

Delivery of Public- Funded Physical Therapy Services in Geographically Isolated and Disadvantaged Areas: The Case of Culion Municipality in the Island Province of Palawan

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Abstract— This study assessed the delivery of public-funded physical therapy services in the Island Province of Palawan, particularly among patients residing in Geographically Isolated and Disadvantaged Areas (GIDAs). Specifically, it examined patients' perceptions of service quality using the SERVQUAL dimensions of tangibility, reliability, responsiveness, assurance, and empathy, as well as the challenges encountered in receiving rehabilitation services. A quantitative correlational research design was employed involving 80 patients undergoing physical therapy services at Culion Sanitarium and General Hospital during the last quarter of 2025. Data were gathered using a structured SERVQUAL-based questionnaire and analyzed using descriptive statistics and Chi-square tests. Findings revealed that all SERVQUAL dimensions obtained very high ratings, indicating that respondents perceived physical therapy services as highly satisfactory, compassionate, responsive, professional, and dependable despite the geographical limitations commonly experienced in GIDAs. Respondents also reported minimal challenges related to accessibility, service efficiency, patient support, and the adequacy of facilities and equipment, suggesting effective service delivery and operational management within the hospital. Significant relationships were identified between perceived service quality and selected challenges encountered by patients, particularly in terms of patient support and the adequacy of facilities and equipment. The study concluded that public-funded physical therapy services provided by Culion Sanitarium and General Hospital are effective, patient-centered, and responsive to the rehabilitation needs of individuals living in geographically isolated communities. It is recommended that the hospital improve rehabilitation facilities, upgrade physical therapy equipment, and strengthen patient support systems, while continuously maintaining patient-centered care to sustain and further enhance the quality and accessibility of services in GIDA communities.

Keywords— Public-funded physical therapy, SERVQUAL, rehabilitation services, service quality, Geographically Isolated and Disadvantaged Areas (GIDAs), patient satisfaction, Palawan.

INTRODUCTION

In the healthcare industry, increasing costs are not always matched by improvements in service quality, and many healthcare systems continue to struggle in consistently meeting acceptable standards of care. Health care quality is commonly evaluated through the structure, process, and outcome framework, emphasizing its multidimensional nature as it has a pivotal role of service quality in shaping patient experiences and influencing healthcare outcomes (Zehra et al. 2025). As a result, service quality has become a critical factor in achieving organizational efficiency, cost effectiveness, and improved patient

outcomes (Irfan et al., 2014). Thus, Service quality in healthcare is commonly assessed using the SERVQUAL model developed by Parasuraman et al. (1988), which measures the gap between patient expectations and perceptions across five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. This model provides a structured approach for evaluating service delivery and identifying gaps in healthcare services (Andaleeb et al., 2001).

In the healthcare setting, physical therapy plays a vital role in rehabilitation, functional recovery, and improvement of quality of life, as it significantly

supports recovery, functional improvement, and safe return to sport in patients with orthopedic injuries (Ullah et al. 2025). Therefore, it is vital for physical therapists to also support patient education and discharge preparation, which are critical to recovery outcomes (Iqbal et al., 2019). However, literature shows that physical therapy service quality is strongly influenced by SERVQUAL dimensions, particularly responsiveness and tangibles, which affect patient perceptions of care (Aziz et al. 2021). In the Philippine context, particularly in Palawan, studies specifically examining patient-perceived physical therapy service quality using the SERVQUAL framework remain limited. While physical therapy services are available in public hospitals, there is insufficient empirical evidence on how patients evaluate service quality across SERVQUAL dimensions and experience service-related challenges in local hospital settings such as Culion Sanitarium and General Hospital.

Therefore, this study aims to assess patient perceptions of physical therapy service quality in Culion Sanitarium and General Hospital using the SERVQUAL model. It also seeks to determine the level of perceived service quality across its five dimensions and identify gaps and challenges in service delivery within the selected hospital setting.

Statement of the Problem

This study aims to analyze the service quality delivery of public-funded physical therapy services in Culion Sanitarium and General Hospital. Specifically, it seeks to assess patients' perceptions regarding the quality-of-service delivery of public-funded physical therapy services using the SERVQUAL model. Thus, this study aims to answer the following research questions:

1. What are the demographic profiles of respondents in terms:
 - 1.1 Age
 - 1.2 Gender
 - 1.3 Marital Status
 - 1.4 Municipality or Residence
 - 1.5 Number of Physical Therapy Services Attended
 - 1.6 Type of Physical Condition or Injury Treated

2. What is the level of patient perception of the service quality delivery of public-funded physical therapy services in Culion Sanitarium and General Hospital in terms:

- 2.1 Tangibility
- 2.2 Reliability
- 2.3 Responsiveness
- 2.4 Assurance
- 2.5 Empathy

2. What are the challenges encountered by patients of public-funded physical therapy services in Culion Sanitarium and General Hospital In terms of:

- 2.3 Lack of Access
- 2.4 Inefficient Service Delivery
- 2.5 Limited Patient Support
- 2.6 Lack of Equipment and Facilities

3. Is there a significant relationship between patients' level of perception of service quality delivery of public-funded physical therapy services based on the SERVQUAL model and their demographic profiles?

4. Is there a significant relationship between patients' level of perception of service quality delivery of public-funded physical therapy services based on the SERVQUAL model and the challenges they encountered?

METHODOLOGY

Research Design

This study employed a correlational research design to examine the relationship between patients' perceptions of service quality delivery at Culion Sanitarium and General Hospital using the SERVQUAL dimensions as the evaluation framework. Correlational research design, according to Putri et al. (2025), It is a methodological approach that aims to identify and analyze the relationship between two or more variables without manipulation. Likewise, this design was considered appropriate for the study because it allowed the researchers to examine the association between patients' perceptions of service quality based on the SERVQUAL dimensions and patients' demographic profile and challenges encountered in accessing physical therapy services without manipulating the existing hospital environment.

Locale of the Study

This study was conducted at Culion Sanitarium and General Hospital, located in Culion, Palawan. Specifically it was conducted at Physical Therapy Department. The selection of Culion Sanitarium and General Hospital as the study locale was based on several considerations, including the hospital catered to a considerable number of patients who availed themselves of publicly funded physical therapy services as well as the presence of an established Physical Therapy Department provided a relevant context for assessing healthcare service quality using the SERVQUAL dimensions and finally the researcher was affiliated with the institution.

Population and Sample of the Study

The population of this study consisted of patients receiving physical therapy services at Culion Sanitarium and General Hospital located in Culion. In particular, in the hospital's Physical Medicine and Rehabilitation Unit. It includes patients who were currently undergoing or had recently undergone physical therapy services during the data collection period. The study utilized purposive sampling, a non-probability sampling technique in which participants are intentionally selected based on specific characteristics relevant to the objectives of the study which includes: (1) twenty (20) years old and above; (2) attended at least two (2) physical therapy sessions; (3) received physical therapy services within last two months; (4) must diagnosed with physical condition; and finally (5) willing to participate. The exclusion criteria include: (1) patients with congenital or cognitive dysfunctions; and finally (2) not willing to participate. Hence, the sample size of the study consisted of eighty (80) respondents.

Research Instruments

The instrument used for data collection in this study was an adapted survey questionnaire designed to measure patients' perceptions of physical therapy services through using SERVQUAL model developed by Parasuraman et al. (1988) assessing service quality through five dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy. Hence, for the purposes of this study, the original SERVQUAL instrument, which consists of 22 items,

was adapted and adjusted to align with the context of the study and its specific objectives, particularly in relation to physical therapy services. The adapted instrument comprised five dimensions, each containing four statements, resulting in a total of 20 items that assessed patients' perceptions of service quality delivery.

The questionnaire was structured into three main parts. The first part focused on the demographic profile of the respondents. The second part measured patients' perceptions of physical therapy services provided by Culion Sanitarium and General Hospital using the five SERVQUAL dimensions, namely tangibility, reliability, responsiveness, assurance, and empathy, where respondents indicated their level of agreement using a five-point Likert scale ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). The third part examined the challenges encountered by patients in availing physical therapy services, including limited access to services, inefficiencies in service delivery, insufficient patient support, and lack of equipment and facilities, also measured using the same 5-point Likert scale.

Data Collection Procedure

The researcher secured approval and clearance from the Research Ethics Committee (REC). Thereafter, a letter of intent and a formal request letter were prepared and addressed to the authorities of the Medical Center Chief Office of Culion Sanitarium and General Hospital seeking permission to conduct the study. Upon approval, the researcher coordinated with department personnel to facilitate the data collection process and identify patients who met the inclusion criteria of the study. Potential respondents were informed about the purpose and nature of the research and were invited to participate voluntarily. Before answering the questionnaire, respondents were provided with an informed consent form explaining the objectives of the study.

The data were collected using a structured questionnaire based on the SERVQUAL dimensions, distributed online through Google Forms and printed form within the hospital. the data collection process took place from the third week of April 2026 until the

last week of April 2026. Upon completion of data collection, all responses from both online and printed questionnaires were compiled, organized, and tabulated.

Statistical Design

For the respondents' demographic variables, descriptive statistics, such as frequency and percentage, were used to determine the distribution of respondents by age, gender, marital status, municipality of residence, number of physical therapy sessions attended, and the type of physical condition or injury being treated. Likewise, in assessing patients' perceptions of the delivery of physical therapy services at Culion Sanitarium and General Hospital using the SERVQUAL model, the researcher used a five-point Likert scale ranging from strongly agree to strongly disagree. Besides, descriptive statistics, such as the weighted mean and standard deviation, were used to determine the average responses of the

respondents and the variability of their perceptions, with corresponding verbal interpretations for each computed mean. The same statistical measures were also used to identify the challenges patients faced in accessing physical therapy services in the hospital.

Pearson's correlation was used as an inferential statistical tool to determine the relationships among patients' perceptions, the challenges encountered, and the perceived quality of physical therapy service delivery at Culion Sanitarium and General Hospital through using Statistical Package for the Social Sciences (SPSS) version 26.0.

RESULTS AND DISCUSSION

Demographic Profiles of Respondents

1. Age.

The table below shows the age distribution of respondents.

Table 4.1 Frequency of Respondents according to Age (n=80)

Age Bracket	Frequency	Percentage (%)
41 above	63	78.8
36-40	8	10.1
31-35	4	5.0
20-25	3	3.8
26-30	2	2.5
Total	80	100

The table above shows the distribution of respondents by age. Hence, the findings revealed that the highest frequency was among respondents aged 41 years and above (63 respondents, 79%), followed by participants aged 36-40 years (8 respondents, 10%). Nonetheless,

least represented group was respondents aged 26 to 30, with 2 respondents (2.5%). Moreover, the findings imply that most of the patients availing public-funded physical therapy services in Culion Sanitarium and General Hospital are middle-aged and older adults.

2. Gender

Table 4.2 Frequency of Respondents according to Gender (n=80)

Gender	Frequency	Percentage (%)
Female	50	62.5
Male	30	37.5
Total	80	100

The table above shows the distribution of respondents by age. Nonetheless, the numerical findings revealed that of the 80 respondents, 50 (62.5%) were female, while 30 (37.5%) were male. The findings indicate that

female respondents comprised the majority of the participants in the study.

The findings are supported by the study of Mohan et al. (2025), which emphasized that women generally exhibit higher healthcare utilization rate and health

seeking behavior owing to increased health awareness to achieve equitable healthcare utilization.

3. Marital Status

Table 4.3 Frequency of Respondents according to Marital Status(n=80)

Marital Status	Frequency	Percentage (%)
Married	46	57.4
Single	17	21.3
Widowed	17	21.3
Total	80	100

Among the 80 respondents, 46 or 57.5% were married, while 17 or 21.3% were single, and another 17 or 21.3% were widowed. The findings reveal that the majority of respondents were married, suggesting that

many participants may have family-related responsibilities and experiences that could influence their perspectives and responses in the study.

4. Barangay

Table 4.4 Frequency of Respondents according to Barangay in Culion, Palawan (n=80)

Barangay	Frequency	Percentage (%)
Osmena	20	25.0
Tiza	17	21.3
Libis	16	20.0
Jardin	12	15.0
Balala	8	10.0
Culang	3	3.8
Baldat	1	1.3
Galoc	1	1.3
Halsey	1	1.3
Binudac	1	1.3
Total	80	100

Table 4.4 presents the frequency and percentage distribution of respondents by barangay in Culion, Palawan. Among the 79 respondents, the largest number came from Osmena with 20 respondents (25.3%), followed by Tiza with 17 respondents (21.5%) and Libis with 16 respondents (20.2%). Meanwhile, Jardin accounted for 12 respondents

(15.1%), Balala had 8 respondents (10.1%), and Culang had 3 respondents (3.7%). The barangays of Baldat, Galoc, and Halsey each recorded 1 respondent or 1.2%. Findings revealed that the majority of respondents concentrated on Osmena, Tiza, and Libis, suggesting that these barangays had greater participation in the study than other areas.

5. Number of Physical Therapy Sessions Attended

Table 4.5 Frequency of Respondents according to the Number of Physical Therapy Sessions Attended (n=80)

No. of Therapy Sessions	Frequency	Percentage (%)
10 and above	45	56.3

1-3	15	18.8
4-6	13	16.3
7-9	7	8.8
Total	80	100

The findings revealed that the majority, comprising 45 (56.3%), attended 10 or more therapy sessions. This was followed by 15 respondents (18.8%) who attended 1–3 sessions, 13 respondents (16.3%) who attended 4–6 sessions, and 7 respondents (8.8%) who attended 7–9 sessions. Moreover, the general findings revealed that most respondents had long-term engagement with physical therapy services indicating a repeated use of rehabilitation interventions emphasizing that public-

funded physical therapy services in Cullion Sanitarium and General Hospital are primarily utilized not for one-time treatment but for extended rehabilitation management. Similar study revealed by Wang et al. (2022), emphasized that physical therapy is most effective when delivered as a continuous, progressive intervention, particularly for patients with chronic conditions requiring long-term rehabilitation.

6. Type of Injury Treated

Table 4.6 Frequency of Respondents according to the Type of Physical Condition or Injury Treated

Type of Injury	Frequency	Percentage (%)
Musculoskeletal Injury	32	40.0
Others	13	16.3
Orthopedic	11	13.8
Neurological Injury	10	12.5
Arthritic	10	12.5
Post Surgery Rehabilitation	4	5.0
Total	80	100

Among the 80 respondents, musculoskeletal injury was the most common condition, with 32 respondents or 40.0%. This was followed by other conditions with 13 respondents or 16.3%, orthopedic conditions with 11 respondents or 13.8% of total population. Likewise, Post-surgery rehabilitation recorded the lowest

frequency with 4 respondents or 5.0%. The findings indicate that musculoskeletal injuries were the primary reason for seeking physical therapy services among the respondents which reveals that the conditions affecting muscles, bones, and joints are among the most prevalent concerns in the study area.

Level of Perception of Service Quality Delivery of Physical Therapy Services in CSGH

1. Tangibility

Table 4.7 Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Cullion Sanitarium and General Hospital in terms of Tangibility

Statements	Mean	Descriptive Interpretation
The physical therapy facilities are clean and well-maintained.	4.86	Very High
Physical therapy equipment is adequate and in good condition.	4.77	Very High
Physical therapists maintain a neat and professional appearance.	4.95	Very High
The therapy area is comfortable for treatment.	4.82	Very High
Total Mean	4.85	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

The table above shows the level of patient perceptions of the delivery of physical therapy services in terms of tangibility. Hence, numerical findings indicated that physical therapists maintain a neat and professional appearance had the highest mean of 4.95, interpreted as very high satisfaction and perception, followed by the cleanliness and proper maintenance of facilities (M=4.86) and the comfort of the therapy area (M=4.82). Meanwhile, the adequacy and good condition of equipment received the lowest mean score of 4.77, though this is still interpreted as very high satisfaction and perceptions. Overall findings revealed that respondents perceive the tangibility

2. Reliability

Table 4.8 Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Reliability

Statements	Mean	Descriptive Interpretation
Physical therapy sessions are conducted as scheduled.	4.90	Very High
Physical therapists provide treatment accurately and consistently.	4.92	Very High
Physical therapists clearly explain therapy procedures and exercises.	4.90	Very High
Therapy services follow the planned treatment program.	4.90	Very High
Total Mean	4.90	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

With an overall mean of 4.90, interpreted as very high, indicates that respondents perceive a strong and consistent level of reliability in the delivery of physical therapy services. Majority rated physical therapists as providing treatment accurately and consistently as very high, with a mean of 4.92. Meanwhile, physical therapy sessions are conducted as scheduled, therapists clearly explain therapy procedures and exercises, and therapy services follow the planned treatment program, all of which obtained a mean of 4.90 and are interpreted as very high. Thus, the findings imply that patients have a very high level of trust in the consistency, accuracy, and dependability of physical therapy services at CSGH. To support the

3. Responsiveness

Table 4.9 Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Responsiveness

Statements	Mean	Descriptive Interpretation
Physical therapists respond promptly to patients' concerns.	4.91	Very High
Physical therapists are willing to help when assistance is needed.	4.93	Very High

aspect of service quality as having a very high positive perception and satisfaction, particularly in terms of staff physical appearance, facility cleanliness, and treatment environment, indicating positive patient perceptions of CSGH's service quality in physical therapy. To prove, Yunus et al. (2024), highlighted the importance of regularly assessing patient satisfaction and identifying areas for improvement in healthcare service quality through focusing on tangibility. Also, well-maintained facilities and professional healthcare personnel contribute to greater patient confidence and a better service experience (Mosadeghrad, 2019).

findings above, Sukmawati et al. (2024) noted that reliability in healthcare is reflected in dependable service processes, clear communication, and adherence to planned treatment programs, as important contributors to patient satisfaction, influencing their overall experience in healthcare facilities. Furthermore, Butt and Run (2010) found that reliability enhances patient trust and compliance in rehabilitation settings, particularly when services are consistently delivered and treatment plans are properly followed, findings that align with the present study's result of very high perceived reliability across all indicators.

Patients receive prompt assistance during therapy sessions.	4.93	Very High
Waiting time for therapy services is reasonable.	4.87	Very High
Total Mean	4.91	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

Moreover, based on the overall mean of 4.91, the findings indicated that respondents had a very high level of positive perception and satisfaction with the hospital's physical therapy services, particularly in terms of responsiveness, highlighting the quality of services delivered to patients. Likewise, the distribution of mean scores shows that the highest ratings were observed for the willingness of physical therapists to help when assistance is needed and for prompt assistance received during therapy sessions, both with a mean of 4.93, indicating very high levels. This was followed by the prompt response of therapists to patients' concerns (M = 4.91, very high) and the reasonableness of waiting time for therapy services (M = 4.87, very high). Thus, the findings indicate that patients receive efficient, timely, and

attentive service delivery, with physical therapists perceived as highly responsive to patient needs and concerns. This reflects effective patient-centered care at CSGH, where immediate assistance, minimal delays, and proactive support contribute to higher satisfaction and a better service experience in their rehabilitation services. To prove, the study of Hidayat et al. (2025), greater attentiveness and quicker responses from healthcare providers lead to higher patient satisfaction and positive patient perceptions.

4. Assurance

The table below shows the level of patient-perceived service quality for the delivered physical therapy services in terms of assurance dimensions.

Table 4.10 Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Assurance

Statements	Mean	Descriptive Interpretation
Physical therapists demonstrate professional knowledge and competence.	4.93	Very High
Patients feel safe during therapy sessions.	4.88	Very High
Physical therapists treat patients with courtesy and respect.	4.97	Very High
Physical therapists can answer patients' questions about treatment.	4.91	Very High
Total Mean	4.92	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

The overall mean was 4.92, indicating very high and positive perceptions and satisfaction, and indicating the effectiveness and competent qualities of the hospital's physical therapy in the provision of physical therapy services to its patients. Likewise, considering the mean distribution, the highest mean was identified in the context of respondents who perceived that physical therapists treat patients with courtesy and respect (M=4.97) at a very high level, demonstrate professional knowledge and competence (M=4.93), are able to answer patients' questions about treatment

(M=4.91), and make patients feel safe during therapy sessions (M=4.88). Therefore, these results reflect a consistently strong perception of assurance across all indicators, particularly in terms of professional behavior, communication competence, and patient safety. Overall findings revealed that patients have a very high level of trust and confidence in physical therapists' abilities and professionalism. As per Aldarmaki et al. (2025), indicated that admission, staff behavior, and responsiveness significantly impact patient satisfaction and positive perception directly.

5. Empathy

Table 4.11 Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Empathy

Statements	Mean	Descriptive Interpretation
Physical therapists give individual attention to patients.	4.95	Very High
Physical therapists understand the specific needs of patients.	4.95	Very High
Physical therapists show genuine concern for patients' recovery.	4.92	Very High
Physical therapists encourage and motivate patients during therapy.	4.90	Very High
Total Mean	4.93	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

Based on the overall mean of 4.93, interpreted as very high, indicates that respondents perceive a strong level of empathy demonstrated by physical therapy service providers. Specifically, the highest ratings were given to the provision of individual attention to patients (M = 4.95) and the understanding of patients' specific needs (M = 4.95), followed by showing genuine concern for patients' recovery (M = 4.92) and encouraging and motivating patients during therapy (M = 4.90), all interpreted as very high, indicating consistently strong perception of empathetic care across all indicators, particularly in terms of

individualized attention, emotional support, and patient-centered interaction. Thus, the findings imply that patients feel personally valued, understood, and supported throughout their rehabilitation process. Such findings were relevant to the Howcroft et al. (2026) found that empathetic communication and personalized care in hospital services are strongly associated with higher patient satisfaction and improved therapeutic outcomes, reinforcing the importance of patient-centered care in physical therapy services.

6. Summary of Patients Perception of the Service Quality Delivery

Table 4.12 Summary of the Level of Patient Perception of the Service Quality Delivery of Public-Funded Physical Therapy Services in Culion Sanitarium and General Hospital Across SERVQUAL Dimensions

SERVQUAL Dimensions	Mean	Descriptive Interpretation
Tangibility	4.85	Very High
Reliability	4.90	Very High
Responsiveness	4.91	Very High
Assurance	4.92	Very High
Empathy	4.93	Very High
Total Mean	4.90	Very High

Legend: 1.00-1.80: Very Low, 1.81-2.60: Low, 2.61-3.40: Neutral, 3.41-4.20: High, 4.21-5.00: Very High

The table above presents a summary of patients' perceptions of service quality in the delivery of public-funded physical therapy services at Culion Sanitarium and General Hospital across the five SERVQUAL dimensions. Overall findings an overall mean of 4.90, interpreted as very high, indicating that patients

generally perceived the hospital's physical therapy services as highly satisfactory and effective. Among the dimensions, empathy obtained the highest mean score of 4.93, followed by assurance (M = 4.92), responsiveness (M = 4.91), reliability (M = 4.90), and tangibility (M = 4.85), all interpreted as very high.

Moreover, the consistently very high ratings across all dimensions suggest that CSGH's rehabilitation services effectively meet patient expectations, implying public-funded physical therapy services in the study setting demonstrated strong service quality performance across all SERVQUAL dimensions. Findings were supported by the study of Nguyen et al. (2021) highlighted that healthcare service quality is strongly linked to patients' overall evaluation of hospital services, emphasizing that consistency, responsiveness, and professional care contribute to favorable patient perceptions.

Challenges Encountered by Patients

1. Lack of Access

The table below shows the challenges encountered by patients receiving physical therapy services at Cullion Sanitarium and General Hospital. Moreover, the

highest mean was identified among participants who disagreed with the difficulty of accessing physical therapy services due to transportation or distance, with a mean of 2.16, followed by their strong disagreement with the difficulty and the limitations of physical therapy scheduling in the hospital, with a mean of 1.76. Additionally, respondents strongly disagreed that securing an appointment for therapy sessions is challenging (M=1.71) and that there are not enough therapy schedules available to patients (M=1.72). Thus, with a total mean of 1.83, interpreted as disagreement and pose towards respondents as not a challenge on their end, which indicates that respondents generally do not perceive lack of access as a major barrier to receiving physical therapy services, suggesting that scheduling systems, appointment availability, and service accessibility are perceived to be adequately managed by the hospital.

Table 4.13 Challenges Encountered by Patients of Public Funded Physical Therapy Services in Cullion Sanitarium and General Hospital in terms of Lack of Access

Statements	Mean	Descriptive Interpretation
It is difficult to access physical therapy services due to transportation or distance.	2.16	Disagree
Physical therapy schedules are limited or difficult to obtain.	1.76	Strongly Disagree
Securing an appointment for therapy sessions is challenging.	1.71	Strongly Disagree
There are not enough available therapy schedules for patients.	1.72	Strongly Disagree
Total Mean	1.83	Very Low Challenges

Legend: 1.00-1.80: Very Low Challenges, 1.81-2.60: Slightly Challenges, 2.61-3.40: Moderately Challenges, 3.41-4.20: High Challenges, 4.21-5.00: Extremely Challenges.

To prove, findings of Schwarz et al. (2021), found that when health systems are organized and responsive, utilization barriers decrease, resulting in improved

patient access experience, which aligns with the observed low level of perceived access challenges in this study.

2. Inefficient Service Delivery

Table 4.14 Challenges Encountered by Patients of Public Funded Physical Therapy Services in Cullion Sanitarium and General Hospital in terms of Inefficient Service Delivery

Statements	Mean	Descriptive Interpretation
Waiting time before therapy sessions is long.	1.81	Disagree
Therapy sessions sometimes start later than the scheduled time.	1.80	Strongly Disagree
There are delays in the delivery of therapy services.	1.76	Strongly Disagree
Scheduling therapy sessions is sometimes inconsistent.	1.75	Strongly Disagree

Total Mean	1.78	Very Low Challenges
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Legend: 1.00-1.80: Very Low Challenges, 1.81-2.60: Slightly Challenges, 2.61-3.40: Moderately Challenges, 3.41-4.20: High Challenges, 4.21-5.00: Extremely Challenges.

Table 4.14 presents the challenges encountered by patients receiving public-funded physical therapy services at Culion Sanitarium and General Hospital regarding inefficient service delivery. The total mean of 1.78, interpreted as strongly disagree, posed a significant challenge to respondents, indicating that they generally do not experience inefficiencies in the delivery of physical therapy services. Specifically, respondents strongly disagreed that therapy sessions sometimes start later than the scheduled time ($M = 1.80$), that there are delays in the delivery of therapy services ($M = 1.76$), and that scheduling therapy

sessions are inconsistent ($M = 1.75$). Meanwhile, they disagreed that waiting time before therapy sessions is long ($M = 1.81$). Overall, these findings imply that the physical therapy department demonstrates effective time management, organized scheduling, and consistent service delivery. Moreover, this finding is supported by Dobrzykowski et al. (2019), who emphasized that efficient healthcare service delivery is strongly associated with streamlined operational processes, effective scheduling systems, and reduced patient waiting times, all of which contribute to improved patient experience.

3. Limited Patient Support

Table 4.15 Challenges Encountered by Patients of Public Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Limited Patient Support

Statements	Mean	Descriptive Interpretation
Patients do not always receive enough guidance during therapy exercises.	1.57	Strongly Disagree
Therapy procedures are not always clearly explained to patients.	1.55	Strongly Disagree
Patients sometimes receive limited assistance during therapy sessions.	1.55	Strongly Disagree
Follow-up support from therapy staff is sometimes insufficient.	1.58	Strongly Disagree
Total Mean	1.56	Very Low Challenges

Legend: 1.00-1.80: Very Low Challenges, 1.81-2.60: Slightly Challenges, 2.61-3.40: Moderately Challenges, 3.41-4.20: High Challenges, 4.21-5.00: Extremely Challenges.

The numerical findings revealed that respondents do not experience significant limitations in the support provided by physical therapy staff. Specifically, respondents strongly disagreed that therapy procedures are not always clearly explained ($M = 1.55$) and that patients sometimes receive limited assistance during therapy sessions ($M = 1.55$). They also strongly disagreed that patients do not always receive enough guidance during therapy exercises ($M = 1.57$) and that follow-up support from therapy staff is sometimes insufficient ($M = 1.58$). Nonetheless, the findings yielded a mean of 1.56, interpreted as they experienced a very low challenges, indicating that limited patient support is not perceived as a significant challenge in the delivery of physical therapy services,

wherein it suggests that physical therapy staff consistently provide clear guidance, adequate assistance, and continuous follow-up support, contributing to a well-supported rehabilitation experience for patients. Therefore, Hwang et al. (2020) found that strong support from healthcare providers, particularly in rehabilitation settings, significantly improves patient satisfaction and treatment compliance.

4. Lack of Equipment and Facilities

The findings indicate that respondents generally do not perceive inadequate equipment and facilities as a major challenge in receiving physical therapy services. Specifically, respondents disagreed that some therapy

equipment is insufficient for patient needs (M = 2.11), that some needed equipment is unavailable (M = 2.23), and that the therapy area lacks adequate space for treatment (M = 2.23). However, respondents reported a relatively higher mean for the statement that some physical therapy facilities need improvement or upgrading (M = 2.82). Nonetheless, the findings

yielded a mean of 2.34, interpreted as disagreement and experienced a slight challenges, which significantly revealed not a challenge to the end of patients, which indicates that lack of equipment and facilities is not perceived as a significant challenge in the delivery of physical therapy services at CSGH.

Table 4.16 Challenges Encountered by Patients of Public Funded Physical Therapy Services in Culion Sanitarium and General Hospital in terms of Lack of Equipment and Facilities

Statements	Mean	Descriptive Interpretation
Physical therapy equipment is sometimes insufficient for patient needs.	2.11	Disagree
Some therapy equipment needed for treatment is unavailable.	2.23	Disagree
The physical therapy area sometimes lacks adequate space for treatment.	2.23	Disagree
Some therapy facilities need improvement or upgrading.	2.82	Disagree
Total Mean	2.34	Slightly Challenges

Legend: 1.00-1.80: Very Low Challenges, 1.81-2.60: Slightly Challenges, 2.61-3.40: Moderately Challenges, 3.41-4.20: High Challenges, 4.21-5.00: Extremely Challenges.

Furthermore, Dunsch et al. (2019) found that improvements in healthcare facility conditions and

equipment availability significantly influence patient satisfaction and perceived quality of care.

5. Summary of Challenges Encountered by Patients

Table 4.17 Summary of Challenges Encountered by Respondents

Dimension of Challenges	Grand Mean	Interpretation
Lack of Access	1.83	Not a Significant Challenge
Inefficient Service Delivery	1.78	Not a Significant Challenge
Limited Patient Support	1.56	Not a Significant Challenge
Lack of Equipment and Facilities	2.34	Not a Challenge
Overall Mean	1.88	Not a Significant Challenge

Legend: 1.00-1.80: Very Low Challenges, 1.81-2.60: Slightly Challenges, 2.61-3.40: Moderately Challenges, 3.41-4.20: High Challenges, 4.21-5.00: Extremely Challenges.

The results reveal that all identified dimensions obtained mean scores are interpreted as not a significant challenge, indicating that respondents generally do not experience major barriers in access, service delivery, patient support, or the availability of equipment and facilities. the findings are similar to those of Gulliford et al. (2019), who emphasized that effective healthcare access is characterized by minimal

barriers to scheduling, service availability, and ease of utilization, leading to improved patient experience and service patient perceptions.

Relationship between Patients' Level of Perception of Service Quality and Delivery of Public-Funded Physical Therapy Services Based on the SERVQUAL Model and their Demographic Profiles

Table 4.18 Relationship between Tangibility and Demographic Profile

Demographic Profile	Chi Square Value	df	p-value	Interpretation
20-25 years old	90.834	24	<0.001**	Significant
Gender	7.893	6	0.246	Not Significant
Marital Status	0.13.685	12	0.321	Not Significant
Barangay Osmena	140.409	96	0.002*	Significant
No. of Physical Therapy Sessions Attended	23.755	18	0.163	Not Significant
Type of Physical Condition or Injury Treated	21.842	36	0.970	Not Significant

Legend: p-value <0.05: Significant*

Table 4.16 presents the relationship between tangibility and the respondents' demographic profile. The results revealed significant relationships between tangibility and age ($\chi^2 = 90.834$, $p < 0.001$) and barangay ($\chi^2 = 140.409$, $p = 0.002$), indicating that patients' perceptions of the physical aspects of service quality vary according to age group and place of residence, likely due to differences in access, exposure to healthcare services, and expectations. In contrast,

gender ($p = 0.246$), marital status ($p = 0.321$), number of physical therapy sessions attended ($p = 0.163$), and type of physical condition or injury treated ($p = 0.970$) showed no significant relationship with tangibility, implying that these factors do not influence perceptions of the physical environment and facilities, and that evaluations of tangible service quality remain generally consistent across these groups.

Table 4.19 Relationship between Reliability and Demographic Profile

Demographic Profile	Chi-Square Value	df	p-value	Interpretation
Age	7.680	16	0.958	Not Significant
Gender	0.770	4	0.942	Not Significant
Marital Status	4.368	8	0.823	Not Significant
Barangay Osmena	95.444	64	0.007*	Significant
No. of Physical Therapy Sessions Attended	11.737	12	0.467	Not Significant
Type of Physical Condition or Injury Treated	10.935	24	0.989	Not Significant

Legend: p-value <0.05: Significant*

Table 4.19 presents the relationship between reliability and respondents' demographic profiles. The results indicate that barangay ($\chi^2 = 95.444$, $p = 0.007$) is significantly related to reliability, suggesting that respondents' perceptions of the consistency, accuracy, and dependability of physical therapy services vary by barangay. This may imply that differences in access to healthcare services, exposure to rehabilitation care,

and local service experience across barangays influence how patients evaluate service consistency, treatment accuracy, and adherence to scheduled therapy programs. In contrast, age ($p = 0.958$), gender ($p = 0.942$), marital status ($p = 0.823$), number of physical therapy sessions attended ($p = 0.467$), and type of physical condition or injury treated ($p = 0.989$) showed no significant relationships with reliability.

Table 4.20 Relationship between Responsiveness and Demographic Profile

Demographic Profile	Chi-Square Value	df	p-value	Interpretation
Age	8.700	20	0.986	Not Significant
Gender	6.325	5	0.276	Not Significant
Marital Status	4.692	10	0.911	Not Significant

Barangay	122.419	80	0.002*	Significant
No. of Physical Therapy Sessions Attended	17.209	15	0.307	Not Significant
Type of Physical Condition or Injury Treated	14.840	30	0.991	Not Significant

Legend: p-value <0.05: Significant*

Table 4.20 presents the relationship between responsiveness and respondents' demographic profiles. The results show that barangay ($\chi^2 = 122.419$, $p = 0.002$) has a significant relationship with responsiveness, indicating that patients' perceptions of promptness, willingness to assist, and timeliness of physical therapy services vary depending on their place of residence, likely due to differences in accessibility, proximity to the facility, and community-based service experiences. In contrast, age ($p = 0.986$), gender ($p = 0.276$), marital status ($p = 0.911$), number of physical therapy sessions attended

($p = 0.307$), and type of physical condition or injury treated ($p = 0.991$) showed no significant relationships with responsiveness, suggesting that responsiveness is generally perceived consistently across most demographic groups. Hence, findings imply that while the physical therapy unit generally delivers prompt and patient-centered services across different patient categories, disparities in geographical accessibility and community location may still influence how patients evaluate the timeliness and availability of care.

Table 4.21 Relationship between Assurance and Demographic Profile

Demographic Profile	Chi-Square Value	df	p-value	Interpretation
Age	10.352	20	0.961	Not Significant
Gender	6.490	5	0.261	Not Significant
Marital Status	5.891	10	0.824	Not Significant
Barangay	98.817	80	0.078	Not Significant
10 and above Physical Therapy Sessions Attended	25.261	15	0.047*	Significant
Type of Physical Condition or Injury Treated	16.690	30	0.976	Not Significant

The results indicate that the number of physical therapy sessions attended ($\chi^2 = 25.261$, $p = 0.047$) is significantly related to assurance, suggesting that patients' confidence in the competence, professionalism, and safety provided by physical therapists varies with their level of exposure to therapy sessions. This implies that repeated interaction with

physical therapy services may strengthen patients' trust, perceived competence of therapists, and sense of safety during treatment. In contrast, age ($p = 0.961$), gender ($p = 0.261$), marital status ($p = 0.824$), barangay ($p = 0.078$), and type of physical condition or injury treated ($p = 0.976$) showed no significant relationships with assurance.

Table 4.22 Relationship between Empathy and Demographic Profile

Demographic Profile	Chi-Square Value	df	p-value	Interpretation
Age	22.696	20	0.304	Not Significant
Gender	5.867	5	0.319	Not Significant
Marital Status	14.70	10	0.143	Not Significant
Barangay	181.799	80	<0.001**	Significant
No. of Physical Therapy Sessions Attended	13.282	15	0.581	Not Significant
Type of Physical Condition or Injury Treated	24.800	30	0.735	Not Significant

Legend: p-value <0.05: Significant*

The findings reveal that barangay ($\chi^2 = 181.799$, $p < 0.001$) is significantly related to empathy indicating that contextual and community-based factors such as accessibility, local healthcare experiences, and patient-provider interaction patterns may influence how empathy is perceived in publicly funded physical

therapy services. In contrast, age ($p = 0.304$), gender ($p = 0.319$), marital status ($p = 0.143$), number of physical therapy sessions attended ($p = 0.581$), and type of physical condition or injury treated ($p = 0.735$) showed no significant relationships with empathy.

Relationship Between Patient’s Level of Perception of Service Quality and Delivery of Public-Funded Physical Therapy Services Based on the SERVQUAL Model and the Challenges Encountered

Table 4.23 Pearson Correlation of Patients’ Level of Perception of Service Quality Delivery and the Challenges Encountered in terms of Lack of Access

Service Quality	Pearson’s r value	p-value	Interpretation	Degree of Correlation
Tangibility	-.260	0.020*	Significant	Weak Correlation
Reliability	-.271	0.015*	Significant	Weak Correlation
Responsiveness	-.243	0.030*	Significant	Weak Correlation
Assurance	-.193	0.087	Not Significant	Very Weak Correlation
Empathy	-.214	0.056	Not Significant	Weak Correlation

Legend: p-value <0.05: Significant,

Table 4.23 presents the Pearson correlation between patients’ perceptions of service quality delivery and the challenges encountered due to a lack of access. The results show that tangibility ($r = -0.260$, $p = 0.020$), reliability ($r = -0.271$, $p = 0.015$), and responsiveness ($r = -0.243$, $p = 0.030$) have significant but weak negative correlations with lack of access. This leads to the rejection of the null hypothesis for these variables, indicating that access-related challenges are

significantly associated with patients’ perceptions of physical, dependable, and prompt service quality. The negative relationship further implies that as access-related challenges decrease, patients’ perceptions of these service quality dimensions improve slightly. In contrast, assurance ($p = 0.087$) and empathy ($p = 0.056$) showed no significant relationships with lack of access; thus, the null hypothesis is accepted for these variables.

Table 4.24 Pearson Correlation of Patients’ Level of Perception of Service Quality Delivery and the Challenges Encountered in terms of Inefficient Service Delivery

Service Quality	Pearson’s r value	p-value	Interpretation	Degree of Correlation
Tangibility	-.274	0.014*	Significant	Weak Correlation
Reliability	-.323	0.004*	Significant	Weak Correlation
Responsiveness	-.306	0.006*	Significant	Weak Correlation
Assurance	-.190	0.091	Not Significant	Very Weak Correlation
Empathy	-.167	0.139	Not Significant	Very Weak Correlation

Legend: p-value <0.05: Significant

The results indicate that tangibility ($r = -0.274$, $p = 0.014$), reliability ($r = -0.323$, $p = 0.004$), and responsiveness ($r = -0.306$, $p = 0.006$) have significant but weak negative correlations with inefficient service delivery. This leads to the rejection of the null

hypothesis for these variables, implying that service delivery inefficiencies are significantly associated with patients’ evaluations of the physical environment, service dependability, and promptness of care. Meanwhile, assurance ($p = 0.091$) and empathy ($p =$

0.139) showed no significant relationships with inefficient service delivery; hence, the null hypothesis is accepted for these variables

Table 4.25 Pearson Correlation of Patients Level of Perception of Service Quality Delivery and the Challenges Encountered in terms of Limited Patient Support

Service Quality	Pearson's r value	p-value	Interpretation	Degree of Correlation
Tangibility	-.350	0.001*	Significant	Weak Correlation
Reliability	-.417	<.001**	Significant	Moderate Correlation
Responsiveness	-.405	<.001**	Significant	Moderate Correlation
Assurance	-.318	0.004*	Significant	Weak Correlation
Empathy	-.315	0.004*	Significant	Weak Correlation

Legend: p-value <0.05: Significant

The results reveal that all SERVQUAL dimensions have significant negative correlations with limited patient support, namely tangibility ($r = -0.350$, $p = 0.001$), reliability ($r = -0.417$, $p < 0.001$), responsiveness ($r = -0.405$, $p < 0.001$), assurance ($r = -0.318$, $p = 0.004$), and empathy ($r = -0.315$, $p = 0.004$), leading to the rejection of all null hypotheses and indicating that limited patient support is significantly associated with patients' perceptions across all dimensions of service quality. Likewise, the findings were relevant to the study of Yunus et al. (2024), likewise found that strong patient support is significantly associated with improved perceptions of healthcare service quality across all dimensions, reinforcing the importance of comprehensive support

systems in achieving high-quality patient-centered care. Nonetheless, the table below presents the Pearson correlation between patients' perceptions of service quality delivery and the challenges encountered due to a lack of equipment and facilities. Therefore, The results reveal that all SERVQUAL dimensions have significant negative correlations with lack of equipment and facilities, namely tangibility ($r = -0.365$, $p < 0.001$), reliability ($r = -0.375$, $p < 0.001$), responsiveness ($r = -0.360$, $p = 0.001$), assurance ($r = -0.236$, $p = 0.035$), and empathy ($r = -0.266$, $p = 0.017$), leading to the rejection of all null hypotheses and indicating that deficiencies in equipment and facilities are significantly associated with lower perceptions across all dimensions of service quality.

Table 4.26 Pearson Correlation of Patients' Level of Perception of Service Quality Delivery and the Challenges Encountered in terms of Lack of Equipment and Facilities

Service Quality	Pearson's r value	p-value	Interpretation	Degree of Correlation
Tangibility	-.365	<.001**	Significant	Weak Correlation
Reliability	-.375	<.001**	Significant	Weak Correlation
Responsiveness	-.360	0.001*	Significant	Weak Correlation
Assurance	-.236	0.035*	Significant	Weak Correlation
Empathy	-.266	0.017*	Significant	Weak Correlation

Legend: p-value <0.05: Significant

Thus, findings emphasize the importance of having adequate quality facilities and equipment's in providing hospital-related services towards patients. Hence, the study of Labiba et al. (2025), confirmed that better facilities and optimal service quality lead to higher satisfaction levels, emphasizing the need for

hospital management to prioritize these areas in delivering patient-centered care.

CONCLUSION

This study on the Delivery of Public-Funded Physical Therapy Services in the Island Province of Palawan,

particularly in Geographically Isolated and Disadvantaged Areas (GIDAs), found that the hospital's physical therapy services are highly effective, patient-focused, and responsive to the rehabilitation needs of people living in remote communities. The results showed that respondents consistently reported very high satisfaction across all SERVQUAL dimensions, especially in empathy, assurance, responsiveness, reliability, and tangibility. These findings suggest that physical therapy services are perceived as professional, accessible, compassionate, and reliable, despite the geographical challenges commonly encountered in GIDA areas. The study also found that the hospital has maintained efficient service delivery and operational systems that reduce the usual barriers encountered in remote healthcare settings. Respondents reported only minimal challenges in accessibility, service efficiency, patient support, and facility adequacy, indicating that most patients experience smooth, satisfactory rehabilitation services. This reflects the institution's effective healthcare practices and support systems, which encourage the continuous use of physical therapy services among patients in the province.

In addition, the findings revealed that demographic factors, such as age, barangay, and frequency of therapy sessions, may affect certain perceptions of service quality, although overall responses remained generally consistent across participants. This indicates that the publicly funded physical therapy services are largely equitable and inclusive for patients from different communities and backgrounds across the province. The study further confirmed that perceived service quality is significantly associated with patients' challenges, particularly regarding patient support and the adequacy of equipment and facilities. Although these challenges were considered minimally significant, their connection to service quality emphasizes the need to continuously improve healthcare resources, modernize rehabilitation facilities, and strengthen patient motivation and support systems to maintain high-quality service delivery.

Overall, the study highlights that public-funded physical therapy services in the Island Province of

Palawan play an important role in addressing the healthcare needs of people living in Geographically Isolated and Disadvantaged Areas. Despite logistical and geographical limitations, the hospital has remained committed to providing high-quality rehabilitation services that promote equitable healthcare, patient well-being, and inclusive public health. Continued investment in rehabilitation infrastructure, updated equipment, and patient-centered care approaches is recommended to further improve the quality and long-term sustainability of physical therapy services in GIDA communities.

RECOMMENDATIONS

Based on the summary of findings and conclusions, the recommendations of the study are hereby provided.

To Cullion Sanitarium and General Hospital

The researcher recommends that the hospital continue strengthening its public-funded physical therapy services by maintaining high-quality, patient-centered, and accessible rehabilitation care consistent with the very high SERVQUAL ratings obtained in the study. The researcher also recommends prioritizing the improvement of rehabilitation facilities, upgrading of physical therapy equipment, and ensuring adequate resources to address the identified relationship between service quality and lack of equipment and facilities. Continuous monitoring of patient satisfaction and service quality is further recommended to sustain efficient service delivery and support ongoing quality improvement.

To Physical Therapists

The researcher recommends that physical therapists continue sustaining the very high level of service quality reflected in all SERVQUAL dimensions by maintaining compassionate, responsive, and patient-centered care.

Continuous professional development and engagement in evidence-based practice are recommended to further enhance clinical competence. Strengthening communication and patient education is also recommended to improve patient engagement and support consistent rehabilitation outcomes.

To Patients Receiving Physical Therapy Services

The researcher recommends that patients actively participate in their rehabilitation by attending therapy sessions regularly, following prescribed treatment plans, and complying with therapist instructions. Continued cooperation and open communication with physical therapists are also recommended to support effective and consistent rehabilitation outcomes.

To Healthcare Administrators and Policymakers

The researcher recommends that healthcare administrators and policymakers continue supporting publicly funded physical therapy services, particularly in Geographically Isolated and Disadvantaged Areas (GIDAs), by addressing infrastructure and equipment-related gaps identified in the study. Strengthening rehabilitation facilities, ensuring availability of adequate resources, and sustaining equitable access to services are recommended to maintain high service quality and improve healthcare delivery in underserved communities.

To Future Researchers

The researcher recommends that future researchers conduct similar studies with larger samples and wider geographic coverage to further validate and strengthen the generalizability of the findings. The researcher also recommends exploring additional variables that may influence service quality and patient perceptions. Furthermore, the use of triangulation methods combining quantitative, qualitative, and observational approaches is recommended to reduce bias and provide a more comprehensive understanding of service quality in physical therapy settings, particularly in GIDA communities.

REFERENCES

- [1] Zehra, S., et al. (2025). Service quality in healthcare: understanding the relationship between patient experience and healthcare outcomes. <https://doi.org/10.1108/IJHCQA-09-2024-0090>
- [2] Irfan, S. (2014). IDENTIFICATION OF CRITICAL SUCCESS FACTORS OF TQM IMPLEMENTATION IN HEALTH CARE SECTOR OF PAKISTAN USING PARETO ANALYSIS APPROACH. *Science International*. 26(5), pp. 2603-2141
- [3] Parasuraman, A., et al. (1988). SERVQUAL: A multiple- Item Scale for measuring consumer perceptions of service quality. *Journal of Retailing*. 4(7), pp. 32-65.
- [4] Andaleeb, S., et al. (2001). Service quality perceptions and patient satisfaction: A study of hospitals in a developing country. [https://doi.org/10.1016/S0277-9536\(00\)00235-5](https://doi.org/10.1016/S0277-9536(00)00235-5)
- [5] Ullah, S., et al. (2025). Analyzing the Role of Physical Therapy in Recovery From Sport-Related Orthopedic Injuries. <https://doi.org/10.7759/cureus.88613>
- [6] Aziz, S., et al. (2021). Assessment of Service Quality of public Physical therapy practice based on SERVQUAL model. <https://doi.org/10.54393/tt.v2i1.23>
- [7] Putri, L., et al. (2025). CORRELATIONAL RESEARCH DESIGN. <https://doi.org/10.71282/jurmie.v2i6.456>
- [8] Mohan, D., et al. (2025). Gender differences in health-seeking behaviour: insights from the National Health and Morbidity Survey 2019. <https://doi.org/10.1186/s12913-025-13020-0>
- [9] Wang, Y., et al. (2025). Utilization of rehabilitation services among older adults with physical disabilities: the interactive influence of regional development and socioeconomic position. <https://doi.org/10.3389/fpubh.2025.1535229>
- [10] Yunus, N., et al. (2024). The Impact of Healthcare Service Quality on Patient Satisfaction at University Health Center. [https://doi.org/10.22610/imbr.v16i3\(I\)S.4072](https://doi.org/10.22610/imbr.v16i3(I)S.4072)
- [11] Mosadeghrad, A. (2019). Factors Affecting Medical Service Quality. *Iran Journal of Public Health*. 43(2), pp. 210-220.
- [12] Sukmawati, T., et al. (2024). Enhancing Patient Satisfaction by Healthcare Service Providers: A Systematic Literature Review. <https://doi.org/10.9734/ajeba/2024/v24i121613>
- [13] Butt, M. & Run, E. (2010). Private healthcare quality: applying a SERVQUAL model. <https://doi.org/10.1108/09526861011071580>
- [14] Hidayat, D., et al. (2025). The Impact of Responsiveness on Patient Satisfaction: Ensuring Healthy Lives and Well-Being Through

- Sustainable Development Goal 3.
<https://doi.org/10.46456/jisdep.v6i1.640>
- [15] Aldarmaki, A., et al. (2025). Influential Dimensions of Healthcare Service Quality on Patient Satisfaction in Public Hospitals of Abu Dhabi, UAE.
<https://doi.org/10.5296/ijssr.v13i3.23318>
- [16] Howcroft, A., et al. (2025). AI chatbots versus human healthcare professionals: a systematic review and meta-analysis of empathy in patient care. <https://doi.org/10.1093/bmb/ldaf017>
- [17] Nguyen, N., et al. (2021). Impact of Service Quality on In-Patients' Satisfaction, Perceived Value, and Customer Loyalty: A Mixed-Methods Study from a Developing Country. <https://doi.org/10.2147/PPA.S333586>
- [18] Schwarz, T., et al. (2021). Barriers to Accessing Health Care for People with Chronic Conditions: A Qualitative Study. <https://doi.org/10.21203/rs.3.rs-959131/v1>
- [19] Dobrzykowski, D. (2019). Understanding the Downstream Healthcare Supply Chain: Unpacking Regulatory and Industry Characteristics. <https://doi.org/10.2139/ssrn.3351961>
- [20] Hwang, M., et al. (2020). Effectiveness of a digital health coaching self-management program for older adults living alone with multiple chronic conditions: a randomized controlled trial. <https://doi.org/10.1016/j.gerinurse.2025.103509>
- [21] Dunsch, F., et al. (2022). Management, supervision, and healthcare: A field experiment. <https://doi.org/10.1111/jems.12471>
- [22] Gulliford, M., et al. (2022). What does 'access to health care' mean?. <https://doi.org/10.1258/135581902760082517>