

## Research Article

# Analysis of Patient Satisfaction Levels According to the SERVQUAL Method on Post-Stroke Services at the Physiotherapy Clinic Muhammadiyah University Hospital Malang

Sri Sunaringsih Ika Wardoyo\*, Rakhmad Rosadi

Physiotherapy Department Faculty of Health Science, University of Muhammadiyah Malang, Indonesia

**ORCID**Sri Sunaringsih Ika Wardoyo: <https://orcid.org/0000-0002-7321-0506>**Abstract.**

One of the primary services at the physiotherapy clinic of UMM Hospital is post-stroke rehabilitation. The hospital is fully equipped with the infrastructure that supports these services, including the availability of static cycles, IR, and diathermy. Post-stroke rehabilitation services have been conducted since June 2013, however, since the establishment of the clinic, levels of patient satisfaction have not been evaluated. Assessment of client satisfaction is important because, in the future, the clinic will be a place of reference for physiotherapy students about post-stroke rehabilitation and providing excellent service to clients. This study used the SERVQUAL (Service Quality) method which involves the assessment of the aspects of tangibility, reliability, responsiveness, assurance, and empathy, to assess the level of patient satisfaction with different services. The study was conducted on all patients who come to the clinic between March and May 2015. The sample size was 20 patients. We identified the patient's expectations and perception of clinic physiotherapy at the clinic and compared it to the results of the SERVQUAL performance assessment. Based on the results of the study, it was found that the majority of respondents were unsatisfied with the services at the physiotherapy clinic, due to the limitations of the physiotherapists' abilities, long waiting times for services, and lack of on-call physiotherapists. In addition, there are patient complaints about the lack of equipment at the clinic. However, patients were very satisfied with the safety and comfort of the therapy services, this is influenced by the abilities of qualified physiotherapists who are able to resolve complaints. We suggest that the clinic needs to increase the number of physiotherapists in this clinic, and it is necessary to make updates to the existing physiotherapy equipment.

**Keywords:** Service quality, physiotherapy, strokeCorresponding Author: Sri Sunaringsih Ika Wardoyo; email: [srisunaringsihika@gmail.com](mailto:srisunaringsihika@gmail.com)**Published** 23 June 2023

Publishing services provided by Knowledge E

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Selection and Peer-review under the responsibility of the HSIC Conference Committee.

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## 1. Introduction

Currently in Indonesia the development of science is happening very rapidly. It also encourages the development of health sciences, especially regarding the science of physiotherapy services, which emphasizes more on services in the field of medical rehabilitation. This development is also accompanied by an increase in customer demand for professional health services. In June 2013, the University of Muhammadiyah Malang has operated the UMM Hospital which has a vision to provide Islamic and professional health services. There are various health services in this hospital, one of which is physiotherapy services. Some cases of physical rehabilitation that can be handled in this clinic include therapy for patients with post-stroke conditions, cerebral palsy sufferers, and post-accident patient mobilization exercises. Post-stroke rehabilitation services are the flagship service in this clinic, this is due to the complete equipment that supports this service, and the number of patients served in this clinic is post-stroke rehabilitation, with an estimated 10 patient visits per month since June 2013.

On the other hand, patient satisfaction with a type of health service is important to note, because according to (1) consumer satisfaction with a health service is very decisive for the sustainability of a type of health service, where if patient satisfaction is high with a health services, the continuity of these health services can last a long time, and vice versa.

During the year of operation of the Physiotherapy Clinic at UMM Hospital, it is very necessary to conduct a study to determine patient satisfaction with existing services, because this is related to the development of this clinic as a place for physiotherapy students to learn about post-stroke rehabilitation services and service excellence to clients.

Measuring the quality of service (services) is different from measuring the quality of tangible goods. According to (2) measuring service quality is a challenge because satisfaction is influenced by many intangible things. One method of assessing the level of patient satisfaction is to use the SERVQUAL (Service Quality) method which includes aspects of: tangible, reliability, responsiveness, assurance, empathy. This method is the right method to assess the level of patient satisfaction with health services, because it is an effective measuring tool for consumer satisfaction surveys because it includes dimensions of service quality (3).

Based on the explanation above, this research proposal will conduct an analytical study to determine the level of patient satisfaction according to the SERVQUAL method for post-stroke rehabilitation services at the physiotherapy clinic physiotherapy of UMM

Hospital. Thus, this study aimed at analyzing the level of patient satisfaction with post-stroke rehabilitation services at the physiotherapy clinic at UMM Hospital by using the service quality (SERVQUAL) method which includes an assessment of the tangible, reliability, responsiveness, assurance, and empathy aspects

## 2. Methods

This is a cross-sectional study which recruited 20 physiotherapy patients in Physiotherapy clinic in RS UMM during March to May 2019. Measurements used is a patient satisfaction questionnaire based on the service quality (SERVQUAL) method, where the level of patient satisfaction will be assessed according to aspects of tangible, reliability, responsiveness, assurance, and empathy, with a total of 22 questions that will be given to each patient after receiving services at the physiotherapy clinic at UMM Hospital. The number of questions for each dimension is also the same, namely four questions for the tangible dimension, five questions for the reliability dimension, four questions for the responsiveness dimension, five questions for the assurance dimension, and five questions for the empathy dimension. The 22 questions will then be evaluated by calculating the value/score for each question. These values are then added together to obtain the sum of the values of the five dimensions. This value is then used as a deduction from the perception value, to find out the gaps that occur in each dimension. While, the procedure for this study were identifying clinic physiotherapy patients at UMM Hospital based on data from medical records, Conducting interviews and filling out questionnaires on patients related to satisfaction with the services provided by the SERVQUAL evaluation method, and perform a descriptive analysis of the level of patient satisfaction with services at the Physiotherapy Clinic at UMM Hospital based on tangible, reliability, responsiveness, assurance and empathy aspects.

### *Research Procedures*

After identifying patients at the physiotherapy clinic at UMM Hospital based on their medical record, then it followed with recruiting patients and conducting interviews and filling out questionnaires related to satisfaction with the services provided using the SERVQUAL evaluation method. Thus, it continued with conducting descriptive analysis of the level of patient satisfaction with services at the Physiotherapy clinic UMM Hospital based on the aspects of tangible, reliability, responsiveness, assurance and empathy.

### 3. Results

#### Patients Characteristics

TABLE 1: Sociodemographics of Patients Characteristics.

Variables	n	Percentage (%)
<b>Sex</b>		
Male	15	75
Female	5	25
<b>Age (years-old)</b>		
<30 years-old	18	90
>30 years-old	2	10
<b>Educational Level</b>		
Elementary school	2	10
Junior High School	2	10
Senior High School	7	35
University	9	45
Total	20	100

Based on information from table 1, it is stated that the majority of patients at the physiotherapy clinic at UMM Hospital Physiotherapy during the period March-May 2015 were male (90%), aged more than 30 years as much as 90%, and had the last level of education was tertiary education 45%.

#### *Characteristics of Patients satisfaction level*

Based on the results of assessing the level of patient satisfaction with services in the physiotherapy clinic using the SERVQUAL method, it is known that there were 23.84% of respondents who were satisfied with the services in the physiotherapy clinic, with the highest satisfaction item related to the feeling of safety and comfort felt by patients when doing therapy here.

However, there were 47.1% of respondents who stated that they were not satisfied with the services at the physiotherapy polyclinic, especially related to the response of respondents who felt that physiotherapists were too busy and unable to accommodate the health needs of the patients they were handling. Meanwhile, the remaining 29.06% of respondents felt that the expectations they had for services at this poly were in accordance with what they got after getting services at this physiotherapy clinic.

TABLE 2: Patients Satisfaction level based on Servqual Assessment.

Items	SERVQUAL aspects	Average expected value	Average performance value	Tingkat Kepuasan (Performance-Harapan)	
Physiotherapy clinic has good and complete equipment for post-stroke rehabilitation	TANGIBLE	7	6	-1	
Physiotherapy clinic has good facility		6,5	6,5	0	
Material and facility of physiotherapy clinic has good quality		7	7	0	
Physiotherapist has good performance	RELIABILITY	6	5	-1	
Physiotherapy clinic has good medical record database		6,5	6,5	0	
Physiotherapist has reliable services		7	7	0	
If patients has complained, physiotherapist has shown empathy		7	6	-1	
Physiotherapy service has ontime services		6	5,5	-0,5	
Physiotherapists are always willing to help patients		RESPONSIVENESS	5	4	-1
Physiotherapists provide responsive services to patients			4,5	3	-1,5
The physiotherapist informs the patient exactly when the service will be delivered	7		6	-1	
Physiotherapists are never too busy to respond to patient requests for services	6,6		4	-2,6	
The behavior of the physiotherapist makes the patient assured them	ASSURANCE	6	7	1	
Patients feel safe when doing post-stroke rehabilitation at the physiotherapy clinic UMM Hospital		5	7	2	
Physiotherapists are always polite		5,5	6,5	1	
Physiotherapists have the knowledge to be able to always answer patient questions		5	6	1	
The UMM Hospital gave individual attention to all of their patients	EMPHATY	3	4	1	
Physiotherapist at UMM Hospital always pays attention to the patient's interests		7	7	0	
Physiotherapist at UMM Hospital has health workers who give personal attention to patients		6	7	1	
Physiotherapist at UMM Hospital has an appropriate and comfortable operating time for all patients		5	4	-1	
Physiotherapists understand the special needs of patients		5	4,5	-0,5	

## 4. Discussions

Based on the results of the study, it is known that the percentage of respondents who are not satisfied with the services at the physiotherapy clinic is still quite high compared to respondents who are satisfied with the existing services. The existing patient complaints are mainly related to the very limited number of physiotherapist human resources (2 people) so this has an impact on the lack of ability of physiotherapists to be able to accommodate and meet patient expectations, especially related to their health development, long waiting time for services, as well as on-call physiotherapists. In addition, there are patient complaints about the incomplete equipment in this physiotherapy clinic. On the other hand, patients are very satisfied with the guarantee of the safety and comfort of the therapy services obtained at this place, this is influenced by the abilities possessed by qualified physiotherapists so that they are able to resolve complaints that are felt well(4).

According to (3,5) expectation is belief, prior individual belief about what should happen in certain situations. This illustrates that expectations play a role in forming consumer perceptions. Consumer expectations can influence the interpretation of stimuli. According to (1,6) in the context of product quality (goods and services) and consumer satisfaction, there is a kind of consensus that customer expectations have an important role as a standard of comparison in evaluating quality and satisfaction. Pre-consumption expectations indicate the extent to which consumers' expectations of the performance of a product. Likewise with patient expectations, which indicate the extent to which health services are expected to receive. The formation of expectations in consumers is influenced by various factors. (7,8) revealed that there are 10 determinants that affect expectations. The ten determinants are (i) enduring service intensifiers, this factor is a stable factor and encourages consumers to increase their sensitivity to service; (ii) personal needs, these factors include physical, social, and psychological needs; (iii) transitory service intensifiers, these factors are temporary individual factors that increase consumer sensitivity to services; (iv) perceived service alternatives, which are customer perceptions of the service level of other similar companies; (v) self-perceived alternatives, this factor reflects consumers' perceptions of their involvement in influencing the services they receive; (vi) situational factors, consisting of all possibilities that can affect service performance, which are beyond the control of the service provider; (vii) explicit services promises, which are statements or promises by the organization regarding its services to consumers; (viii) implicit service promises, this factor concerns service-related instructions, which provide conclusions or descriptions

for consumers about what kind of service they should and will receive; (ix) word of mouth, which is a statement delivered by someone other than a service provider to consumers, and (x) past experiences, which are past experiences, including things that have been learned or known by consumers from what they have received in the past.

Thus, based on these results, to improve services in the physiotherapy clinic at UMM Hospital, it is necessary to make efforts to add physiotherapy resources and add facilities and equipment in this poly, so that it is hoped that it will improve the quality of service excellence and be able to increase patient satisfaction.

## 5. Conclusion

Based on the results of the study, it can be concluded that the majority of respondents still felt dissatisfaction with the services in the physiotherapy poly, namely 47.1%, while 23.08% of the respondents who felt satisfied, while the rest felt even with the results of the services in the physiotherapy poly of UMM Hospital. Respondents who felt dissatisfaction were mainly influenced by the limitations of existing physiotherapists and available equipment, so that this affected the lack of accommodation for patients' needs for physiotherapy services. On the other hand, patients are very satisfied with the guarantee of the safety and comfort of the therapy services obtained at this place, this is influenced by the abilities of qualified physiotherapists so that they are able to resolve complaints that are felt well. Thus, the next steps that need to be taken by the management of UMM Hospital to improve the quality of service at the Physiotherapy polyclinic of UMM Hospital include adding physiotherapist staff and procuring the latest physiotherapy health equipment.

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