

# SATISFACTION LEVEL OF PATIENTS RECEIVING PHYSICAL AND REHABILITATION SERVICE IN A PUBLIC HOSPITAL

## BİR KAMU HASTANESİNDE FİZİK TEDAVİ VE REHABİLİTASYON HİZMETİ ALAN HASTALARIN MEMNUNİYET DÜZEYİ

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### ABSTRACT

**Objective:** To determine the satisfaction level of patients who applied to the outpatient clinic to receive physical therapy and rehabilitation service. **Materials and Method :** This is a descriptive observational study. It included 284 patients who applied to a public hospital to receive physical therapy and rehabilitation service on an outpatient basis between 01 September 2022 and 01 December 2022. Patients were categorized on the basis of the disease groups A, B, C, and D according to the classification of the Social Security Institution. Satisfaction level was rated according to the Patient Satisfaction Scale for Physical Therapy Outpatient Clinics (PSSPTOC) and 2 open-ended questions. **Results:** The mean age of the participants was 38.0±16.7 years. Women constituted 61.3% of the study population, and a large majority of the participants were in the disease group C (55.6%) and A (35.9%). The mean total score of the Patient Satisfaction Scale for Physical Therapy Outpatient Clinics for the entire study population was 74.70±14.55 (good satisfaction level). The mean total scale score was 71.18±13.86 for children, 75.05±14.61 for adults, and 76.73±14.77 for the elderly. The highest mean total scale score was recorded in the disease group B (81.79±9.15) and the lowest in the disease group D (71.9±17.1). No significant difference was found between the disease groups with respect to the mean total and subdimensional scale scores (p>0.05).

**Conclusion:** The satisfaction level of patients who applied to the outpatient clinic to receive physical therapy and rehabilitation service was good. Although important elements of service such as physical comfort, transportation, and hygiene caused a lower-than-expected satisfaction level, the fact that the patients attached importance to the therapy, that they would prefer the same institution again and recommend it to their relatives indicate the importance of communication for service quality.

**Key Words:** Exercise therapy, rehabilitation, patient satisfaction, outpatient

### ÖZET

**Amaç:** Ayaktan polikliniğe fizik tedavi ve rehabilitasyon hizmeti almak amacıyla başvuran hastaların memnuniyet düzeyini saptamaktır. **Materyal ve Metod:** Araştırma, gözlemsel tanımlayıcı bir çalışmadır. Bir kamu hastanesine 01 Eylül 2022 – 01 Aralık 2022 tarihleri arasında ayaktan fizik tedavi ve rehabilitasyon hizmeti almak üzere başvuran 284 hasta kayıt altına alındı. Hastaların kategorizasyonunda Sosyal Güvenlik Kurumu'nun A, B, C ve D hastalık grupları kullanıldı. Memnuniyet düzeyi, Fizik Tedavi Poliklinikleri için Hasta Memnuniyet Ölçeği ve 2 açık uçlu soru ile değerlendirildi. **Bulgular:** Katılımcıların yaş ortalaması 38,0±16,7 idi. Hastaların %61,3'ü kadın ve büyük çoğunluğu C (%55,6) ve A (%35,9) hastalık grubundaydı. Fizik tedavi poliklinikleri için tüm hastalarda memnuniyet ölçeği ortalama toplam puanı 74,70±14,55 (iyi) saptandı. Ortalama toplam ölçek puanı çocuklarda 71,18±13,86; erişkinlerde 75,05±14,61 ve yaşlılarda 76,73±14,77 bulundu. Ortalama toplam ölçek puanı en yüksek B (81,79±9,15) ve en düşük D (71,9±17,1) hastalık grubunda saptandı. Toplam ve alt boyut ölçek puan ortalamalarının hastalık grupları arasında istatistiksel olarak anlamlı fark bulunmadı (p>0.05). **Sonuç:** Ayaktan polikliniğe fizik tedavi ve rehabilitasyon hizmeti almak amacıyla başvuran hastaların memnuniyeti yüksek düzeyde saptandı. Tedavi süreci içerisinde fiziksel konfor, ulaşım ve temizlik gibi önemli unsurların beklenenden düşük memnuniyete sebep olmasına rağmen hastaların tedaviyi önemsemesi, aynı yeri tekrar tercih edecek ve yakınlarına da önerecek olması tedavi hizmeti kalitesinde iletişimin önemini göstermektedir.

**Anahtar Sözcükler:** Egzersiz tedavisi, rehabilitasyon, hasta memnuniyeti, ayaktan hasta

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## INTRODUCTION

Diagnosis, therapy, and rehabilitation services are provided in health institutions. Expectations from healthcare services and the patients' satisfaction levels with the services are related with service quality and use<sup>1</sup>. In order for healthcare services to be of high quality, it is essential to allocate and use resources in a judicious and efficient manner, to put emphasis on the principle of equality in the access of the target population to the service, to provide services in an effective manner, and to ensure the satisfaction of service recipients<sup>2,3</sup>. Patient satisfaction is the average of perceived quality, expected quality, and quality of the service<sup>4</sup>.

Patients report their satisfaction level by making a comparison between the level of quality they demand and the level of quality they perceive<sup>2</sup>. Patient satisfaction is seen by the administrators of health institutions as a main element for the continuity and progress of institutions<sup>5</sup>. From the viewpoint of healthcare personnel, patient satisfaction is an important factor that determines the success of therapy. Studies have shown that patients who are dissatisfied with healthcare service are less likely to comply with the recommendations of healthcare personnel, and primary and secondary prevention services are also adversely affected<sup>6,7</sup>.

Physical therapy and rehabilitation (PTR) is a type of healthcare service encompassing diagnosis, therapy, and rehabilitation processes, which aims to treat an individual's functional disorders resulting from a disease, accident, congenital defect, or injury, to rehabilitate the patient, and to improve his/her quality of life<sup>8</sup>. The first study that was conducted in 2000 by British Physiotherapy Association to rate physical therapy services and to determine the quality standards of service was revised and published in 2005<sup>9</sup>. Later, different scales have been developed to rate service quality and satisfaction level, and many studies have been conducted in this field so far<sup>10-12</sup>. In those studies, it was aimed to establish certain standards using the ratings by service providers and service demanders in order to increase the effectiveness and efficiency of physical therapy and rehabilitation services<sup>9,11,13</sup>.

Expectations from the treatment and rehabilitation services vary according to a patient's age, sex, educational level, sociocultural characteristics, and past experiences with healthcare services<sup>2,14</sup>. Additionally, distance of a patient from healthcare facilities, communication of individuals with healthcare professionals, perceived competence, reassuring behaviours of healthcare professionals, and patients' expectations are important variables for patient satisfaction<sup>15</sup>. Many studies to date have emphasized the importance of the communication between healthcare professionals and the patient, stressing that it's one of the main determinants of patient satisfaction. Kılıç<sup>16</sup> et al. reported that 78.10% of patients were satisfied with their physiotherapist, and 91.10% of those who were satisfied benefited therap<sup>8</sup>. In a study by Licciardone JC et al. on patients with chronic low back pain indicated that interpersonal attitudes of physicians are the most positive aspect of the patient-physician relationship (mean score, 77.6)<sup>17</sup>.

The language of communication that the service providers establish with the patient has a critical role in the therapy process. Unlike the literature, our study evaluated the communication of patients with all healthcare professionals and investigated whether they would prefer the same institution again for therapy. This study aimed to determine the satisfaction level of patients who applied to outpatient clinic to receive physical therapy and rehabilitation services. The results of the present study may help service providers make plans to improve service quality and to increase therapy compliance and adherence of patients.

## **MATERIALS AND METHOD**

This is a descriptive observational study. It enrolled 284 (51.6%) of 550 patients who applied to Mardin Training and Research Hospital between 01 September 2022 and 01 December 2022 to receive physical therapy and rehabilitation service on an outpatient basis. It was aimed to reach more than half of the patients, based on the number of patients registered in the hospital's database and coming for physical therapy for 3 months. The form and scale questions containing sociodemographic information were printed as written material. Patients who attended treatment regularly, had no communication problems, agreed to participate in the study, and the companions of patients who were unable to do so themselves were given study forms after the treatment and asked to fill them out. Except for the patients of the physiotherapist conducting the study, the form and scale documents were given directly to the patients by the physiotherapist conducting the study. Patients who did not attend therapy sessions regularly, who disrupted treatment, who had communication problems, who answered the questions in the scale incompletely, who had mental or severe physical problems, whose companions had communication problems, and who refused to participate in the study were excluded from the study. In addition, the patients of the physiotherapist who was part of the team conducting the study were excluded from the study. Patients who did not attend therapy sessions regularly, and those who refused to participate in the study were excluded. The PTR patients' medical statuses were categorized in 4 groups ranging from severe to mild as A, B, C, D according to the Health Practice Statement of Republic of Turkey Social Security Institution (the domestic reimbursement institution)<sup>18</sup>. Diseases such as hemiplegia, cerebral palsy, multiple sclerosis, and Parkinson disease were grouped in group A; diseases such as brachial plexus, amputations, asthma, and hydrocephalus in Group B; diseases such as lower and upper extremity fractures, joint subluxation, sprains, polyneuropathies in Group C; and diseases such as arthroses, juvenile arthritis, intervertebral disc disorders, and synovitis in Group D<sup>18</sup>. The study was conducted with the face-to-face interview technique after obtaining the patients' informed consent. The research team did not participate in PTR health service delivery to the participants. The sociodemographic features of the participants (age, sex, educational level, marital status, area of residence, social insurance status) were recorded on a data form. The satisfaction levels of paediatric patients, patients who were too old to answer the questions, and patients with chronic disease were

determined by asking the questions to their relatives accompanying them regularly. The research was conducted in accordance with the Declaration of Helsinki. Ethics committee approval and institutional permission were obtained prior to the start of the study (Ethics Committee; Date: 10.11.2021, No:477).

### ***2.1. Patient Satisfaction Scale for Physical Therapy Outpatient Clinics***

The scale consists of 7 subdimensions (factor) and 23 statements. All of the questions that were prepared in 5-point Likert type were expressed as a positive sentence. The answers include the choices (4) I strongly agree, (3) I agree, (2) I am not sure, (1) I disagree, and (0) I strongly disagree. In the scale, standardized scores between 0-100 are calculated for each of the factors of technical quality, communication with the physiotherapist, physical comfort, communication with the secretary, communication with the physician, accessibility, hygiene, as well as the whole scale. In the standardized scores, “0” denotes the lowest satisfaction level and “100” the highest satisfaction level. Standardized scores are calculated with the following formula: total raw score in the scale or its subfactors/possible highest score in the scale or its subfactors) x 100. Additionally, the participants were asked to answer two close-ended questions, namely “Would you prefer this institution again when necessary?” and “Would you recommend this institution to your relatives?” by selecting one of the options (2) yes; (1) no; and (0) I am not sure<sup>7</sup>. Satisfaction level was rated using the Patient Satisfaction Scale for Physical Therapy Outpatient Clinics (PSSPTOC) developed by Tüzün et al., whose validity and reliability studies have been performed in Turkey, and whose Cronbach alpha value has been found 0.88<sup>7</sup>.

### ***2.2. Statistical Analysis***

The number of patients was calculated by aiming to reach more than half of the population and based on exclusion criteria. G Power analysis could not be performed. Study data were analysed using SPSS version 21.0 statistical software package. Descriptive statistics were expressed as percentage (%) and number (n). Continuous variables were expressed as mean ( $\bar{X}$ )  $\pm$  standard deviation (SD), (min-max). Kolmogorov-Smirnov tests and graphs were used to determine whether continuous variables were normally distributed according to the number of participants in each group. The Kruskal Wallis test was used to compare the means of more than two groups because it was not suitable for normal distribution. As a result of the analysis,  $p < 0.05$  was considered to be a statistically significant difference. Mann Whitney U test with Bonferroni correction was used as a multiple analysis post-hoc test to determine which group caused this difference. As a result of the analysis, a corrected p value of  $< 0.008$  was considered statistically significant.

## RESULTS

The mean age of 284 patients participating in the study was  $38.0 \pm 16.7$  years. The mean age of the paediatric patients was  $9.3 \pm 5.1$  (min 1, max 17) years;  $39.5 \pm 11.5$  (min 18, max 64) years in the adults; and  $67.3 \pm 2.6$  (min 65, max 74) years in the elderly. The questionnaire was filled by the patient himself/herself (69.0%) and his/her attendant (31.0%). Women constituted 61.3% of the participants. It was found that 12.3% of the patients were illiterate; 22.5% were college graduates; 63.7% were married; and 76.7% were residing in urban areas. The majority of patients were in the disease group C (55.6%) and A (35.9%) (Table 1).

The mean total Patient Satisfaction Scale for Physical Therapy Outpatient Clinics score was  $74.70 \pm 14.55$  (good) in the whole study population. The mean total scale score was  $71.18 \pm 13.86$  in children;  $75.05 \pm 14.61$  in adults; and  $76.73 \pm 14.77$  in the elderly. As for the subdimensions of the scale, the mean physical comfort score was lower in the adults ( $55.29 \pm 27.34$ ) and the elderly ( $45.45 \pm 29.29$ ); hygiene score was lowest in children ( $42.14 \pm 33.91$ ); and accessibility score was lowest in patients coming from rural areas ( $45.20 \pm 29.96$ ). Group B had the highest PSSPTOC score ( $81.79 \pm 9.15$ ) and group D ( $71.9 \pm 17.1$ ) had the lowest. There was no significant difference between the disease groups regarding the total and subdimension scores ( $p > 0.008$ ) (Table 2).

Among the patients participating in the study, 70.6% of the patients who responded 'strongly disagree' to the statement 'my physiotherapist did not change during the treatment' were in group A. (Table 3).

Of the participants, 79.5% ( $n=226$ ) strongly agreed with the statement "My physiotherapist showed utmost care with my therapy" with the highest frequency, while 0.7% of them ( $n=2$ ) strongly agreed the sentences "My physiotherapist answered questions in an understandable manner" with the lowest frequency (Table 4). Of the participants, 48% ( $n=16.9$ ) strongly agreed the sentence "there are enough toilets in the therapy unit" with the lowest frequency, while 32.7% of them ( $n=93$ ) undecided the sentences "there are enough toilets in the therapy unit" with the highest frequency (Table 4).

In the study, 238 (83.8%) patients stated that they would choose Mardin Training and Research Hospital again and recommend it to their relatives, while 12 patient (4.2%) stated that they would not prefer the FTR department of Mardin Training and Research Hospital. There were 8 (2.8%) patients who did not even want to recommend it to their relatives.

**Table 1: Descriptive information**

<b>Characteristics</b>	<b>Group A</b>	<b>Group B</b>	<b>Group C</b>	<b>Group D</b>	<b>Total</b>
	<b>n(%)</b>	<b>n(%)</b>	<b>n(%)</b>	<b>n(%)</b>	<b>n(%)</b>
<b>Age group (years)</b>					
Child (1-17)	21(20.6)	2(25.0)	12(7.6)	-	35(12.3)
Adult (18-64)	70(68.6)	6(75.0)	135(85.4)	16(100.0)	227(80.0)
Elderly (65 years old or older)	11(10.8)	-	11(7.0)	-	22(7.7)
<b>Sex</b>					
Female	65(63.7)	8(100.0)	89(56.3)	12(75)	174(61.3)
Male	37(36.3)	-	69(43.7)	4(25)	110(38.7)
<b>Educational Level</b>					
Illiterate	27(26.5)	2(25)	5(3.2)	1(6,3)	35(12.3)
Primary school	27(26.5)	1(12.5)	43(27.2)	4(25)	75(26.5)
Secondary school	7(6.9)	-	20(12.7)	-	27(9.5)
High school	22(21.6)	3(37.5)	49(31)	9(56.2)	83(29.2)
College	19(18.6)	2(25)	41(25.9)	2(12.5)	64(22.5)
<b>Marital Status</b>					
Married	60(58.9)	5(62.5)	105(66.5)	11(68.6)	181(63.7)
Single	42(41.1)	3(37.5)	53(33.5)	5(31.4)	103(36.3)
<b>Area of Residence</b>					
Urban	70(68.6)	4(50)	133(84.2)	11(68.8)	218(76.7)
Rural	32(31.4)	4(50)	25(15.8)	5(31.2)	66(23.3)
<b>Total*</b>	<b>102(35.9)</b>	<b>8(2.8)</b>	<b>158(55.7)</b>	<b>16(5.6)</b>	<b>284(100.0)</b>

**Table 2: Mean total and subdimension Patient Satisfaction Scale for Physical Therapy Outpatient Clinics scores by patient group**

<b>Subdimension / Patient Groups</b>	<b>Group A X ±SD</b>	<b>Group B X ±SD</b>	<b>Group C X ±SD</b>	<b>Group D X ±SD</b>	<b>p*</b>
Technical quality	85.1±14.9	87.5±12.5	88.1±14.3	88.1±11.8	n.s.
Communication with the Physiotherapist	86.9±14.0	90.6±10.5	90.7±12.9	83.2±17.0	>0.008
Physical Comfort	54.9±27.3	62.5±26.3	52.9±28.7	45.8±24.7	n.s.
Communication with the Secretary	78.3±18.5	92.7±10.3	80.6±23.4	81.7±12.6	>0.008
Communication with the Physician	85.0±17.8	95.8±8.90	81.8±25.2	72.4±24.8	n.s.
Accessibility	53.1±28.5	71.8±22.6	54.0±28.2	53.6±29.8	n.s.
Hygiene	58.8±31.8	56.2±25.0	56.3±35.8	60.1±40.3	n.s.
<b>Total Scale Score</b>	<b>74.1±12.9</b>	<b>81.8±9.15</b>	<b>74.9±15.4</b>	<b>71.9±17.1</b>	<b>n.s.</b>

**Table 3: Satisfaction between disease groups according to Physiotherapist Change During Treatment Sessions**

<b>Disease Groups</b>	<b>Phys did not change throughout the treatment</b>					<b>Total n(%)</b>
	<b>I strongly disagree n(%)</b>	<b>I disagree n(%)</b>	<b>I am undecided n(%)</b>	<b>I agree n(%)</b>	<b>I strongly agree n(%)</b>	
Group A	12 (70.6)	11(39.3)	6(66.7)	19(41.3)	54(29.3)	102(35.9)
Group B	1(5.9)	-	-	1(2.2)	6(3.3)	8(2.8)
Group C	4(23.5)	17(60.7)	3(33.3)	22(47.8)	112(60.9)	158(55.6)
Group D	-	-	-	4(8.7)	12(6.5)	16(5.7)
<b>Total</b>	<b>17(100.0)</b>	<b>28(100.0)</b>	<b>9(100.0)</b>	<b>46(100.0)</b>	<b>184(100.0)</b>	<b>284(100.0)</b>

**Table 4: The answers given by the patients to the questionnaire questions and their rates**

Subdimension	Statements	I strongly disagree	I disagree	I am undecided	I agree	I strongly agree
		n(%)	n(%)	n(%)	n(%)	n(%)
<b>TECHNICAL QUALITY</b>	Phys complied with the appointment hours	-	4(1.4)	1(0.4)	62(21.8)	217(76.4)
	Phys satisfactorily explained the methods that should be applied at home	-	8(2.8)	20(7.0)	71(25.0)	185(65.1)
	Phys provided information about the devices	9(3.2)	17(6.0)	20(7.0)	85(29.9)	153(53.9)
	Phys did not change throughout the treatment	17(6.0)	28(9.9)	9(3.1)	46(16.2)	184(64.8)
	Phys respected my privacy	3(1.1)	4(1.4)	6(2.1)	64(22.5)	207(72.9)
<b>COMMUNICATION WITH THE PHYSIOTHERAPIST</b>	Phys showed utmost care with my therapy	-	2(0.7)	6(2.1)	50(17.6)	226(79.6)
	Phys explained the reasons of the procedures at the start of the therapy	3(1.1)	7(2.5)	6(2.1)	81(28.5)	187(65.8)
	Phys answered questions in an understandable manner	2(0.7)	2(0.7)	6(2.1)	67(23.6)	207(72.9)
	I did not wait for too long to start the therapy	7(2.5)	25(8.8)	21(7.4)	70(24.6)	161(56.7)
<b>PHYSICAL COMFORT</b>	The toilets are designed to suit patient needs	30(10.6)	62(21.8)	95(33.5)	45(15.8)	52(18.3)
	There are enough toilets in the therapy unit	47(16.6)	54(19.0)	93(32.7)	42(14.8)	48(16.9)
	The therapy rooms were adequately ventilated, illuminated, and at adequate temperature	46(16.2)	40(14.1)	45(15.8)	71(25.0)	82(28.9)



**Table 4: Continues**

<b>COMMUNICATION WITH THE SECRETARY</b>	The secretary was closely involved in the procedures	9(3.1)	5(1.8)	23(8.1)	111(39)	136(48)
	The secretary provided information about the procedures to be performed	12(4.2)	10(3.5)	17(6.0)	119(42)	126(44.5)
	My procedures at the secretariat were completed quickly	7(2.5)	5(1.8)	33(11.6)	125(44.0)	114(40.1)
<b>COMMUNICATION WITH THE PHYSICIAN</b>	The physician showed closed interest in my health problem	7(2.5)	16(5.6)	21(7.4)	78(27.5)	162(57.0)
	The physician allowed me to ask questions and listened to me	2(0.7)	15(5.3)	28(9.9)	72(25.4)	167(58.7)
	The information about my disease that my physician provided was clear	7(2.5)	19(6.7)	23(8.1)	76(26.7)	159(56.0)
<b>ACCESSIBILITY</b>	The physical rehabilitation unit is within easy reach from home	44(15.5)	43(15.1)	24(8.5)	88(31.0)	85(29.9)
	The outpatient clinic has adequate number of parking lots	67(23.6)	46(16.2)	40(14.1)	64(22.5)	67(23.6)
	The guiding signs of the outpatient clinic are adequate	55(19.3)	61(21.5)	56(19.7)	55(19.4)	57(20.1)
<b>HYGIENE</b>	The therapy room was always clean	42(14.8)	43(15.2)	35(12.3)	81(28.5)	83(29.2)
	The sheets and pillow cases in the therapy room were always clean	61(21.5)	42(14.8)	31(10.9)	87(30.6)	63(22.2)

## DISCUSSION

Our study found good satisfaction level in all patients for physical therapy outpatient clinics. Satisfaction level was highest in disease group B and lowest in group D. No statistically significant difference was found between the disease groups in terms of mean total and subdimensional PSSPTOC scores. Among the subdimensions of the scale, mean physical comfort score was the lowest in the adults; hygiene score was the lowest in the paediatric patients; and accessibility score was the lowest in patients coming from the rural areas.

Patient satisfaction is an important indicator of healthcare services in health sector<sup>19</sup>. Several studies on this subject have been reported from different countries so far<sup>1,20</sup>. In this study, the satisfaction level of patients receiving regular physical therapy in a public hospital was assessed under the titles of technical quality, communication with the physiotherapist, physical comfort, communication with the secretary, communication with the physician, accessibility, and hygiene.

The satisfaction level of the patients, more than ninety percent of whom were in the disease groups A and C, had a significantly high satisfaction level with technical quality, and communication with the physiotherapist, secretary, and physician. Patient satisfaction levels with physical comfort, accessibility, and hygiene were low. Patients residing in the urban and rural areas provided feedback that they were quite satisfied with communication with healthcare professionals and technical quality, while they did not have the same opinion about the titles of transportation and physical comfort.

While patients residing in the urban areas reported a low satisfaction with physical comfort, patients from rural areas reported a high satisfaction with the same title. Patients residing on rural areas reported a lower satisfaction with accessibility to hospital. This may result from a greater distance of rural areas from the city centre and the scarcity of public transportation vehicles in Mardin province. Considering the new developments in therapeutic opportunities and the expansion of the service area with each passing day, physical therapy and rehabilitation services advance on two pillars: 'technical quality' and 'communication with health personnel<sup>6</sup>. Under the scope of technical quality, compliance of a physiotherapist with the hours of therapy sessions, patient privacy, content of the therapy program, devices used, and continuation of the therapy with the same therapist were questioned. In a study of patients receiving physical therapy service on an outpatient basis in Ethiopia, patients who were treated by the same therapist during the therapy had a 3.02 times greater satisfaction level than patients whose therapist changed over the course of the therapy<sup>21</sup>. Other studies in the literature have also demonstrated that physical therapy being provided by the same therapist throughout the therapy positively affects patient satisfaction<sup>22-24</sup>. Also in our study, patients whose therapist changed throughout the therapy reported a low satisfaction level. Changing physiotherapist throughout the therapy is more commonly observed in patients in disease group A (Table 3). We can deduce that this is related to a longer therapy course in disease group A. While patients in the disease group A receive therapy services 1 to 3 months per year, other disease groups use therapy services up to 1 month per year at most.

In a study of 200 patients in Brazil, the satisfaction level of physiotherapy patients was found high, with the highest score being scored by respectful behaviour of physiotherapist to the patient<sup>19</sup>. Another study conducted in the United Kingdom reported that the professionalism and personal attitudes of physiotherapists created a positive effect on patients<sup>5</sup>. Our study also revealed that the communication of physiotherapists with the patients was associated with high satisfaction. The statement “therapist working in compliance with the working hours” scored the highest score in the technical quality subdimension. Particularly patients in the disease group C reported a high satisfaction level ( $90.74 \pm 12.91$ ). The fact that the patients in the disease group C had diseases with a high rate of recovery (fractures, sprains, muscle spasms etc.) may have resulted in a higher satisfaction level in this group of patients. The patients reported low satisfaction with the communication with the secretary. A good communication between patients and the healthcare personnel is also important in terms of therapy adherence and motivation towards recovery.

Satisfaction with certain statements, such as “the presence of toilets in the therapy unit that are adequate and suitable for patients”, and “the therapy rooms being adequately illuminated and air conditioned”, which we questioned under the title of physical comfort, differed for patients living in the city and rural areas. Patients residing in the urban areas reported low satisfaction with physical comfort ( $51.38 \pm 27.13$ ) while those coming from rural areas reported otherwise ( $60.61 \pm 29.55$ ). A comparison by educational level showed that the college graduates showed low satisfaction with physical comfort. In this study we observed that the expectations of patients with a high educational level from physical comfort were not met.

In a study conducted by Odumodu et al., it was reported that 44% of patients were satisfied with the accessibility to the institution where they received physical therapy service; additionally, 42.1% of patients were satisfied or highly satisfied with the presence of parking lots<sup>25</sup>. Our patients reported a moderate satisfaction level with the statements related to the distance to the hospital, presence of adequate guiding signs, and the presence of parking lots in transportation to the hospital. Transportation was reported as a problem for rural residents who reported a low satisfaction level. In general, the majority of patients reported low satisfaction with transportation. The overall satisfaction with the hygiene of therapy rooms, pillows, and sheets was of moderate level. However, patients from urban areas reported a lower satisfaction compared with those from rural areas.

Although the satisfaction level with physical comfort, transportation, and hygiene was low, more than eighty percent of patients stated that they would prefer Mardin Training and Research Hospital for physical therapy, which once again stresses the importance of technical quality and communication with the physiotherapist for treatment adherence.

The low number of patients (The entire study population could not be reached.), lack of analysis of other factors affecting satisfaction, and the single-centre nature of the study are some of the limitations of the study. Therefore, its results cannot be generalized. Researchers who want to study the same subject can take the number of samples equally in the compared groups. They can conduct the study on a larger

population over a longer period of time. The research reveals a versatile result in terms of satisfaction of physical therapy patients. It can be used as a reliable source to solve the problems that arise in line with the satisfaction of physical therapy patients.

## CONCLUSION

The satisfaction level of patients who applied to the outpatient clinic to receive physical therapy and rehabilitation on an outpatient basis was found to be good. Considering that service delivery in healthcare is patient-centred and patient satisfaction is one of the important determinants of health, patient satisfaction with healthcare personnel and technical quality will contribute to patient satisfaction greatly. Despite lower-than-expected satisfaction with some important elements such as physical comfort, transportation, and hygiene, patients took the therapy seriously, they stated that they would prefer the same institution again and would recommend it to their relatives, which shows the importance of communication for therapy service quality. Furthermore, we think that a healthy communication with patients will positively affect therapy compliance and the therapy process.

## REFERENCES

1. Gutiérrez-Sánchez D, Pérez-Cruzado D, Cuesta-Vargas AI. Instruments for Measuring Satisfaction With Physical Therapy Care: A Systematic Review. *Phys Ther.* 2020 Aug 31;100(9):1690-1700. doi: 10.1093/ptj/pzaa111. PMID: 32542400.
2. Bilir Kaya B, Kurtulmuş D. The Demographic Characteristics and The Satisfaction Rates of Patients Hospitalized In a Public Rehabilitation Hospital. *Haydarpaşa Numune Eğitim ve Araştırma Hastanesi Tıp Dergisi.* 2015; 55 (1)
3. Sofaer S, Firminger K. Patient perceptions of the quality of health services. *Annu Rev Public Health.* 2005;26:513-59. doi: 10.1146/annurev.publhealth.25.050503.153958. PMID: 15760300.
4. Heidegger T, Saal D, Nuebling M. Patient satisfaction with anaesthesia care: what is patient satisfaction, how should it be measured, and what is the evidence for assuring high patient satisfaction? *Best Pract Res Clin Anaesthesiol.* 2006 Jun;20(2):331-46. doi: 10.1016/j.bpa.2005.10.010. PMID: 16850781.
5. Mir M, O' Sullivan C, Blake C, Lennon O. An Exploration of Parental Satisfaction With an Advanced Practice Physical Therapy Clinic in Pediatric Orthopedics. *Pediatr Phys Ther.* 2019 Apr;31(2):192-199. doi: 10.1097/PEP.0000000000000586. PMID: 30865147.
6. Khan ML, Ghous M, Amjad I, Nouman M, Yaqoob I. Level of satisfaction regarding physical therapy services in district Poonch, Azad Jammu Kashmir. *J Pak Med Assoc.* 2020 Mar;70(3):452-456. doi: 10.5455/JPMA.10977. PMID: 32207424.
7. Tüzün E.H, Eker L, A patient satisfaction instrument for outpatient physical therapy clinics: reliability and validity. *Fizyoterapi Rehabilitasyon.* 2009; 20(1):09-16
8. Kılıç Z, Bilgilişoy Filiz M. Benefits, Therapy Compliance, Awareness and Expectation Levels Related to Therapy of Patients Taking Physical Therapy Program. *Turk J Osteoporos.* 2019;25:78-82
9. Erden A. Farklı Kurumlarda Verilen Fizyoterapi ve Rehabilitasyon Hizmetinin Hasta Memnuniyeti Bakımından Karşılaştırılması. *Turk J Physiother Rehabil.* 2019; 30(2):136-144.
10. de Fátima Costa Oliveira N, Oliveira Pena Costa L, Nelson R, Maher CG, Beattie PF, de Bie R, Oliveira W, et al. Measurement properties of the Brazilian Portuguese version of the MedRisk instrument for measuring

- patient satisfaction with physical therapy care. *J Orthop Sports Phys Ther.* 2014 Nov;44(11):879-89. doi: 10.2519/jospt.2014.5150. PMID: 25361861.
11. Casserley-Feeney SN, Phelan M, Duffy F, Roush S, Cairns MC, Hurley DA. Patient satisfaction with private physiotherapy for musculoskeletal pain. *BMC Musculoskelet Disord.* 2008 Apr 15;9:50. doi: 10.1186/1471-2474-9-50. PMID: 18412974; PMCID: PMC2359748.
  12. Vanti C, Bonetti F, Ceron D, Piccarreta R, Violante FS, Guccione A, et al. Cross-cultural adaptation and validation of the Physical Therapy Outpatient Satisfaction Survey in an Italian musculoskeletal population. *BMC Musculoskelet Disord.* 2013 Apr 5;14:125. doi: 10.1186/1471-2474-14-125. PMID: 23560848; PMCID: PMC3623747.
  13. Bingöl Ü, Altan L, Ertürk MM, Yurtkuran M. Development and evaluation of a new questionnaire for rating patient satisfaction in a balneotherapy and physical therapy outpatient clinic. *Türkiye Klinikleri J Med.* 2009;29(4):837-44,
  14. Kavuncubaşı Ş. Hastane ve sağlık kurumları yönetimi. Siyasal Kitabevi. Ankara 2022, 6. Baskı.
  15. Sarı H, Pala K, Aytekin AH, Nilüfer Halk Sağlığı Eğitim ve Araştırma Bölgesi'ndeki İki Sağlık Merkezine Başvuranların Aldıkları Hizmetlerden Memnuniyet Durumlarının Saptanması. *Bursa Devlet Hastanesi Bülteni.* 2005, 20(2-3)53-5
  16. Odole AC, Ayodeji A, Adolo B, Alumona CJ, Adandom H, Mbada CE, et al. Patients' satisfaction with physiotherapy management of chronic mechanical neck pain in physiotherapy departments of public hospitals in Ibadan, Nigeria: A mixed-method study. *Physiother Theory Pract.* 2022 Mar 23:1-10. doi: 10.1080/09593985.2022.2056099. Epub 2022 Mar 23. PMID: 35321634.
  17. Licciardone JC, Ganta S, Goehring L, Wallace K, Pu R. Analysis of the Patient-Physician Relationship, Race, and Pain Control and Physical Function Among Adults With Chronic Low Back Pain. *JAMA Netw Open.* 2022 Jun 1;5(6):e2216270. doi: 10.1001/jamanetworkopen.2022.16270. PMID: 35679045; PMCID: PMC9185184.
  18. 27/07/2022 SUT Değişiklik Tebliği İşlenmiş Güncel 2013 SUT Sosyal Güvenlik Kurumu Sağlık Uygulama Tebliği
  19. De Paula DAG, Piatti NCTP, Costa LM, Chiavegato LD. Satisfaction levels with physical therapy in hospitalized patients. *Braz J Phys Ther.* 2020 Mar-Apr;24(2):118-123. doi: 10.1016/j.bjpt.2019.02.012. Epub 2019 Mar 1. PMID: 30872007; PMCID: PMC7082682.
  20. Albornoz-Cabello M, Pérez-Mármol JM, Cardero-Durán MLÁ, Barrios-Quinta CJ, Espejo-Antúnez L. Construction, Factor Structure, and Internal Consistency Reliability of the Hospital Physical Therapy Perceived Satisfaction Questionnaire (H-PTPS). *Int J Environ Res Public Health.* 2020 Aug 12;17(16):5857. doi: 10.3390/ijerph17165857. PMID: 32806784; PMCID: PMC7459722
  21. Guadie YG, Kibret AK, Adem KS, Yalew ES. Patient's satisfaction in physiotherapy outpatient departments of Amhara regional comprehensive specialized hospitals, Ethiopia. *BMC Health Serv Res.* 2022 Aug 8;22(1):1011. doi: 10.1186/s12913-022-08338-y. PMID: 35941683; PMCID: PMC9361663.
  22. Odole AC, Ayodeji A, Adolo B, Alumona CJ, Adandom H, Mbada CE, Awosoga OA. Patients' satisfaction with physiotherapy management of chronic mechanical neck pain in physiotherapy departments of public hospitals in Ibadan, Nigeria: A mixed-method study. *Physiother Theory Pract.* 2022 Mar 23:1-10. doi: 10.1080/09593985.2022.2056099. Epub 2022 Mar 23. PMID: 35321634
  23. Shakya N, Shakya B . Patient Satisfaction with Outpatient Physiotherapy Services in Dhulikhel Hospital, Kathmandu University Hospital, Nepal. *Kathmandu Univ Med J (KUMJ).* 2019 Jan.-Mar;17(65):317-322. PMID: 31734678.
  24. Ampiah PK, Ahenkorah J, Karikari M. Patients' Satisfaction With Inpatient Orthopedic Physiotherapy Services at a Tertiary Hospital in Ghana. *J Patient Exp.* 2019 Sep;6(3):238-246. doi: 10.1177/2374373518793144. Epub 2018 Aug 7. PMID: 31535013; PMCID: PMC6739682.
  25. Odumodu IJ, Olufunlayo TF, Ogunnowo BE, Kalu ME. Satisfaction With Services Among Attendees of Physiotherapy Outpatient Clinics in Tertiary Hospitals in Lagos State. *J Patient Exp.* 2020 Aug;7(4):468-478. doi: 10.1177/2374373519847370. Epub 2019 May 24. PMID: 33062866; PMCID: PMC7534107.