

# LEVEL OF SATISFACTION AMONG THE PATIENTS RECEIVING PHYSICAL THERAPY SERVICES IN GOVERNMENT AND PRIVATE HOSPITALS OF PESHAWAR: A CROSS-SECTIONAL STUDY

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Abstract

## Keywords

Level of satisfaction, Physical therapy services, patient satisfaction.

## Article History

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Copyright @Author Corresponding Author: \* Sheza Babar, Naveera Razak \*<sup>1</sup>ShezaC202@gmail.com, \*<sup>2</sup>naveerarazak@gmail.com **Background:** Physical therapists face huge challenges due to competitive marketplace situation. Patient satisfaction may also recognize the probability of treatment compliance. Patients are more satisfied if the physical therapy service is in their approach (in terms of location, parking, and clinic hours), number of sessions, care during the treatment, communication with the patients, treatment outcome and involves helpful administrative staff, and provided all the facilities which is necessary.

**Objective**: To determine the level of satisfaction among patients receiving physical therapy services in government and private hospitals of Peshawar.

To compare the level of satisfaction of physical therapy services in government and private hospitals of Peshawar.

**Methodology:** The data on level of satisfaction among the patients receiving physical therapy services have been collected by researchers in government and private hospitals of Peshawar and was collected from the Bibi Zahida Memorial Hospital (BZMH) (private), City Hospital (Government) Maqsood Medical Complex General Hospital (MMCGH) (private), Hayatabad Medical Complex (HMC) (Government). For the data collection researchers used standard based questionnaire. Data was analyzed through SPSS version 25.0. **Results:** In this study the data was collected from 2 government hospitals and 2 private hospitals. Out of 214 participants, 96(44.9%) were from government hospitals and 118(55.1%) were from private hospitals the result shows high level of satisfaction in private than government hospital.

**Conclusion:** A descriptive study was undertaken to access the patient satisfaction with physical therapy services in government and private hospitals of Peshawar. Overall result shows that most of the patients reported high level of satisfaction with the various domains of the physiotherapy services assessed in private hospitals as compared to the government hospitals in Peshawar.

# INTRODUCTION

Physical therapists face huge challenges due to competitive marketplace situation. Although some physicians tend to decrease referrals to physical therapy, other professionals, make their services well to increase the satisfaction for future patients(1). With increases in marketplace struggle, patient satisfaction has appeared as a changeable of critical importance. In other words, patient satisfaction may also recognize the probability of treatment compliance(1, 2). Unhappy patients may share negative feedback, harming the provider's reputation, while satisfied patients are more likely to return for care and follow treatment plans (2). Patient satisfaction is a multidimensional phenomenon which includes the following factors:(3) Physical therapy related factors, patient related factors, socio cultural values, and environmental related factors(4). Patient satisfaction is often higher in acute conditions than in chronic ones (5), possibly because those with acute conditions are more hopeful about their outcome(6). Other variables which increase the level of satisfaction are: treatment frequency(5), appropriate follow-up(7), adequate duration(8), continuity of care(9), mode of treatment and patient involvement in decision making(10).

Higher satisfaction is stated when the treatment process is more consultative(11). Low satisfaction may be linked to long wait times, poor communication, uncomfortable facilities, and lack of trust in the therapist (12). Patients are more satisfied when physical therapy is accessible through convenient location, parking, clinic hours, number of sessions, quality care, good communication, positive outcomes(13-15) and involves helpful administrative staff, and provided all the facilities which is necessary(16). However, patients were more satisfied in a private clinic than in a government hospital, possibly because of higher quality resources in private clinics, particularly, the therapist time(17). Patient satisfaction may also enhance through well-being, guidance and follow up(18). In physical therapy, patient-therapist interaction is often stronger than in other healthcare fields due to the treatment's nature, which involves multiple sessions that directly affect patient satisfaction(6,19-21). Usually multidimensional questionnaire is used to measure the satisfaction level(6,19). Patient satisfaction is a key



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measure of physical therapy quality, highlighting the need for more research on satisfaction with services in the capital city (22). Satisfaction of patient along with care is a concept reflecting the individual overall experience of receiving investigation and cure in a environment during a particular period of time(23). Satisfaction of patient continues to obtain attention as the measure of effect of physical therapy intervention. For the health care providers quality of care continues to be chief concern and also for the health services research it is a main focus(24).

Physical therapy treatment is given in a specialized physical therapy center, to generate, regain, maintain the peoples functional mobility(25) and it involves the direct or indirect access of the patients for the therapy and the therapy session is based upon(26) examination, functional diagnosis, treatment plan, execution of intervention and estimation of patient condition result(24, 25). Clients response is important because it is used to improve the treatment services and to overcome the deficiency of treatment procedure(9).Patients who are receiving benefits from their treatment are reporting higher satisfaction(19, 20).

Recently as the prevailing theory or perception of evidence based practice there has been a rising interest in patient satisfaction measurement in health care research, demonstrating a move in the direction of patient care(26). In Pakistan previously in physical therapy no such studies have been conducted. While the Chartered Society of Physiotherapy(CSP, UK) has included patient feedback questionnaires in their Core Standards of practice(27). Although, no particular methodology, for the satisfaction measurement is suggested over another, many studies practice self-reported questionnaire(28), which are less time consuming, less costly and have fewer potential bias towards false high scores than interviewer administered questionnaire(29). There is varied opinion or view or belief in the literature concerning whether or not level of satisfaction are a reflection of quality of healthcare(29), but the consensus is that the satisfaction of patient is reflective of the perception of quality of healthcare received by the patient(30, 31). The importance of satisfaction of the patient is further highlighted by evidence that the patients which are satisfied are more likely to follow the treatment,

benefit from their healthcare and have a better quality of life(32, 33). Therefore, this study aimed to estimate the level of satisfaction among the patients receiving physical therapy services in government and private hospitals of Peshawar, Pakistan to fulfill the gap of literature to some extent. This study will also be a source for the professional bodies and association to improve the ways of treatment to increase the level of satisfaction.

## METHODS AND MATERIALS:

Study design was analytical cross-sectional study, it was conducted at government and private hospitals of Peshawar and data was collected at Bibi Zahida memorial hospital (BZMH), City hospital, Maqsood Medical Complex General Hospital (MMCGH) (private), Hayatabad Medical Complex (HMC) (Government). The sample size was 214 participants with confidence interval at 95%. The sample size was calculated using sample size calculator i.e Raosoft. Sampling technique used was convenient sampling. The study was completed within six months after approval of proposal by research committee of National College of Science (NCS). The inclusion criteria for this study were as follows: Patients of age 18 and above, both the male and female patients and

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those patients, available at the time of data collection and were willing to participate in the study while excluding patients below 18 years of age and those who were not willing to participate in the study. Data was collected using a standardized questionnaire with two sections, completed through interviews: Section 1 covered demographic information, and Section 2 focused on patient satisfaction. The data was analyzed using SPSS version 25. The participants answered according to their treatment. Many of the patients were satisfied from their physical therapy services in both government and private hospitals.

## **RESULTS:**

In this study the data was collected from 2 government hospitals and 2 private hospitals. Out of 214 participants, 96(44.9%) were from government hospitals and 118(55.1%) were from private hospitals the result shows that high level of satisfaction in private than government hospital.

# SECTION 1: DEMOGRAPHIC CHARACTERISTICS:

It includes age ranges and gender of participants (Table-1).

Variables	Categories	Frequency	Percentage
Age Range	18-30 years	59	27.6
	30-40 years	45	21.0
	40-50 years	57	26.6
	50-60 years	39	18.2
	Above 60 years	14	6.5
Gender	Male	97	45.3
	Female	117	54.7

## Table-1 : Demographic characteristics of the participants

# SECTION 2: PATIENT SATISFACTION WITH PHYSICAL THERAPY SERVICES:

It includes all the important questions about the patient satisfaction of physical therapy services (Table-2).

Out of 214 participants 66.8% of participants were agree that physiotherapists were good about explaining the reason for their physiotherapy. 68.7% participants agreed that physiotherapists had material and equipment used for physiotherapy. 56.1% participants agreed that physiotherapists always made them feel that their diagnosis was correct. 66.8% participants agreed that physiotherapists were thorough in my treatment and examination. 57.0% participants agreed that they had easy access to the physiotherapists when they need their feedback. 52.8% participants agreed that physiotherapists treated them in a very friendly and courteous manner. 52.3% participants agreed that physiotherapists always took their time when they treated them. 57.9% participants agreed that physiotherapists always acknowledged what they told them about their



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condition. 57% participants agreed that they have no doubt about the abilities of physiotherapists who treated them. 52.3% participants agreed that physiotherapists who treated them were very respectful. 54.7% participants agreed that the environment of hospitals was comfortable and they were able to say everything that was important. 52.8% participants agreed that due to their level satisfaction they compliant naturally. 51.9% participants agreed that they were satisfied with physiotherapy care they received. 50.9% participants agreed that they were fully compliant with the physiotherapy treatment.

## Table-2: Patient Satisfaction with Physical therapy services

	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
	N(%)	N(%)	N(%)	N(%)	N(%)
Physiotherapists were good about explaining the	1(.5)	4(1.9)	20(9.3)	143(66.8)	46(21.5)
reason for my physiotherapy.					
I think the physiotherapist had materials and	1(.5)	7(3.3)	16(7.5)	147(68.7)	43(20.1)
equipment needed to complete my care.					
Physiotherapists always made me feel their diagnosis	1(.5)	6(2.8)	28(13.1)	120(56.1)	59(27.6)
was correct.					
The physiotherapists were thorough in treating and	1(.5)	6(2.8)	25(11.7)	120(56.1)	62(29.0)
examining me.					
I had easy access to the physiotherapists I needed	1(.5)	9(4.2)	29(13.6)	122(57.0)	53(24.8)
regarding feedback on my physiotherapy procedures.					
My physiotherapists treated me in a very friendly and	1(.5)	8(3.7)	7(3.3)	113(52.8)	85(39.7)
courteous manner.					
Those who provided my physiotherapy care always	2(.9)	6(2.8)	11(5.1)	112(52.3)	83(38.8)
took their time when they treated me.					
The physiotherapists always acknowledged what I told	0	5(2.3)	22(10.3)	124(57.9)	63(29.4)
them.					
I had no doubts about the ability of the	2(.9)	6(2.8)	16(7.5)	122(57.0)	68(31.8)
physiotherapists who treated me.					
The physiotherapists who treated me gave me respect.	0	7(3.3)	8(3.7)	112(52.3)	87(40.7)
During my physiotherapy I was allowed to say	3(1.4)	5(2.3)	24(11.2)	117(54.7)	65(30.4)
everything that I thought was important.					
Due to my level of satisfaction my compliance to the	4(1.9)	9(4.2)	24(11.2)	113(52.8)	64(29.9)
physiotherapy came naturally.					
I was very satisfied with the physiotherapy care I	8(3.7)	9(4.2)	16(7.5)	111(51.9)	70(32.7)
received.					
I was fully compliant with the physiotherapy	4(1.9)	13(6.1)	14(6.5)	109(50.9)	74(34.6)
treatment I received.					

# CROSSTABLES:

# 1. CORRECT DIAGNOSIS \* HOSPITALS:

Table-3 shows the cross tabulation between correct diagnosis by physiotherapists and hospitals. The results show that 48 participants out of 59 were strongly agree with the correct diagnosis in private

hospitals while 11 participants were strongly agree with the correct diagnosis in government hospitals. 60 participants out of 120 were agree with private hospitals while 60 were agree with government hospitals.



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T DIAGNOSIS * HOSPI	TALS		
	Hospitals		Total
	Government Hospital	Private Hospital	
Strongly disagree	0	1	1
Disagree	5	1	6
Uncertain	20	8	28
Agree	60	60	120
Strongly agree	11	48	59
	96	118	214
	Strongly disagree Disagree Uncertain Agree	T DIAGNOSIS * HOSPITALS Hospitals Government Hospital Strongly disagree 0 Disagree 5 Uncertain 20 Agree 60 Strongly agree 11	T DIAGNOSIS * HOSPITALS Hospitals Government Hospital Private Hospital Disagree 0 1 Disagree 5 1 Uncertain 20 8 Agree 60 60 Strongly agree 11 48

# 2. TREATMENT AND EXAMINATION\* HOSPITALS:

Table-4 shows the cross tabulation between explaining the reason by physiotherapists and hospitals. The results show that 36 participants out of 46 were strongly agree with the correct reason for physiotherapy in private hospitals while 10 participants were strongly agree with the correct reason for physiotherapy in government hospitals. 76 participants out of 140 were agree with private hospitals while 67 were agree with government hospitals.

## Table-4 TREATMENT AND EXAMINATION\* HOSPITALS

	Hospitals		
	Government Hospital	Private Hospital	Total
Strongly disagree	1	0	1
Disagree	2	5	7
Uncertain	13	3	16
Agree	74	73	147
Strongly agree	6	37	43
	96	118	214
	Disagree Uncertain Agree	Government HospitalStrongly disagree1Disagree2Uncertain13Agree74	Government HospitalPrivate HospitalStrongly disagree10Disagree25Uncertain133Agree7473Strongly agree637

## DISCUSSION:

There are many studies related to Patient's Satisfaction. The aim of the study was to find LEVEL OF SATISFACTION AMONG PATIENTS RECEIVING PHYSICAL THERAPY SERVICES IN GOVERNMENT AND PRIVATE HOSPITALS IN PESHAWAR and to identify relationship between hospitals of Peshawar (Government and Private Hospitals) with selected variables.

Very few similar studies have been done and therefore we had limited data for the comparison. In this study the data was collected from 2 government hospitals and 2 private hospitals. Out of 214 participants, 96(44.9%) were from government hospitals and 118(55.1%) were from private hospitals the result shows that high level of satisfaction in private than government hospitals, as compare it with this article which shows the same result Sheikh Jamal Hossain, et al (2012) "Quality of Care: View of Patient Satisfaction with Physiotherapy in Government and Private settings in Dhaka, Bangladesh". Patient Satisfaction with Physiotherapy is high in Private setting than that in Government setting in Dhaka(23).

In this study descriptive statistic of age ranges from 18above 60 with a mean age of 41.40, standard deviation 13.796 result shows maximum age of participants was 75 and minimum age was 19 this result shows that low satisfaction level above age 60(6.5%) but the result showed that almost same age group (35-65) people visited both the government and private physiotherapy care(23).

Age was associated with patient satisfaction. Older patients have been identified in some studies(6) as more satisfied with physiotherapy services, and authors suggested that older patients may have lesser expectations of services due to comorbidity and increased utilization of health-care services. This is in disagreement with the current study findings, as

younger patients were found to be more satisfied with physiotherapy care than older patients(34).

In this study result shows distribution of sample according to gender. The majority of participant in the sample were female 117 (54.7%) and only 97(45.3%) were male participants. In Saudi Arabia four hundred patients who received physical therapy treatment during 2017 were invited to participate in this study. A total number of 358(90%) patients completed the survey and majority (77%) of them were female (35).

In the study by Hills and Kitchen (5),females were found to be more satisfied than males and another study found males to be more satisfied. The reason for this is unclear but may be attributed to males and females judging satisfaction based on different indices, and different indices measured in different studies may explain these inconsistent results(34).

Cross tabulation between material and equipment and hospitals. The results show that 37 participants out of 43 were strongly agree with the material and equipment present in private hospitals while 6 participants were strongly agreed with the material and equipment present in government hospital. 73 participants out of 147 were agree with private hospitals while 74 were agree with government hospitals. As compare with this study, a questions was asked on satisfaction with overall quality of care: most the patients answered agree: 29(38.7%), and strongly agree: 36(48%) from government facilities and these number were 38(50.7%) and 18(24%) from private(23).

Paapa Kwesi Ampiah, et al (2018)(34) conducted research on Patient Satisfaction with Inpatient Orthopedic Physiotherapy Services at a Tertiary Hospital in Gana. A study was conducted on a sample of 120 patients who were receiving physiotherapy services Komfo Anokye Teaching Hospital (KATH) Overall satisfaction with the physiotherapy services recorded 65(54.2%) patients strongly agreeing and 50(41.7%) patients agreeing, with only 1(0.8%) patient disagreeing with it.

Other study which is in favor in this study shows Dr-Rahul Krishnan Kutty, et al (2014) (24)conducted research on "Evaluation of Patient's Satisfaction level associated factors of Physiotherapy Services in Mekelle Ortho-Physiotherapy center, North Ethiopia: A Cross-Sectional Study". Institution based cross-



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sectional study was carried out at Mekelle Orthophysiotherapy center, Tigray region, Northern Ethiopia. A structured format questionnaire was prepared which is inclusive of questions related to assess the patient's satisfaction level were listed. The collected data were entered and cleaned and analyzed in SPSS version 20 statistical software. The study suggests that the satisfactory patients are more when compared to dissatisfactory patients.

It is expected that their level of satisfaction would be high in both private and government hospitals but according to cross tabulation strongly agree participants in private hospitals were more than government hospitals. In this study we found that in private settings from the upper income group population sought physiotherapy care than the patients of government hospitals. It was because of that all the patients were receiving physiotherapy care in a big room in that setting.

## CONCLUSION:

A descriptive study was undertaken to access the patient satisfaction with physical therapy services in government and private hospitals of Peshawar. The study was conducted in sample of 214 patients. Based on the findings of the study following conclusion was drawn. Study shows that patients were satisfied with services provided in both the government and private hospitals in Peshawar. But the overall result shows that most of the patients reported high level of satisfaction with the various domains of the physiotherapy services assessed in private hospitals as compared to the government hospitals in Peshawar on the basis of materials and equipment used by the physiotherapists in the private hospitals, correct diagnosis and overall satisfaction with the physical therapy services.

## LIMITATIONS:

0 The sample size was limited to 214.

o Patients who have age below 18 years were not included.

o The study was limited to OPD.

o Participants in this study was limited due to the questionnaire-based study and those who were not interested or didn't have time did not respond.

# **RECOMMENDATIONS:**

o Sample size should be large.o Study setting should be broad.

# **REFERENCES:**

- Tennakoon T, de Zoysa P. Patient satisfaction with physiotherapy services in an Asian country: A report from Sri Lanka. Hong Kong Physiotherapy Journal. 2014;32(2):79-85.
- Gray B, Boshoff C. The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry. South African Journal of Business Management. 2004;35(4):27-37.
- Beattie P, Dowda M, Turner C, Michener L, Nelson R. Longitudinal continuity of care is associated with high patient satisfaction with physical therapy. Physical therapy. 2005;85(10):1046-52.
- Beattie PF, Nelson RM. Preserving the quality of the patient-therapist relationship: an important consideration for value-centered physical therapy care. JOSPT, Inc. JOSPT, 1033 North Fairfax Street, Suite 304, Alexandria, VA ...; 2008.
- Hills R, Kitchen S. Satisfaction with outpatient physiotherapy: a survey comparing the views of patients with acute and chronic musculoskeletal conditions. Physiotherapy theory and practice. 2007;23(1):21-36.
- Casserley-Feeney SN, Phelan M, Duffy F, Roush S, Cairns MC, Hurley DA. Patient satisfaction with private physiotherapy for musculoskeletal pain. BMC musculoskeletal disorders. 2008;9(1):50.
- Beattie P. Measurement of health outcomes in the clinical setting: applications to physiotherapy. Physiotherapy theory and Practice. 2001;17(3):173-85.
- MacDonald CA, Cox PD, Bartlett DJ. Productivity and client satisfaction: a comparison between physical therapists and studenttherapist pairs. Physiotherapy Canada. 2002;54(2):92-101.
- May SJ. Patient satisfaction with management of back pain main. Physiotherapy. 2001;87(1):4-20.



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- Stephens B, Gross DP. The influence of a continuum of care model on the rehabilitation of compensation claimants with soft tissue disorders. Spine. 2007;32(25):2898-904.
- Cooper K, Smith BH, Hancock E. Patient-centredness in physiotherapy from the perspective of the chronic low back pain patient. Physiotherapy. 2008;94(3):244-52.
- Kumari R, Idris MZ, Bhushan V, Khanna A, Agarwal M, Singh SK. Study on patient satisfaction in the government allopathic health facilities of Lucknow district, India. Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine. 2009;34(1):35.
- Hills R, Kitchen S. Satisfaction with outpatient physiotherapy: focus groups to explore the views of patients with acute and chronic musculoskeletal conditions. Physiotherapy theory and practice. 2007;23(1):1-20.
- Layzell M. Back pain management: a patient satisfaction study of services. British journal of nursing. 2001;10(12):800-7.
- Sheppard LA, Anaf S, Gordon J. Patient satisfaction with physiotherapy in the emergency department. International emergency nursing. 2010;18(4):196-202.
- Olatunji TO, Ogunlana MO, Bello MA, Omobaanu SO. Assessment of patients satisfaction with physiotherapy care. Journal of Nigeria Society of Physiotherapy. 2009;16(1):11-5.
- Torgbenu EL, Nakua EK, Kyei H, Badu E, Opoku MP. Causes, trends and severity of musculoskeletal injuries in Ghana. BMC musculoskeletal disorders. 2017;18(1):349.
- Billiter PF. Hospital health care executives' attitudes and beliefs on the impact that the Healthcare Providers and Systems survey has on service quality and hospital reimbursement. 2011.
- Hush JM, Cameron K, Mackey M. Patient satisfaction with musculoskeletal physical therapy care: a systematic review. Physical therapy. 2011;91(1):25-36.



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- Beattie PF, Pinto MB, Nelson MK, Nelson R. Patient satisfaction with outpatient physical therapy: instrument validation. Physical therapy. 2002;82(6):557-65.
- Oliveira NdFC, Costa LOP, Nelson R, Maher CG, Beattie PF, de Bie R, et al. Measurement properties of the Brazilian Portuguese version of the MedRisk instrument for measuring patient satisfaction with physical therapy care. Journal of orthopaedic & sports physical therapy. 2014;44(11):879-89.
- Machado N, Nogueira LJBJoPT. Evaluation of physical therapy service user satisfaction. 2008;12(5):401-8.
- Hossain SJ, Ferdousi J, Biswas MK, Mahfuz N, Biswas GJFMCJ. Quality of care: view of patient satisfaction with physiotherapy in government and private settings in Dhaka, Bangladesh. 2012;7(2):71-4.
- Kutty RK, Gebremichael H, Tadesse K, Negash K, Teame B, Abraha MJI. Evaluation of Patient's Satisfaction level and Associated factors of Physiotherapy Services in Mekelle Ortho-Physiotherapy Centre, North Ethiopia: A Cross Sectional Study. 2014;10.
- Gummesson E. Relationship marketing in the new economy. Journal of relationship marketing. 2002;1(1):37-57.
- Babur MN, Junaid M, Ansari M, Zubair MJIJoRS. PATIENT'S SATISFACTION IN PHYSICAL THERAPY OPD OF AL-NAFEES HOSPITAL ISLAMABAD. 2017;4(01):25-9.
- Sumner M, Mead J, ten Hove R. Audit and re-audit of the CSP core standards of physiotherapy practice. Physiotherapy. 2000;86(10):512-6.
- Crow H, Gage H, Hampson S, Hart J, Kimber A, Storey L, et al. Measurement of satisfaction with health care: Implications for practice from a systematic review of the literature. Health technology assessment. 2002.
- Hudak PL, Wright JG. The characteristics of patient satisfaction measures. Spine. 2000;25(24):3167-77.
- McCracken LM, Evon D, Karapas ET. Satisfaction with treatment for chronic pain in a specialty service: preliminary prospective results. European Journal of Pain. 2002;6(5):387-93.

- Potter M, Gordon S, Hamer P. The physiotherapy experience in private practice: the patients' perspective. Australian Journal of Physiotherapy. 2003;49(3):195-202.
- Wagner D, Bear M. Patient satisfaction with nursing care: a concept analysis within a nursing framework. Journal of advanced nursing. 2009;65(3):692-701.
- Law B, Driediger M, Hall C, Forwell L. Imagery use, perceived pain, limb functioning and satisfaction in athletic injury rehabilitation. New Zealand Journal of Physiotherapy. 2006;34(1).
- Ampiah PK, Ahenkorah J, Karikari MJJoPE. Patients' Satisfaction With Inpatient Orthopedic Physiotherapy Services at a Tertiary Hospital in Ghana. 2018:2374373518793144.
- Algudairi G, Al-Eisa ES, Alghadir AH, Iqbal ZAJBhsr. Patient satisfaction with outpatient physical therapy in Saudi Arabia. 2018;18(1):888