

# Comparison of Patient Satisfaction Between Public and Private Physical Therapy Clinical Sectors of Sialkot

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Submitted for Publication: 02-07-2022  
Accepted for Publication 28-09-2022

**How to Cite:** Nadeem Z, Fatima S, Mahmood T, Yousaf Q, Salam A. Comparison of Patient Satisfaction Between Public and Private Physical Therapy Clinical Sectors of Sialkot. *APMC* 2022;16(3):184-188. DOI: 10.29054/APMC/2022.1421

## ABSTRACT

**Background:** Patient satisfaction is thought to be an emotional reaction towards patient's values and judgments about their therapeutic interaction with a doctor. Now it has been used for different but related goals. To compare different health-care programs or systems, to assess treatment quality and to determine which aspect of a service needs to be modified to improve patient satisfaction. **Objective:** This study was aimed to compare the level of patient satisfaction between private and public physiotherapy clinical sectors of Sialkot. **Study Design:** Comparative cross-sectional survey. **Settings:** Imran Idrees Institute of Rehabilitation Sciences, Sialkot Pakistan. **Duration:** Six months from December 2021 to May 2022. **Methods:** The sample size was n=260 and data was collected from both gender in age 20 to 40 years with specific musculoskeletal and neuromuscular disorders selected from both public and private sectors of Sialkot. The data was collected by using MED-RISK patient satisfaction instrument. The data was analyzed by SPSS version 16, the data was presented in frequency and ages while mean difference was estimated with using independent t-test, at CI 95% ( $P \leq 0.05$ ). **Results:** Of the 260 (100%) participants, 165 (63.46%) were female and 95 (36.54%) were male. 115 (44.23%) participants from public hospitals and 145 (55.77%) were from private hospitals. The mean score of public hospital was  $45.59 \pm 5.3$  and private hospital was  $48.13 \pm 5.5$ , which shows an overall higher level of patient satisfaction with a p-value of  $>0.05$  with no significant difference. **Conclusion:** The satisfaction level of patients with physical therapy services is collectively high in both public and private hospitals of Sialkot. Patients which takes the PT services in private hospital are had statistically significant higher level of satisfaction with ( $p \leq 0.05$ ) as compared to public hospital.

**Keywords:** Inpatient, Musculoskeletal, MED risk, Neuromuscular, Patient satisfaction, Physical therapy, Public, Private, Pakistan.

## INTRODUCTION

The health-care sector is the most significant unit in a country because its outcome affects other areas like social, political, moral and business.<sup>1</sup> Physical therapy is an important part of the health care profession which aims to maintain, promote and restore health related problems. Each therapy session is based on physical examination, interventions, diagnosis, prognosis, rehabilitation, health promotion and disease prevention.<sup>2,3</sup> Patient satisfaction is defined as an individual's positive response to many aspects of the services and it is usually based on the expectations of the

patients/clients, influenced by communication, past experience, healthcare givers status, mass media and some other adjoining factors.<sup>4,5</sup> Patient and therapist more strong relation develops than other medical profession because of the extended duration of rehabilitation and treatment environment which have positive impact on pain management, treatment outcome, physical functional task, satisfaction with treatment and having ability to perform daily living activities.<sup>6</sup> Unlike other countries which have the NHS, Pakistan has three healthcare delivery systems including include public, private and military based institutions.<sup>7</sup> The perception of patients related to satisfaction varies from public to

private hospitals.<sup>1</sup> Patients visit private hospitals because of less delay in treatment, no waiting lists, a clean environment, latest equipment, and individualized nursing and medical care.<sup>8</sup> Therapist related are knowledge, skills, professionalism, effective communication, friendly attitude, frequency of treatment and adequate duration. Patient related factors such as age, gender, socioeconomic condition, race, health status, trust and perception about institution can affect the level of satisfaction. While older patients are more satisfied with the younger ones. Infrastructure, type and level of facility, physical environment, and institutional reputation may also correlate with satisfaction.<sup>9,10,11</sup> With the help patient satisfaction quality and effectiveness of health care centers is usually evaluated like we can determine the outcome of health care services and patients follow regimens which are medically prescribed and thus give a positive effect on health.<sup>12</sup> There is lack of study related to patient satisfaction, one already study aimed to evaluate and compare the level of satisfaction of inpatients and outpatients with psychiatric services in 2016.<sup>13</sup> Lack of related study in Sialkot which is based on patient satisfaction and also with a comparison of public and private sectors of physical therapy services. The purpose of this study was to evaluate and compare level of patient satisfaction in physical therapy sectors. This study is designed to fulfill the most important aspects that influence patient satisfaction including quality of physiotherapy treatment, waiting time and environment.

## METHODS

It was a comparative cross-sectional study conducted at different physiotherapy sectors of Sialkot included Ijaz Amin medical complex, social security hospital Sialkot, Islam center hospital Sialkot, Saeed medical complex Sialkot, Imran Idrees Teaching Hospital Allama Iqbal Memorial Teaching Hospital. The study comprised of both male and female patients with neuromuscular and musculoskeletal problems. The study was conducted from Six months from December 2021 to May 2022 after approval of study from the Institutional Review Committee. 260 patients with neuromuscular and musculoskeletal problems were selected. Sample size was calculated by using Cochran's formula keeping the confidence interval equal to 95% and level of precision equal to 0.05.<sup>14</sup>  $n = \frac{z^2pq}{e^2}$ , Confidence Interval= C. I = 95%, table value (z) =1.96, estimated proportion of success (p)=0.5, 1-p (q)=0.5, Level of precision (e)=0.05.

The data was collected using Non-Probability Simple convenient sampling technique. The participants were male and female patients, aged 20 to 40 years, patients with neuromuscular and musculoskeletal disorder and least matriculation. Other than neuromuscular and musculoskeletal disorder, reoccurrence of

neuromuscular and musculoskeletal disorders and under matriculation were excluded. The outcome tool was Medrisk, which is a 12-item questionnaire that measures the patient satisfaction. It has 2 global and 10 specific items. Item number 1 to 3 shows the external factors, 4 to 10 shows the internal factors and 11 and 12 are global measures of satisfaction. Each question is worth one point, scores range from 1 (strongly disagree) to 5 (strongly agree). Item number 1, 4 and 8 will be recoded as positive during scoring. Higher scores indicates the higher satisfaction.<sup>15</sup> The validity and reliability of patient satisfaction ratings is ranging from 0.68 to 0.80 according to Sarwar *et al* in their study on patient satisfaction in public hospitals of Lahore. The SEM is 0.17 for external factors and 0.20 for internal factors. The high Cronbach's alpha value illustrates internal consistency. The small values for the Standard Error Measurement indicate that mean scores have a low measurement error.<sup>14</sup>

The role and regulations set by the ethical committee of Imran Idrees institute of rehabilitation sciences was followed. While collection of data all the participant's remained anonymous throughout the study and they were free to withdraw from the research at any time. While conducting personal information of the participants kept confidential. All participant were asked to sign a written consent form before data collection. The data was analyzed by using SPSS version 16 and results presented in the form of frequency tables and cross tables were generated across public and private patients. The mean difference was measured using Independent t test and P value was considered significant at  $\leq 0.05$ .

## RESULTS

Of the 260 subjects, 95 (36.54%) were males and 165 (63.46%) were females while 115 (44.23%) belong from public and 145 (55.77%) were from private. 76 (29.23%) participants were belong to upper class, 115 (59.61%) from middle class and 29 (11.15%) from lower class. 1.538% were from inpatients and 98.46% from outpatient department. Maximum number of patients had Musculoskeletal 213 (81.92%) while 17.69% were neurological patients and 0.384% were have other type of disorder. Table 1

The mean score of office receptionist, waiting area, therapist treat me respectfully and return to office for future services in public and private sector was  $4.20 \pm 0.73$ ,  $4.26 \pm 0.84$ ,  $3.67 \pm 1.22$ ,  $4.03 \pm 1.22$ ,  $4.59 \pm 0.59$ ,  $4.73 \pm 0.503$ ,  $4.03 \pm 1.05$  and  $3.90 \pm 1.31$ , respectively. While regarding the mean difference in public and private sector clinics the p-value =0.04 of office receptionist, p = 0.01 for waiting area and p =0.002 of my therapist treats me respectfully. While the mean difference in public and private sector clinics the p-value=0.003 of return to office for future services. Table 2

Mean score of public is  $45.591 \pm 5.381$  and mean score of private is  $48.131 \pm 5.545$ . Table 3

**Table 1: Demographic Profile of participants**

Descriptive statistics		Public	Private	Total (%age)	P value
Gender	Male	39	56	95 (36.54%)	.61
	female	76	89	165 (63.46%)	
Socioeconomic Status	Upper class	25	51	76 (29.23%)	.11
	Middle class	72	83	155 (59.61%)	
	Lower class	18	11	29 (11.15%)	
Marital Status	Married	67	68	135 (51.92%)	.31
	Unmarried	48	77	125 (48.07%)	
Education Level	Matric	37	32	69 (26.53%)	.35
	Intermediate	20	40	60 (23.07%)	
	Graduation	58	73	131 (50.38%)	
Type of Disorder	Musculoskeletal	101	112	213 (81.92%)	.22
	Neurological	14	32	46 (17.69%)	
	Others	0	1	1 (0.384%)	
Occupation	Students	34	42	76 (29.23%)	.10
	Teachers	9	19	28 (10.76%)	
	Therapist	7	0	7 (2.692%)	
	Shopkeepers	0	4	4 (1.538%)	
	Housewives	36	32	68 (26.15%)	
	Other	29	48	77 (29.61%)	
Age	Mean $\pm$ SD	28.98 $\pm$ 0.123	28.49 $\pm$ 6.220		.00
Body Mass Index	Mean $\pm$ SD	23.44 $\pm$ 3.51	23.44 $\pm$ 3.74		.00

**Table 2: MED risk mean score of participants (Group Statistics)**

Sub Categories	Sub-Items	Sector	N	Mean $\pm$ Std. Deviation	Std. Error Mean	P value
External factor	1. The office receptionist is courteous.	Public	115	4.20 $\pm$ 0.73	.06	.04
		Private	145	4.26 $\pm$ 0.84	.06	
	2. The registration process is appropriate.	Public	115	4.04 $\pm$ 0.76	.07	.57
		Private	145	4.48 $\pm$ 0.60	.05	
	2. The waiting area is comfortable.	Public	115	3.67 $\pm$ 1.22	.11	.01
		Private	145	4.03 $\pm$ 1.10	.09	
Internal factor	3. My therapist did not spend enough time with me.	Public	115	1.96 $\pm$ 0.99	.09	.87
		Private	145	2.13 $\pm$ 0.90	.07	
	4. My therapist thoroughly explains the treatment I receive.	Public	115	4.06 $\pm$ 0.92	.08	.59
		Private	145	4.32 $\pm$ 0.79	.06	
	5. My therapist treats me respectfully.	Public	115	4.59 $\pm$ 0.59	.05	.00
		Private	145	4.73 $\pm$ 0.50	.04	
	6. My therapist does not listen to my concerns.	Public	115	2.00 $\pm$ 0.82	.07	.12
		Private	145	2.18 $\pm$ 0.84	.06	
	7. My therapist answer my all question.	Public	115	4.26 $\pm$ 0.86	.08	.11
		Private	145	4.51 $\pm$ 0.72	.06	
	8. My therapist advise me on ways to avoid future problems.	Public	114	4.14 $\pm$ 0.89	.08	.83
		Private	145	4.33 $\pm$ 0.80	.06	
	9. My therapist gives me detailed instructions regarding my home program.	Public	114	4.23 $\pm$ 0.80	.07	.47
		Private	145	4.35 $\pm$ 0.75	.06	
Global factor	10. Overall I am completely satisfied with the services I receive from my therapist.	Public	114	4.21 $\pm$ 0.78	.07	.07
		Private	145	4.40 $\pm$ 0.69	.05	
	11. I would return to this office for future services or care.	Public	115	4.03 $\pm$ 1.05	.09	.03
Private	145	3.90 $\pm$ 1.31	.10			

**Table 3: Mean sum public vs private sector participants**

Level of Patient Satisfaction			Mean difference	Std. Error Difference	P-Value
Sector	N	Mean $\pm$ Std. Deviation			
Public	115	45.59 $\pm$ 5.38	-2.53	.68	.63
Private	145	48.13 $\pm$ 5.45	-2.53	.68	
Total	260	47.00 $\pm$ 5.607			

## DISCUSSION

The main objective of the study was to determine the patient satisfaction in private and public physical therapy sectors of Sialkot. There are a lot of studies which reports a higher level of patient satisfaction with physical therapy treatment. Some studies also indicated that patient with acute condition was highly satisfied than those with chronic conditions.<sup>15</sup> However, some studies also reveals a low level of mean scores of satisfaction. Such as a study was accompanied in England, where participants shows a low level of satisfaction because in this study, patients was also incorporate their feelings and experience about the health care system into their satisfaction rates. Similar to present results. A study which was conducted in Brazil and Australia have also stated a higher level of patient satisfaction with physical therapy treatment (with mean score of 4.50 and 4.55 respectively).<sup>16</sup>

In the current study, the mean sum score of private hospitals was 48.13  $\pm$  5.45, which shows the highest level of patient satisfaction than public hospitals with a total mean score of 45.59 $\pm$  5.38. This difference is due to the infrastructure of the hospital and also patients have a perception that they would be well treated private rather than public. As in previous study, the office receptionist was courteous mean score was 4.37  $\pm$  0.73 while patient is satisfied whereas in our study the mean score of office receptionist in public sector was 4.20  $\pm$  0.73 and private sector 4.26.<sup>17</sup> The Patients receiving physiotherapy sessions were satisfied with the registration process same as pervious study.<sup>18</sup> It has been stated that the Northern region, Kano, Ibadan, and Benin City that patients were not satisfied with the waiting area and time. The busy schedules of people today may be one of the reason behind it. According to our study, patients in Nigeria responded similarly to individuals in our study when asked if the waiting area was pleasant .<sup>19</sup> The patient is satisfied if provided with adequate information about their condition and treatment, while various studies have demonstrated that PS plays a main role in patients' compliance with medical advice. As pervious study shows, patients give satisfied responses related to "My Therapist answered all my questions the same as our study.<sup>17</sup> While in another local study which was study at Rahman medical institute Peshawar in 2019, stated a lowest level of satisfaction of the patient education with a score of 4.58  $\pm$  0.68.<sup>20</sup> The professionalism of therapists should allow their patients to have a realization that they

are respectful of the therapist. It is a major determinant of patient satisfaction. The results of Therapist advised me on ways to avoid future problems was 4.40  $\pm$  0.75 hence patient is satisfied in this study and as in our study result also supported by this study results as both in public and private hospital patients were satisfied as in our results. Home guidelines are important to patients and to those who live with them, since they help prevention and rehabilitation. In previous study, the patient responses related to My Physical Therapist giving detailed instructions regarding my home program are highly satisfied and its mean and deviation is 4.54  $\pm$  0.73.<sup>17</sup> While in another study by Keramat Ullah 2020 shows a higher satisfaction for the skills of physiotherapist but the follow up exercises plan at home was consider meaningless for the recipients.<sup>21</sup> High satisfaction levels related to 'I am completely satisfied through my care' with a mean of 4.84 and the reason for high satisfaction was the professionalism of the therapist and quality services delivered timely, according to a study carried out in the U.S.A<sup>22</sup> In previous study patient was satisfied while mean score of 'return to this office for future services or care' was 4.39(0.68) whereas in our study patient response the mean score of return to office for future services public sector was 4.03  $\pm$  1.05 and private sector was 3.90  $\pm$  1.31.<sup>17</sup> Patient satisfaction also correlates positively with the all factors of PS, which includes respect and communication , personal care and quality of time. The perception of PS are also indicated by therapist and patient interaction, the positive behavior of therapist, friendly and warm behavior also influenced the patient satisfaction.<sup>23</sup> Hence, Similar to our study which was conducted in Bangladesh from physical therapy services shows a statistically high level of satisfaction in private hospital then public hospital.<sup>24</sup> In our study the private sector showed a statistically high level of satisfaction as compared to that of public sector due to four items including office receptionist, waiting area, therapist treat respect towards patients and response on return to office for future services.

## CONCLUSION

The study was conducted to measure the satisfaction of the patients in public and private sectors of Sialkot. The results showed a higher level of satisfaction in both public and private settings. But the private sectors show significantly a high-level satisfaction in some factors regarding the behavior of the therapist.

## LIMITATIONS

The study is only limited to short time duration and with selection of a specific area for data collection. Most of the data was collected from outpatients, only 4 inpatients were from private hospitals. We have added the education level of at least matriculation and age range of 20-40 years only

## SUGGESTIONS / RECOMMENDATIONS

It is suggested to further studies which should be conducted on patient satisfaction to cover a larger area with no specific short duration of time to measure the satisfaction on a larger scale.

## CONFLICT OF INTEREST / DISCLOSURE

None.

## ACKNOWLEDGEMENTS

We are thankful to administration and physical therapy departments of Ijaz Amin medical complex, social security hospital Sialkot, Islam center hospital Sialkot, Saeed medical complex Sialkot, Imran Idrees Teaching Hospital and Allama Iqbal Memorial Teaching Hospital.

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