



THE INFLUENCE OF SERVICE QUALITY ON SATISFACTION AND ADHERENCE OF MEDICAL REHABILITATION PATIENTS

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Article Info	Abstract
<p><i>Article History:</i> Received : 21-04-2025 Approved : 22-07-2025 Published : 31-07-2025</p> <hr/> <p><i>Keywords:</i> Service quality, satisfaction, adherence, medical rehabilitation</p>	<p>As a health service that aims to restore body function and minimize disability, medical rehabilitation depends on patient adherence to achieve a favorable outcome. This study aims to determine the effect of medical rehabilitation service quality on patient satisfaction and adherence. This study was an analytic study with a cross-sectional design conducted at the medical rehabilitation clinic of Royal Prima Medan Hospital (RPMH). The study was conducted with 186 outpatients of the medical rehabilitation clinic who had undergone therapy at least three times and did not have mental disabilities. Data were collected using the SERVQUAL questionnaire, PTP-SQ (Physical Therapy Patient Satisfaction Questionnaire), and the 8-item General Rehabilitation Adherence Scale. This study found that the majority of medical rehabilitation clinics in RPMH were female (53.76%), aged 51-60 years (34.95%), and experienced complaints for less than one year (51.08%). All participants perceived good quality in all aspects of service, were satisfied with the services received, and adhered to the planned therapy program. Based on the findings in this study, it can be concluded that service quality influences patient satisfaction and adherence to the medical rehabilitation plan, with responsiveness as the most influential factor on satisfaction ($p < 0.001$; OR: 10.035) and assurance as the most influential factor on patient adherence ($p < 0.001$; OR: 7.225). A satisfactory assurance also influenced satisfaction and, subsequently, patient adherence to the treatment plan ($p < 0.005$; OR: 2.230).</p>

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Introduction

Medical rehabilitation services are one of the services that hospitals may provide. The World Health Organization (WHO) estimates that at least 2.6 billion people worldwide need medical rehabilitation services to achieve optimal health conditions, of which 1.3 billion have severe disabilities (World Health Organization, 2023, 2024). The world's high demand for medical rehabilitation shows that various health conditions require medical rehabilitation treatment today. WHO actively advocates for the implementation of medical rehabilitation to prevent and reduce the incidence of disability and minimize the limitations caused by disability (World Health Organization, 2023). However, one significant barrier to achieve the minimal disability remains prominent today, namely low adherence. A systematic review of 33 studies from ten countries found that general adherence to medical rehabilitation among patients and retention rate were as low as 40% and 36%, respectively (Gaid *et al.*, 2024).

In general, patients with acute illness and/or short-term treatment have higher therapeutic adherence than patients with chronic illness and/or long-term treatment (Pignone, 2024). It is estimated that 50% of patients are not fully adherent to the therapy plan, and one-third of patients never take the medication prescribed by the doctor (Pignone, 2024). Several factors influence patient compliance and non-compliance with existing therapy plans, such as information, memory, and doctor-patient communication (Myers dan Midence, 2020; Noble, 2020). Meanwhile, Lewis and Feldman view that patient non-adherence cannot be blamed on the patient but rather is the fault of health workers (Lewis dan Feldman, 2024).

While studies regarding medical rehabilitation adherence determinants are found in Indonesia, these studies were mostly focusing on the role of the patients and their family and neglected the role of the hospital in patients' adherence. This study aims to explain the effect of patients perceived quality of care on patients' satisfaction and patients' adherence to the medical rehabilitation.

Methods

This quantitative analytic study employed a cross-sectional research design with a survey approach. It was conducted at the Medical Rehabilitation Unit of Royal Prima Medan Hospital in September 2024. The population of this study comprised all patients of the Medical Rehabilitation Unit of the Royal Prima Medan Hospital. The sample size was 186, selected through an accidental sampling technique. The sample inclusion criteria were as follows: 1) outpatients; 2) undergoing medical rehabilitation at the Medical Rehabilitation

Unit of the Royal Prima Medan Hospital at least three times; and 3) willing to participate in the study.

Meanwhile, the sample exclusion criteria in this study included 1) inpatients and 2) having physical/mental limitations and not having a permanent caretaker. Data collection in this study was carried out using a questionnaire filled out independently by the sample. The questionnaire was divided into five sections: 1) an explanation of the study's purpose and objectives; 2) informed consent; 3) a service quality (SERVQUAL) questionnaire (Pasaribu *et al.*, 2022); 4) a physical therapy patient satisfaction questionnaire (PTP-SQ) (Monnin & Perneger, 2002); and 5) a patient adherence questionnaire (8-item General Rehabilitation Adherence Scale) (Naqvi *et al.*, 2020). The validity and reliability of the three questionnaires have been established by the previous studies.

The data analysis in this study was carried out by conducting univariate analysis and multivariate binomial logistic regression analysis with a significance level of 0.05.

The Health Research Ethics Committee of Universitas Prima Indonesia granted this study and its protocols ethical clearance by letter No. 17/KEPK/UNPRI/VIII/2024.

Results

A total of 191 questionnaires were completed in this study, but only 186 questionnaires were used due to duplicating four responses and one with incomplete data. The majority of respondents in this study were female (53.76%), aged 51-65 years (34.95%), had a high school education (44.62%), and worked as self-employed or farmers (44.09%). Self-employed and farmers were grouped as one occupational group because both are types of work that use their own resources to generate income. More than 90% of respondents who participated in this study were patients undergoing medical rehabilitation with BPJS Health coverage, where the majority were BPJS PPU (private/government employee) participants (39.25%). In addition, most respondents also had individual incomes above three million rupiah per month (61.29%).

Table 1. Respondents' Sociodemographic and Economic Characteristics

	n	%
Sex		
Male	86	46,24
Female	100	53,76
Age (Year)		
21-30	40	21,51
31-40	26	13,98
41-50	38	20,43
51-60	65	34,95
61-70	8	4,30
71-80	9	4,84
Education		

Junior High School	9	4,84
Senior High School	83	44,62
Diploma	20	10,75
Undergraduate	57	30,65
Master	17	9,14
Employment		
SAHM/Unemployed/Retired	24	12,90
Student	3	1,61
Teacher	27	14,52
Private Employee	29	15,59
Civil Servant	21	11,29
Self-employed/Farmer	82	44,09
Health Financing		
BPJS PBI	64	34,41
BPJS non-PBI	46	24,73
BPJS PPU	73	39,25
Out-of-pocket/Private Insurance	3	1,61
Monthly income		
< Rp 1,500,000	19	10,22
Rp 1,500,000-3,000,000	53	28,49
> Rp 3,000,000	114	61,29

Source: Primary Data

Table 2. Respondents' History of Medical Rehabilitation Utilization

	n	%
Number of visit(s)		
1-4 times	42	22.58
5-8 times	73	39.25
>8 times	71	38.17
Medical rehabilitation in different facilities		
Different hospital	32	53.33
Clinic/Puskesmas	28	46.67
Never	126	67.74
Did not attend scheduled appointments in the past month		
Yes	104	55.91
No	82	44.09
Type of transport		
Private transportation	144	77.42
Public transportation	42	22.58
Travel distance to the hospital		
≤30 Minutes	67	36.02
>30 Minutes	119	63.98

Source: Primary Data

Table 2 shows that out of 186 respondents, most visited the Medical Rehabilitation Unit of Royal Prima Medan Hospital five to eight times a month (39.25%), and 38.17% visited more than eight times per month. Most respondents (67.74%) had only ever undergone medical rehabilitation at the Medical Rehabilitation Unit of Royal Prima Medan Hospital. Of the 60 respondents who had undergone medical rehabilitation at other health facilities, 53.33% had undergone physiotherapy at other hospitals, while 46.67% had undergone physiotherapy at clinics or health centers.

Most respondents in this study also admitted to having missed scheduled medical rehabilitation in the past month (55.91%). However, all respondents were compliant in bringing their control card when visiting the Medical Rehabilitation Unit of Royal Prima Medan Hospital

(100%). In addition, the majority of respondents visited the Medical Rehabilitation Unit of Royal Prima Medan Hospital using private transportation (car or motorcycle) (77.42%), with a travel time of more than 30 minutes (63.98%).

All respondents who participated in this study perceived good service quality at the Medical Rehabilitation Unit of Royal Prima Medan Hospital. However, there were different perceptions on the aspects of service, although most respondents still perceived good service quality.

Most respondents in this study were satisfied with the services they received from the Medical Rehabilitation Unit of Royal Prima Medan Hospital (54.84%). In addition, based on respondents' responses to the adherence questionnaire, it was found that most respondents adhered to the medical rehabilitation schedule provided by the Medical Rehabilitation Unit of Royal Prima Medan Hospital (59.14%).

Table 3. Perceived Quality and Satisfaction of the Medical Rehabilitation Unit of Royal Prima Hospital and Their Adherence

	n	%
Tangibility		
Good	116	62.37
Poor	70	37.63
Reliability		
Good	134	72.04
Poor	52	27.96
Responsiveness		
Good	84	45.16
Poor	102	54.84
Assurance		
Good	148	79.57
Poor	38	20.43
Empathy		
Good	133	71.51
Poor	53	28.49
Satisfaction		
Satisfied	102	54.84
Unsatisfied	84	45.16
Adherence		
Adherent	110	59.14
Non-adherent	76	40.86

Source: Primary Data

Among the five service quality dimensions, it was found that not all dimensions were associated with patient satisfaction regarding the medical rehabilitation services received. Tangibility, responsiveness, and assurance had a significant relationship with patient satisfaction, with a significance level of 0.000 ($p < 0.001$), while reliability had a significance level of 0.002 ($p < 0.005$). Empathy was the only quality dimension that was not associated with patient satisfaction ($p > 0.05$) (Table 4).

In contrast to patient satisfaction, where not all quality dimensions were found to be associated with patient satisfaction, in adherence, it was found that all dimensions of service quality were significantly associated with patients' adherence to

the medical rehabilitation schedule ($p<0.05$). Consistently, it was also found that patients' satisfaction was associated with patient adherence ($p<0.001$) (Table 4).

Table 4. Relationship Between Medical Rehabilitation Service Quality and Patients' Satisfaction and Between Service Quality, Satisfaction, and Adherence

	Patients Satisfaction			
	Satisfied		Unsatisfied	
	n	%	n	%
Tangibility*				
Good	76	65.52	40	34.48
Poor	26	37.14	44	62.86
Reliability**				
Good	83	61.94	51	38.06
Poor	19	36.54	33	63.46
Responsiveness*				
Good	62	73.81	22	26.19
Poor	40	39.22	62	60.78
Assurance*				
Good	92	62.16	56	37.84
Poor	10	26.32	28	73.68
Empathy				
Good	77	57.89	56	42.11
Poor	25	47.17	28	52.83
	Adherent		Nonadherent	
	n	%	n	%
Tangibility**				
Good	78	67.24	38	32.76
Poor	32	45.71	38	54.29
Reliability**				
Good	89	66.42	45	33.58
Poor	21	40.38	31	59.62
Responsiveness***				
Good	59	70.24	25	29.76
Poor	51	50.00	51	50.00
Assurance*				
Good	100	67.57	48	32.43
Poor	10	26.32	28	73.68
Empathy***				
Good	87	65.41	46	34.59
Poor	23	43.40	30	56.60
Satisfaction*				
Satisfied	86	84.3	16	15.7
Unsatisfied	24	28.6	60	71.4

* $p<0.001$; ** $p<0.005$; *** $p<0.05$

Table 5. The Impact of Service Quality on Patients' Satisfaction

		β	OR	CI 95%	
				Lower	Upper
Service Quality → Patients' Satisfaction	Tangibility*	1.78	5.92	2.61	13.39
	Reliability*	1.92	6.84	2.74	17.07
	Responsiveness*	2.31	10.03	4.25	23.64
	Assurance*	1.71	5.52	2.14	14.21
	Empathy**	1.01	2.74	1.20	6.24
Constant		-12.09	0.00		
Service Quality → Patients' Satisfaction	Tangibility**	1.23	3.41	1.61	7.213
	Reliability*	1.66	5.25	2.31	11.95
	Responsiveness*	1.38	3.97	1.85	8.524

Adherence	Assurance*	1.98	7.22	2.92	17.89
	Empathy*	1.50	4.50	2.00	10.14
	Constant	-10.74	0.00		
Service Quality → Patients' Satisfaction	Satisfaction - Reliability**	0.52	1.68	1.10	2.58
	Satisfaction - Assurance**	0.80	2.23	1.37	3.63
	Satisfaction - Empathy**	0.70	2.02	1.25	3.28
Adherence	Constant	-4.23	0.01		

* $p<0.001$; ** $p<0.005$; *** $p<0.05$

Binomial logistic regression was carried out to assess the influence of each dimension of service quality on medical rehabilitation patient satisfaction. Any variable with a significance level of less than 0.25 can be included in the logistic regression test, so all five service quality dimensions can be included in the logistic regression. Table 5 shows that all five dimensions of service quality influence medical rehabilitation patient satisfaction ($p<0.05$), with the most influential dimension being responsiveness (OR: 10.035 - 95% CI: 4.259-23.645; $p<0.001$). The logistic regression model used to assess the effect of service quality on patients' satisfaction was declared fit (Hosmer and Lemeshow goodness of fit (HL): $p>0.05$, Cox and Snell R²: 0.349, Nagelkerke R²: 0.466).

Table 5 also assesses the impact of medical rehabilitation service quality dimensions on patient adherence. The results of binomial logistic regression showed that all five service quality dimensions significantly influenced patient compliance in undergoing medical rehabilitation ($p<0.005$). Among the five dimensions of service quality, assurance is the dimension that has the most significant influence on patient compliance in undergoing medical rehabilitation (OR: 7.225 - 95% CI: 2.918-17.893; $p<0.001$). The logistic regression model used to assess the effect of service quality on patients' adherence was declared fit (HL: 0.432, Cox and Snell R²: 0.298, Nagelkerke R²: 0.402).

Lastly, Table 5 attempts to determine the effect of patient satisfaction on patient compliance with service quality dimensions as cofactors. In the first stage of logistic regression, it was found that there were at least two quality dimensions as cofactors of satisfaction that did not have a significant effect, namely tangibility and responsiveness ($p>0.05$). Therefore, the regression continued into the second stage, where the variable with the highest significance value was excluded (tangibility). In the second stage of logistic regression that did not include tangibility, it was found that responsiveness as a cofactor of satisfaction still did not have a significant effect ($p>0.05$), so the regression continued to the next

stage by not including responsiveness. In the third stage, a regression that only included the quality dimensions of reliability, assurance, and empathy as cofactors of satisfaction was found to have a significant influence on patient compliance. Among the three dimensions of service quality as satisfaction cofactors, it was found that assurance as a satisfaction cofactor was the most influential variable on medical rehabilitation patient compliance (OR: 2.230 - 95% CI: 1.372-3.626; $p < 0.005$). The logistic regression model used to assess the effect of patients' satisfaction with service quality as a cofactor on patients' adherence was declared fit (HL: 0.476, Cox and Snell R^2 : 0.371, Nagelkerke R^2 : 0.500).

Discussion

A high-quality health service can include various dimensions that can be seen and/or felt directly or indirectly by the patient. There are various models of health service quality that are often used: SERVQUAL (Service Quality, a general model that can be used in various types of industries, including health), SERVPERF (Service Performance, a general model that compares patient expectations and actual performance), and HEALTHQUAL (a specific model for health services, but still rarely used) (Ahsan et al., 2020; Lee, 2017; Upadhyai et al., 2019). Upadhyai et al. generally categorize the factors affecting health services' quality into two main aspects: medical and non-medical (Upadhyai et al., 2019). The medical aspect of health services consists of medical human resources (doctors, nurses, laboratorians, and others) and their competence, the availability and currency of instruments, and the availability of medicines. In addition to the physical aspects of medical care, non-physical aspects such as interpersonal relationships between health facilities and patients, treatment outcomes, and staff thoroughness also affect the quality of health services (Upadhyai et al., 2019). Non-medical aspects that influence the perceived quality of care include health facility infrastructure, cleanliness, accessibility, administrative processes, responsiveness, and empathy of health facility staff (Upadhyai et al., 2019). These various medical and non-medical aspects can also be grouped into the five dimensions of service quality in SERVQUAL (physical evidence, reliability, responsiveness, assurance, and empathy).

Physical evidence in medical rehabilitation services can be in the form of building infrastructure / medical rehabilitation service rooms, availability and sophistication of rehabilitation equipment, and the physical appearance of therapists and doctors that patients can see directly. In this study, it was found that physical evidence of medical rehabilitation services had a significant effect on patient satisfaction ($p < 0.001$) and also directly affected patient

compliance ($p < 0.005$). Hasan and Putra's research found that the perception of good service quality has a significant effect on the satisfaction felt by patients ($p < 0.001$) (Hasan & Putra, 2019). Research by Tarigan, Juanita, and Khadijah found that patients' positive perceptions of physical evidence of physiotherapy services significantly affect patient satisfaction ($p < 0.001$) (Tarigan et al., 2024). Physical evidence affects patient perceptions of service quality because good physical evidence increases patient trust in a health facility. However, the results of this study are not in line with the findings in Al-Omari and Hamid's study, which found that physical evidence does not affect patient compliance with therapy (taking medication) ($p > 0.05$), although physical evidence still affects patient satisfaction ($p < 0.05$) (Al-Omari & Hamid, 2022). Research by Golshan et al. also found that physical evidence did not affect therapy adherence among patients with urolithiasis (urinary tract stones) (Golshan et al., 2019).

Reliability in medical rehabilitation services can include aspects of service that demonstrate the ability of the medical rehabilitation clinic to provide excellent service through a straightforward administrative process, reasonable waiting time, sufficient consultation time, and adequate information regarding the patient's condition and treatment plan. In this study, the reliability of medical rehabilitation services was also found to affect patient satisfaction ($p < 0.001$) and patient compliance, either directly ($p < 0.001$) or through the intermediary of patient satisfaction ($p < 0.05$). This finding is supported by various studies, which found that reliability significantly affects patient satisfaction and patient compliance (Al-Omari & Hamid, 2022; Golshan et al., 2019; Rizal et al., 2021; Tarigan et al., 2024). This finding can be interpreted that reliable services will result in satisfied and disciplined patients following the medical rehabilitation schedule determined together. Conversely, less reliable services will result in patients who are less satisfied with the service and end up with low levels of compliance. In the preliminary survey of this study, it was found that although the administration process was easy and the consultation and therapy time provided by the Royal Prima Hospital medical rehabilitation clinic was considered sufficient by patients, the majority of patients complained that the waiting time was too long, both waiting time to receive services and waiting time for scheduling to consult with a medical rehabilitation specialist. Research by Das et al. found that long waiting times are one of the determinants of non-compliance in patients undergoing long-term therapy (Das et al., 2021). Another study also found that waiting time for appointment scheduling is significantly related to patient satisfaction and compliance with the therapy provided (Atinga et al., 2021). Previous studies in Royal Prima Hospital also found that

service reliability was the most impactful factor in determining patients' satisfaction, although the study was in the inpatient department (Siagian et al., 2025). The waiting time for consultation scheduling can be influenced by various factors such as the number of patients, the duration of consultation per patient, the number of doctors, and the frequency of clinic availability. Royal Prima Hospital's medical rehabilitation service operates six days a week (Monday to Saturday), but the physical medicine and rehabilitation specialist (Sp.KFR) is only available on Tuesdays, Thursdays, and Fridays for two to three hours. The Health Foundation's report on waiting times at National Health Service hospitals in England found that waiting times for non-emergency appointments in England can be as long as 18 weeks (The Health Foundation, 2019). One of the factors resulting in these long waiting times is the high rate of referrals from general practitioners for specialty care, similar to the situation in Indonesia (The Health Foundation, 2019). The same report also suggested that efforts to overcome the problem of long scheduling waiting times are to increase the number of staff (doctors) in services with long waiting times.

Responsiveness refers to the speed with which health facilities, both management and medical staff, respond to complaints related to the patient's illness and the services provided. This study found that the responsiveness of the Royal Prima Hospital medical rehabilitation clinic was related to patient satisfaction ($p < 0.001$) and patient compliance ($p < 0.01$), as well as affecting patient satisfaction ($p < 0.001$; OR: 10.035) and directly affecting patient compliance ($p < 0.001$; OR: 3.969). Research on health services in Syria found that the responsiveness of health facilities positively affects patient compliance and loyalty to a health institution but does not affect general patient satisfaction (Al-Omari & Hamid, 2022). Research by Lupenga et al. on physiotherapy services also found that patients felt that staff responsiveness reflected service quality and affected patient satisfaction. However, physiotherapists felt that staff responsiveness did not affect patients' perceptions of the quality of physiotherapy services (Lupenga et al., 2019).

Meanwhile, Golshan et al. found no significant influence between the responsiveness of health facilities and patient compliance in undergoing therapy (Golshan et al., 2019). The study found that one of the factors influencing patient non-adherence is the patients' overly high expectations of the services they will receive, so when these expectations are not met, there is disappointment that affects the patient's decision to follow the prescribed therapy schedule (Golshan et al., 2019). Another study in Indonesia found that health facility responsiveness was positively associated with patient adherence, where it was

found that patients who had positive perceptions of health facility responsiveness had higher adherence to therapy than patients with poorer or negative perceptions of responsiveness (Fitriarahmah et al., 2023). The responsiveness of the health facility can be related to the emotional response of the patient or patient's companion, where if the health facility has a slow or unresponsive response, the patient and/or patient's companion may feel abandoned or not considered, resulting in a sense of dissatisfaction with the services they provide and ultimately can foster reluctance to visit the health facility in the future, even though the patient has a scheduled visit (non-adherent).

Research by Al-Omari and Hamid found that the assurance quality did not affect patient adherence to the therapy plan ($p > 0.05$) (Al-Omari & Hamid, 2022). This finding contradicts the findings in this study, which found that assurance affects patient compliance, both directly ($p < 0.001$; OR: 7.225) and through the intermediary of patient satisfaction ($p < 0.005$; OR: 2.230). However, this study found other results that align with the findings of Al-Omari and Hamid: assurance or certainty directly affects patient satisfaction ($p < 0.01$) (Al-Omari & Hamid, 2022). Another study in Indonesia also supports the findings that assurance was significantly associated with patient compliance with the therapy provided (Fitriarahmah et al., 2023). Research by Lupenga et al. still found differences in perceptions between patients and physiotherapists regarding the importance of guarantees shown by health facilities on patients' perceptions of the quality of services provided (Lupenga et al., 2019). This guarantee or certainty is often closely related to reliability and physical evidence owned by health facilities. This assurance is generally demonstrated by health facilities through the skills possessed by staff in answering patient questions and the ability to convince patients that health facilities have adequate capacity to help patients. At Royal Prima Hospital, the physical evidence and reliability of the medical rehabilitation clinic build patients' trust in the services provided with state-of-the-art treatment, proficient staff, and good supporting facilities. In addition, the status of Royal Prima Hospital as a class B hospital with a good brand image in Medan City also builds the perception of assurance for patients in Medan City.

Empathy is one of the most important aspects of health care. A systematic review found that empathy provides comfort and influences patient outcomes (Nembhard et al., 2023). This study found that empathy was not associated with patient satisfaction ($p > 0.05$) but still influenced medical rehabilitation patient compliance ($p < 0.001$). However, this study found that empathy was one of the factors that influenced overall patient satisfaction ($p < 0.05$; OR: 2.744) and patient compliance, both directly ($p < 0.001$; OR: 4.503)

and by influencing patient satisfaction ($p < 0.005$; OR: 2.024). In simple terms, these results suggest that patient empathy affects the satisfaction and compliance of medical rehabilitation patients. Research by Eltaher et al. found that empathy shown by health facilities was closely related to patient adherence to therapy among diabetic patients in Al-Qassim, Saudi Arabia (Eltaher et al., 2020). The study also found a negative correlation between the doctor's empathy score and non-compliance and complications in patients, meaning that the greater the doctor's empathy score, the lower the non-compliance and complication rate in patients (Eltaher et al., 2020). Another study also found that empathy affects patient compliance and positively impacts patient mortality (reducing up to 50% in diabetic patients), reducing symptomatic burden, increasing patient independence, increasing patient safety, increasing self-efficacy, and reducing burnout in staff (Howick et al., 2020). In medical rehabilitation services, complaints felt or experienced by patients can vary, ranging from pain and limited movement to limited function. In the therapy process, complaints such as pain are often felt by patients. The ability of the therapist (physiotherapist, speech therapist, occupational therapist) to empathize with the patient's condition, both before, during, and after undergoing therapy greatly influences the patient's perception of the therapist's concern for him, thus building the patient's emotional bond with the therapist. This emotional bond will ultimately affect the patient's compliance with the existing therapy plan. This can be seen from the tendency of patients to choose certain therapists when undergoing therapy at a medical rehabilitation clinic, due to positive emotional perceptions. This is supported by the findings of Al-Omari and Hamid who found that although empathy does not affect patient satisfaction and loyalty to a health facility ($p > 0.05$), empathy has a significant effect on patient compliance ($p < 0.05$) (Al-Omari & Hamid, 2022).

Medical rehabilitation services are vital in modern medicine as they aim to restore physiological function and minimize patient disability. Due to medical rehabilitation services that emphasize exercise, patient compliance with the therapy schedule is very influential on the success of therapy, namely the return of function and minimal or no disability (Della Villa et al., 2020; Reed et al., 2021; Rucinski et al., 2019). Patient adherence in medical rehabilitation can include adherence to the healthcare facility's therapy schedule and patient adherence to the self-directed exercise regimen at home. Both aspects of adherence contribute to the success of the patient's therapy. Patient adherence to the therapy schedule at the healthcare facility allows therapists and physicians to evaluate the success of the therapeutic modalities used.

In contrast, adherence to self-directed exercises at home increases patient independence and speeds up therapy. Research by Rucinski et al. found that patients who adhered to the medical rehabilitation plan after osteochondral or meniscal allograft transplantation had a 7.5 times greater chance of ultimate success than patients who were less or not adherent (Rucinski et al., 2019). These findings indicate that adherence to the medical rehabilitation program planned with therapists and doctors is important in producing good outcomes.

Conclusion

Based on the findings in this study, good service quality greatly influences patients' satisfaction and, in turn, influences patients' adherence to the rehabilitation plan. It is highly encouraged for the Medical Rehabilitation Unit to ensure high-quality service by reducing waiting time and improving service reliability. Both of these aspects can be improved by adding more physical therapist and adding more consultation hours in the unit.

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