantitative correlational study with a cross-sectional design was conducted involving 76 respondents selected through probability sampling. Data were collected using questionnaires on service quality and participant loyalty and analyzed using the Spearman Rank test ($\alpha = 0.05$). The results showed that 56.6% of respondents perceived Prolanis service quality as poor, while 51.3% were categorized as less loyal. Significant relationships were found between the dimensions of reliability ($p=0.000$), responsiveness ($p=0.000$), and empathy ($p=0.000$) and participant loyalty. In contrast, tangibles ($p=0.251$) and assurance ($p=0.436$) were not significantly associated with loyalty. Improving reliability, responsiveness, and empathy is recommended to enhance participant loyalty.

Keywords: Service Quality, Participant Loyalty, Prolanis, Health Center

INTRODUCTION

Non-communicable diseases (NCDs), such as diabetes mellitus, hypertension, heart disease, and stroke, are the leading causes of death and disability in the world. The *Global Burden of Disease* (GBD) 2023 analysis shows that NCDs account for approximately 1.80 billion *Disability-Adjusted Life Years* (DALYs), which illustrates the high burden of disease due to premature death and disability (Hay et al., 2025). In Indonesia, NCD control is carried out through promotive and preventive efforts, one of which is through the Chronic Disease Management Program (Prolanis) organized by BPJS Kesehatan with first-level health facilities (FKTP). This program aims to improve the quality of life of participants with type 2 diabetes mellitus and hypertension through health monitoring, education, increased therapy adherence, and prevention of complications in accordance with BPJS Kesehatan Regulation Number 3 of 2024.

Although Prolanis has been implemented nationally, various studies show that its implementation has not been optimal. Purnamasari et al. (2023) reported that the active participation of Prolanis participants was only around 10–20%, while Multazam et al. (2024) showed that the achievement of the Controlled Prolanis Participant Ratio (RPPT) in various FKTPs was still below the target. In addition, Zahra Hamidah et al. (2023) found that the low activity of participants was influenced by access constraints, work, time, and limited support from health workers. The findings show that the high number of registered participants does not guarantee the success of the implementation of Prolanis if participants do not actively participate.

Various studies have also shown that the factors causing the low participation of Prolanis participants come not only from individual characteristics, but also from the quality of service delivery. Cahyaningrum (2024) explained that the quality of service, communication of health workers, family support, and the perception of program benefits affect the sustainability of participant participation. Meanwhile, Febriyanti et al. (2025) highlighted that the limitations of health workers, the implementation of programs that are not in accordance with the guidelines, and weak monitoring and evaluation cause participants to tend to stop participating in Prolanis. On the other hand, Maarif et al. (2021) showed that some participants preferred to seek treatment as general patients because they had not experienced the benefits of the program. The synthesis of these various studies shows that the success of Prolanis is influenced by the interaction between service quality, individual factors, and program implementation system. The relationship between service quality and participant loyalty also still shows results that are not completely consistent. Santoso (2022) and Fitri et al. (2024) reported that service quality has a positive effect on the satisfaction and loyalty of health service participants through increasing comfort, trust, and emotional relationships with health facilities. However, some studies have shown that participant loyalty is also influenced by other factors, such as motivation, perception of benefits, family support, and ease of access to services (Maarif et al., 2021). These differences in results indicate that the effect of service quality on participant loyalty still requires empirical proof in various primary health service contexts.

In Pekalongan Regency, research on Prolanis still focuses more on treatment compliance, participant retention, or obstacles to program implementation in several health centers (Umam et al., 2021), while research that specifically examines the relationship between service quality and loyalty of Prolanis participants is still limited. The results of the preliminary study at the Kedungwuni II Health Center showed that only 55 out of 319 participants (17.2%) actively participated in Prolanis activities, accompanied by limited health workers and not optimal

service. This condition shows that there is a gap between Prolanis' goals and its implementation in the field and is an important basis for testing the relationship between service quality and participant loyalty. Therefore, this study aims to analyze the relationship between service quality and loyalty of participants of the Chronic Disease Management Program (Prolanis) at the Kedungwuni II Health Center, Pekalongan Regency. The results of the study are expected to provide empirical evidence to support improving the quality of Prolanis services and strengthening the management of chronic diseases at the primary health service level.

METHODS

This study uses a quantitative approach with a cross-sectional design to analyze the relationship between service quality and loyalty of participants of the Chronic Disease Management Program (Prolanis). The research was carried out at the Kedungwuni II Health Center, Pekalongan Regency, Indonesia. The research population is all Prolanis participants registered in 2025 as many as 319 people. The sample size was determined using the Slovin formula with an error rate of 10%, so that 76 respondents were obtained. Sampling was carried out using probability sampling. Respondents who meet the inclusion criteria are Prolanis participants who have been registered for at least one year, participated in at least three Prolanis activities in the last 12 months, and are willing to participate by signing an informed consent sheet. Participants who were hospitalized, had communication or cognitive impairments, or refused to participate were excluded from the study.

Data is collected using primary data and secondary data. Primary data was obtained through filling out questionnaires directly by respondents, while secondary data was obtained from the documentation of the Kedungwuni II Health Center, including the number of Prolanis participants, program implementation reports, and active and inactive participant data. Prior to the main data collection, the instrument was tested on 30 participants who had similar characteristics to the study population to assess the validity and reliability of the instrument. The independent variable in this study is the quality of Prolanis services which is measured using the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988), covering five dimensions, namely tangibles, reliability, responsiveness, assurance, and empathy. The dependent variable is the loyalty of Prolanis participants which is measured based on the concept of loyalty Griffin (1995), including commitment to participate in the program on an ongoing basis, consistency in using services, willingness to recommend the program to others, and willingness to continue to follow Prolanis even though there are other

service alternatives. All items were measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The results of the validity test show that all items have a calculated r value greater than the r of the table (0.361), so it is declared valid. The reliability test using Cronbach's Alpha showed a value of 0.881 for the service quality variable and 0.996 for participant loyalty, indicating that both instruments had excellent reliability.

Data analysis is carried out using statistical software. Univariate analysis was used to describe the characteristics of respondents and the distribution of each variable in the form of frequency, percentage, average, and standard deviation. The relationship between service quality and participant loyalty was analyzed using the Spearman Rank correlation test because the two variables were ordinal-scale. A $p < 0.05$ is considered to indicate a statistically significant association with a 95% confidence level.

RESULTS

Univariate Analysis

Univariate analysis is an analysis carried out on one variable separately with the aim of describing the distribution and characteristics of the data in the variables being studied. In numerical variables that are not normally distributed, data can be presented using median, minimum, and maximum values to provide an overview of the distribution of research data (Suryadiningrat et al., 2022). The frequency distribution table of the 76 Respondents.

Table 1 Characteristics of Research Objects

Characteristics	Dominant Categories	n (%)
Age	Women	61 (80,3%)
Gender	45-50 Years	21 (27,6%)
Final Education	SD	47 (61,8%)
Jobs	Housewives (IRT)	50 (65,8%)
Long Time Participant in	1-3 years	47 (61,8%)
PROLANIS		
Participant Activity	Active = 38 (50.0%)	Balanced

Based on the characteristics of the respondents, most of the Prolanis participants were female, namely 61 respondents (80.3%). Based on age group, the majority of respondents were in the age range of 45-50 years as many as 21 respondents (27.6%). The last level of education of the

respondents was dominated by elementary school (SD) graduates, namely 47 respondents (61.8%). Based on work, most of the respondents were housewives (IRT) as many as 50 respondents (65.8%). Prolanis has been a participant for a long time dominated by respondents who have participated in the program for 1-3 years, namely 47 respondents (61.8%). Meanwhile, based on the level of activity, the number of active and inactive participants showed the same proportion, each with 38 respondents (50.0%). In general, the characteristics of the respondents illustrate that Prolanis participants at the Kedungwuni II Health Center are dominated by women of late adulthood with a basic education level, status as housewives, have participated in Prolanis for 1-3 years, and have a balanced distribution of activeness between active and inactive participants.

Table 2 Categories of Prolanis Service Quality

Categories	f	%
Not Good	43	56,6
Good	33	43,4
Total	76	100

Based on Table 2, it is known that most of the respondents assessed the quality of Prolanis services in the poor category, namely 43 respondents (56.6%), while 33 respondents (43.4%) assessed the quality of service in the good category.

Table 3 Distribution of Loyalty Categories of Prolanis Participants

Categories	f	%
Disloyal	5	6,6
Less Loyal	39	51,3
Loyal	32	42,1
Total	76	100

Based on Table 3, it is known that most respondents have loyalty, respondents have loyalty in the less loyal category, namely 39 respondents (51.3%). A total of 32 respondents (42.1%) were in the loyal category and 5 respondents (6.6%) were in the non-loyal category.

Bivariate Analysis

Table 4 Tangible Relationship (Physical Evidence) with Prolanis Participant Loyalty

Variable	Correlation Coefficient (r)	<i>p-value</i>
Tangible with Loyalty	-0,133	0,251

Based on Table 4, the value of the Spearman correlation coefficient (r) was obtained of -0.133 with a p-value of 0.251. Because the p-value is greater than 0.05 ($0.251 > 0.05$), it can be concluded that there is no significant relationship between the tangible dimension (physical evidence) and the loyalty of Prolanis participants at the Kedungwuni II Health Center.

The value of the correlation coefficient of -0.133 indicates a very weak relationship and is negatively directional. These results indicate that the physical evidence aspects of services such as the condition of facilities, infrastructure, and the appearance of officers have not been factors that affect the loyalty of Prolanis participants. Thus, the hypothesis that there is a relationship between the tangible dimension and the loyalty of Prolanis participants is rejected.

Table 5 Relationship between Reliability and Loyalty of Prolanis Participants

Variable	Correlation Coefficient (r)	<i>p-value</i>
Reliability with Loyalty	0,736	0,000

Based on the results of the Spearman Rank correlation test, a correlation coefficient value (r) of 0.736 with a p-value of 0.000 (<0.05) was obtained. This shows that there is a significant relationship between the reliability dimension and the loyalty of Prolanis participants. A correlation value of 0.736 indicates a strong relationship with the direction of a positive

relationship. This means that the better the service provided, the higher the loyalty of Prolanis participants.

Table 6 Relationship between Responsiveness and Loyalty of Prolanis Participants

Variable	Correlation Coefficient (r)	<i>p-value</i>
Responsiveness with Loyalty	0,822	0,000

Based on the results of the Spearman Rank correlation test, a correlation coefficient value (r) of 0.822 with a p-value of 0.000 (<0.05) was obtained. This shows that there is a significant relationship between the dimension of responsiveness (responsiveness) and the loyalty of Prolanis participants. A correlation value of 0.822 indicates a very strong relationship with the direction of a positive relationship. This means that the better the response of the officers in providing services, the higher the loyalty of Prolanis participants.

Table 7 Relationship between Assurance and Loyalty of Prolanis Participants

Variable	Correlation Coefficient (r)	<i>p-value</i>
Insurance with Loyalty	0,091	0,436

Based on Table 7, the value of the Spearman correlation coefficient (r) was obtained of 0.091 with a p-value of 0.436. Because the p-value is greater than 0.05 ($0.436 > 0.05$), it can be concluded that there is no significant relationship between the dimension of assurance (guarantee) and the loyalty of Prolanis participants at the Kedungwuni II Health Center.

The value of the correlation coefficient of 0.091 indicates a very weak relationship and is positively directional. These results show that service assurance which includes the ability of officers to provide a sense of security, trust, and confidence to participants has not been proven to be related to the level of loyalty of Prolanis participants. Thus, the hypothesis that there is a

relationship between the guarantee dimension and the loyalty of Prolanis participants is rejected.

Table 8 Relationship between Empathy and Loyalty of Prolanis Participants

Variable	Correlation Coefficient (r)	<i>p-value</i>
Empathy with Loyalty	0,787	0,000

Based on the results of the Spearman Rank correlation test, a correlation coefficient value (r) of 0.787 with a p-value of 0.000 (<0.05) was obtained. This shows that there is a significant relationship between the dimension of empathy and the loyalty of Prolanis participants. The correlation value of 0.787 indicates a strong relationship with the direction of a positive relationship. This means that the higher the empathy of the officers in providing services, the higher the loyalty of Prolanis participants.

DISCUSSION

Prolanis Service Quality

This study aims to analyze the relationship between service quality and loyalty of Prolanis participants at the Kedungwuni II Health Center. The results showed that most respondents (56.6%) assessed that the quality of Prolanis services was still in the poor category. These findings indicate that the services provided have not fully met the expectations of the participants, especially in terms of service reliability, speed of officers, and attention to the needs of the participants. According to the SERVQUAL theory (Parasuraman et al.), service quality is shaped by five dimensions, namely tangible, reliability, responsiveness, assurance, and empathy, which together affect users' perception of service quality.

These findings are in line with the research of Rosdiana et al. (2023) and Thaifur (2024) which stated that the quality of service is influenced by the accuracy of service, the professionalism of health workers, and the ability of officers to meet patient needs. However, the results of this study show that even though Prolanis services have been running, some aspects of service are still not optimal so that participants' perceptions of service quality tend to be low. These conditions can be influenced by the limited number of health workers, the high burden of

services, and the consistent implementation of Prolanis activities.

Practically, these results show that improving service quality needs to be focused on improving service processes, improving officers' communication competence, and providing services that are more responsive to the needs of participants. These efforts are expected to improve the experience of participants while participating in Prolanis and encourage increased participant loyalty.

Loyalty of Prolanis Participants

The study also found that most respondents had low loyalty (51.3%). The loyalty of the participants is reflected in the willingness to participate in Prolanis activities regularly, utilize services on an ongoing basis, recommend programs to others, and not easily move to other health facilities. Low loyalty indicates that participants have not fully gained service experience that is able to build a long-term commitment to the program.

The results of this study are consistent with the research of Evandinnartha et al. (2023) and Thaifur (2024) which stated that patient loyalty is greatly influenced by service quality and satisfaction with health services. On the other hand, participants who have not experienced the benefits of service optimally tend to be less active in participating in the program and have lower commitment. This shows that participant loyalty is not only influenced by the results of medical services, but also by the overall service experience.

The implication of this research is the need for a strategy to increase loyalty through participant-oriented services, more effective communication, continuous education, and increased participant involvement in every Prolanis activity. This approach is expected to increase participant retention and successful management of chronic diseases.

The Relationship between the SERVQUAL Dimension and Participant Loyalty

Bivariate analysis showed that not all dimensions of SERVQUAL had the same relationship to participant loyalty. Reliability ($r = 0.736$; $p < 0.001$), responsiveness ($r = 0.822$; $p < 0.001$), and empathy ($r = 0.787$; $p < 0.001$) were shown to be positively and significantly related to participant loyalty. In contrast, tangible ($p = 0.251$) and assurance ($p = 0.436$) showed no significant relationship.

The findings show that Prolanis participants emphasize more on the functional aspects of services than on the physical aspects of facilities. As people with chronic diseases who need continuous service, participants appreciated the accuracy of the service, the speed of the officer's response, and the attention given during the service process. These results reinforce

the research of Evandinnartha et al. et al. (2023), Thaifur (2024) and Fauziah Novianti (2023) who report that reliability, responsiveness, and empathy are the main determinants of patient loyalty.

On the other hand, the insignificance of the tangible and assurance dimensions indicates that the condition of physical facilities and service guarantees have not been the main consideration of participants in maintaining loyalty. These findings are in line with the research of Purwati (2020) and Ramadhani et al. (2026) which show that direct service experience has a greater influence on loyalty than physical evidence of service.

CONCLUSION

Based on the results of the study on 76 Prolanis participants at the Kedungwuni II Health Center, it can be concluded that most of the respondents assessed that the quality of Prolanis services was still in the poor category and had loyalty that was classified as less loyal. The results of the relationship analysis using the Spearman Rank test showed that the dimensions of reliability ($r = 0.736$; $p < 0.001$), responsiveness ($r = 0.822$; $p < 0.001$), and empathy ($r = 0.787$; $p < 0.001$) had a positive and significant relationship with participant loyalty, with the responsiveness dimension as the factor that had the strongest relationship. In contrast, the tangible ($r = -0.133$; $p = 0.251$) and assurance ($r = 0.091$; $p = 0.436$) dimensions showed no significant relationship with participant loyalty. These findings show that the loyalty of Prolanis participants is more influenced by the aspects of service reliability, speed and responsiveness of officers, as well as the attention and concern of health workers compared to the condition of physical facilities and service guarantees.

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