### **ORIGINAL ARTICLES**

# Levels of patients' satisfaction from physical therapy services offered at Rehman Medical Institute Peshawar; a cross sectional survey

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#### **ABSTRACT**

Introduction: Patients satisfaction is an important and commonly used an indicator for measuring the quality in health care. It affects clinical outcomes, patient retention, and medical malpractice claims. Patient satisfaction affects the timely, eficient, and patient-centered delivery of quality health care. The importance of patient satisfaction in quality health care has been reported but there is scarcity of quality research on patient satisfaction in the field of physical therapy especially in developing countries. This survey was designed to assess level of patients' satisfaction level receiving physical therapy services at Rehman Medical Institute Pashawar.

Material & Methods: A total of 187 patients from three wards and physical therapy OPD participated in this survey. We used Med Risk instrument for measuring Patient Satisfaction (MRPS) questionnaire for assessing levels of satisfaction among these patients. The questionnaire was modified in order to make it applicable for all the areas including cardiac, musculoskeletal and neurological conditions for both in- and outpatient departments. Data was analyzed through SPSS version 20.

**Results:** A total of 187 with less than half (45.5%) males and the remaining female population participated in this survey. High satisfaction level of patients receiving physical therapy services was witnessed amongst the patients who participated in this survey. Majority of the patients were from cardia ward due to specialized nature of the hospital which is famous for dealing conditions with cardiac conditions. The mean score for the patients' satisfaction level was recorded to 4.68±0.63 which is higher than reported in other trials.

**Conclusion:** Patient getting physical therapy services at both in- and outdoor facilities at Rehman Medical Institute have high level of satisfaction.

Keywords: Med Risk Patient Satisfaction, patient satisfaction level.

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#### **INTRODUCTION**

Patient's satisfaction is a commonly used indicator for assessing the quality in health care as it leaves a large impact on the preand post-clinical results (1). The way patients perceive medical facilities where he/she has been treated is important as it affects the well timed, effcient, and patient-centered delivery of quality health care. This can be described as both health care recipient perceptive evolution and an expressive reaction to his or her experience of health care (2). Patient's satisfaction is an abstract, multidimensional phenomenon which cannot be observed directly and therefore is measured in an indirect manner (3). Despite the fact that patients' satisfaction plays a significant role in improving quality of health care, limited published work is available in developing countries (4). As rehabilitation is often an ignored part in health care system in developing countries, studies on patient's satisfaction in rehabilitation are less commonly available in the literature (5).

A variety of subjective measuring tools may be used to assess patients' satisfaction in clinical settings. Med Risk Patient satisfaction is one of commonly valid tools used to assess patient's satisfaction level in physical therapy services (6). Initially, this tool was available only in Spanish language and translation in other languages was done latter on (7). This tool has been reported valid

and reliable in assessing satisfaction level of patients in different clinical settings (8). The use of such tools in assessing patient's satisfaction level are essential to find out differences in clinicians and patients views about the quality (9). Patient's satisfaction level plays an important role in improving the health care facilitates (10). The more patients are satisfied, the more it will improve quality of care which will ultimately improve therapy outcome (11). It has been reported that satisfied patient were more devoted and compliant towards therapist recommendations and treatment plan (12). Patient's opinion about services in an individual hospital are largely unnoticed in developing countries (13). While results from patient's satisfaction are important in identifying the areas where physical therapists are not confident and need to attend clinical courses. It is fact that more satisfied patients the more will use the same services in future and will ask their friends and family to use the same services (14).

The levels of satisfaction varies from country to country and in countries with the high service standards where quality performance indicators are in place, patients level of judging satisfaction increases (15). It has been observed that practitioners' availability has a direct relation with patients' satisfaction level (16). Clinical decision making and implementing the proper guideline can be facilitated by the awareness of patients' preferences, which will

contribute to increase in quality of care and patient's satisfaction (17). Nowadays concept of health is purchasing coinage that health is composed by health specialists and clients equally, the concept about patient as passive receivers is now changed to active choice makers along the whole treatment plan(18). Collective bond and the combined efforts of the healthcare professional and the patient is a major element for the successful treatment. Modern inclinations are also focusing on this definite part of Physical Therapy researches (19). In the same way, good communication skills and respectful behavior from the Physical Therapist reflects a vital impression on the effectiveness of the treatment (20). Patient's indulgence in goal setting enhances the treatment, the rate of patient's satisfaction and his motivation towards the recovery (21). Patient's satisfaction reveals the post-purchase singularity about how much clients be fond of or dislikes the quality of services being provided by that facility, patient satisfaction is the permit to success in the hospital setting (22). The external factors have more weightage over patient's experiences (23). As far as the overall patient's satisfaction is concerned, the physical appearance of the care provider, the diagnostic services, the billing and pharmacy system are highly observed and the high fee structure drops the satisfaction rate (24). Level of patient's satisfaction has some actual existing roots with the gender, age, education and financial status. Satisfaction varies with demographic features like grownups have been found to be more satisfied with their healthcare than younger patients. Females tend to be more satisfied than males, uneducated population tends to be more satisfied than those with advanced education, and similarly patients with poorer health conditions are less satisfied than patients with good health (25). While measuring patient's satisfaction from physical therapy services, one should take in account both parameters i.e. patient's satisfaction with testament and patient's satisfaction with outcome because it's a multidimensional parameter (26). Knowledge about patient's satisfaction is essential because they are the expert observers of quality of services being provided and strategies to improve health care will be fruitful if they replicate what patients need from the services (27). Patient's satisfaction is related to hospital success, the more the patients satisfied, the longer hospital remains in competition with other hospital in the race (28). The best tactic for successful business is to satisfy the client which is being followed in trade and arcade but recently attention is rising in the measurement of patient's satisfaction in healthcare research, signifying a passage towards patient's care (29). Despite the latter facts about the importance of patients' satisfaction from services, patients' satisfaction regarding physical therapy services remain unclear in developing countries especially in Pakistan. This study was designed to assess the level of patients' satisfaction from physical therapy services offered at Rehman Medical Institute Peshawar.

## **MATERIALS & METHODS**

This was cross-sectional survey conducted at cardiac, medicine, orthopedic wards and out-patient department of physical therapy of Rehman Medical Institute, Peshawar. The duration of this study was approximately 2 months. All those patients who had at least physical therapy sessions at the hospital were eligible for this survey. Both genders who were between 18 and 75 years were invited to participate in this survey. Patients whose GCS level was less than 10 were not added because they are not oriented enough to understand the physical therapy treatment and the environment provided by the setup. The patients were visited by the research team individually and purpose of the survey was explained to them. They were invited to voluntarily participate in the survey

and an informed consent was obtained from all those participants who were willing to participate. The consent form was translated into Urdu to make it understandable for the patients and their attendants. Those who agreed and signed the consent form were recruited in the study and the questionnaire, "Med Risk patient satisfaction Instrument" slightly modified by the research team, was distributed among them. The questionnaire was based on Likert scale. Patients were given a choice either to fill the form by themselves or by the researcher for better understanding. The presence of the translator in each ward filled the communication gap. Most of the questionnaires were filled by the group members themselves because most of the patients were illiterate.

#### **RESULTS**

A total of 177 patients with more than half 118 (66.7%) male population and 59 (33.3%) female population participated in this survey. The mean age of population was  $48.92\pm17.22$  years (mean  $\pm$  sd), with mean BMI 26.5. A total of 54 (30.5%) patients were selected from OPD, 76 (42.9%) from cardiac, 33 (18.6%) neuro and 14 (7.9%) orthopedic wards. Out of 177, 162 (91.5%) were Pushto speakers, 8 (4.5%) were Urdu speakers and the remaining 7 (4%) were Persian speakers. Most of the participants receiving the physical therapy services include 66 (37.3%) from Peshawar (table 1 for more geographical information).

Table 1: Distract wise distribution of data						
#	District	Frequency	%	Valid %	Cum. %	
1	Peshawar	66	37.3	37.3	37.3	
2	Sawabi	13	7.3	7.3	44.6	
3	Swat	11	6.2	6.2	50.8	
4	Charsadda	10	5.6	5.6	56.5	
5	FATA	11	6.2	6.2	62.7	
6	Mardan	9	5.1	5.1	67.8	
7	Afghanistan	16	9	9	76.8	
8	Other	41	23.2	23.2	100	

Most of the anticipated patients were uneducated i.e. 91 (51.4%) and the remaining 86 (48.6%) were educated ranging from primary to post graduate level. When asked about the profession most of the patients 47 (26.6%) were housewives, 30 (16.9%) were government employs, 23 (13%) were students, 33 (18.6) were unemployed and remaining 44 (24.9%) were related to different professions and were categorized in others. The number of visits ranged from 3 to 25 with mean value of 4.92 where the maximum number of patient visited thrice i.e. 79 (44.6%), the facility.

In relation to referral pathways, majority of the respondents 139 (78.5%) were referred by their physician, while 24 (13.6%) learnt from their friends regarding physical therapy services, 4 (2.3%) learnt through former patients of the clinic and 10 (5.6%) by other means. More than half of the patients 157 (88.7%) were receiving the physical therapy sessions for the very first time and the remaining 20 (11.3%) had already received physical therapy sessions. When asked about the experience with this facility 160 (90.4%) had experienced it for the first time while others 17 (9.6%) already had experience with this facility. The most common reasons for attending the physical therapy were post CABG 69 (39%), and stroke 32 (18.1%) (See table 2 for the remaining information).

Table 2: Table showing location of the problem for which phy	/si-
cal therapy was received	

#		Frequency	%	Valid %	Cum. %
1	Neck	6	3.4	3.4	3.4
2	Lower Back	23	13	13	16.4
3	Shoulder	11	6.2	6.2	22.6
4	Elbow	5	2.8	2.8	25.4
5	Hip	7	4	4	29.4
6	Knee	10	5.6	5.6	35
7	Post CABG	69	39	39	74
8	Stroke	32	18.1	18.1	92.1
9	Other	14	7.9	7.9	100

Most of the patients (n=152, 86%) agreed that the behavior of therapist of the physical therapist was polite. More than half of the respondents (n=118, 67.0%) were happy with the registration process and replied strongly agreed while the rest replied having problems in registration process. Regarding environment during physical therapy services, 137 (77.4%) strongly agreed, 1(6%) disagreed with environment being comfortable. A big number, 151 (85.3%) patients strongly considered the physical therapist's attitude respectful towards them. Similar response (n=143, 80.8%)

was found when participants were asked about respectful behavior of other staff members. The cleanliness of the environment satisfied 145 (81.9%) of the patients. For 123 (69.5%) the session timings were convenient but 2 (1.1%) the session timings was not convenient for them. Regarding explanation of the treatment, 141 (79.7%) strongly agreed that the treatment was properly explained to them while only one respondent was not happy with the process of explanation of treatment plan by the physical therapist working there. Majority of the patients, 144 (81.4%) patients reported that the therapist answered all their questions only 2 of the patients were not happy with the answers given by the therapist (for summary of question please see table 3). The mean score for individual section of MRPS showed that in general, patients were satisfied with the physical therapy services provided at different wards and out-patients department of Rehman Medical Institute with 4.6±0.5 (mean±standard deviation) for total score of MRPS, 4.69±0.4 for Interpersonal skills, 4.63±0.6 for convenience and 4.58±0.6 for patient education (for summary see table 4).

#### **DISCUSSION**

The theme of this study was to assess the satisfaction of patients receiving physical therapy services at OPD and the selected wards of Rehman Medical Institute, Peshawar using a modified version of a validated questionnaire MRPS. In general, the patients were highly satisfied from physical therapy services provided at both in and out-patients departments of the hospital. The highest points were presented by the item 'My physical therapist treated me re-

Tab	Table 3: Table showing responses of patients to the questions asked						
#	Questions	Strongly Disagree	Somewhat Disagree	Agree	Somewhat Agree	Strongly Agree	
1	The Therapist was polite	-	2(1.1%)	11(6.2%)	14(7.9%)	150(84.7%)	
2	The registration process or calls made to PT were addressed	3(1.7%)	3(1.7%)	16(9%)	40(22.6%)	115(65%)	
3	The environment during PT services was comfortable	-	1(6%)	12(6.8%)	27(15.3%)	137(77.4%)	
4	The Physical Therapist treated me respectfully	-	-	10(5.6%)	16(9%)	151(85.3%)	
5	The other staff member except (PT) were respectful	4(2.3%)	1(6%)	12(6.8%)	17(9.6%)	143(80.8%)	
6	The surrounding where PT treatment was given was clean	-	-	8(4.5%)	24(13.6%)	145(81.9%)	
7	The timing for PT treatment were convenient	2(1.1%)	4(2.3%)	18(10.2%)	30(16.9%)	123(69.5%)	
8	The Physical Therapist explained carefully the treatment I received	1(1.1%)	3(1.7%)	8(4.5%)	24(13.6%)	141(79.7%)	
9	The Physical Therapist answered all my questions	2(1.1%)	1(6%)	12(6.8%)	18(10.2%)	144(81.4%)	
10	My Physical Therapist advised me about ways to avoid future problems	4(2.3%)	1(6%)	14(7.9%)	39(22%)	119(67.2%)	
11	My Physical Therapist give detailed instructions about home exercise programs	1(6%)	4(2.3%)	11(6.2%)	23(13%)	138(78%)	
12	In general, I am completely satisfied with services I received from my Physical Therapist	-	3(1.7%)	13(7.3%)	25(14.1%)	136(76.8%)	
13	I would return in future for Physical Therapy services and treatments	1(6%)	1(6%)	14(7.9%)	18(10.2%)	143(80.8%)	

Table 4: Table showing mean scores for individual section of MRPS						
Factor	Questions	Mean Values	Mean			
Interpersonal	The Therapist was polite					
Relationship	The registration process or calls made to PT were addressed					
	The environment during PT services was comfortable	4.69(0.619)				
	The Physical Therapist treated me respectfully	4.79(0.525)				
	The other staff member except (PT) were respectful	4.66(0.817)				
	The surrounding where PT treatment was given was clean	4.77(0.516)				
	The timing for PT treatment were convenient	4.51(0.853)				
Convenience	The Physical Therapist explained carefully the treatment I received	4.70(0.687)	4.63(0.657)			
Efficiency	The Physical Therapist answered all my questions	4.70(0.687)				
Patient	My Physical Therapist advised me about ways to avoid future problems	4.51(0.846)	4.50(0.605)			
Education	My Physical Therapist give detailed instructions about home exercise programs	4.65(0.746)	4.58(0.685)			
Global Items	In general, I am completely satisfied with services I received from my Physical Therapist	4.66(0.689)	4.60(0.626)			
	I would return in future for Physical Therapy services and treatments	4.70(0.687)	4.68(0.636)			

spectfully, 'The Therapist was polite' and 'The surrounding where physical therapy was given was clean', presenting average percentage more than 81.9% for each the item. The items where the patients' satisfaction level was less than 80% were 'The registration process or calls made to PT were addressed' and 'my physical therapist advised me about ways to avoid future problems'.

When the items of MRPS instrument were split into three factors as reported in previous trial (7), we observed that 'Interpersonal factors' were at higher level of satisfaction. These factors included items related to therapist-patient interaction. These findings are similar to other studies in which therapist-patient relation was reported a key predictor to the satisfaction of patients receiving physical therapy services at different clinical settings. In this survey, factor 3 where the focus was patient education through physical therapist and his commitments to educate patients and raise awareness, got lowest level of satisfaction from patients. In contrast, high satisfaction level for these three sections was reported in a trial carried out in the USA (6). This difference can may be due to the dissimilar population and treatment protocols followed within the countries.

The MRPS instrument has been used in different countries across the globe, such as the USA (30), England (31), Australia (32), Canada (33, 34), South Korea (20), Ireland (35), Brazil (36) and Sweden (37). Countries with highest averages includes, Canada, with an average of 4.67(35), Australia, 4.55 points (38), and Brazil, with 4.54(37). The patients satisfaction rate of this study conducted in one of the leading private Hospital of Khyber Pakhtunkhwa, Pakistan, scored high average of 4.68. Though the sample of this study unlike others was small but it covered all the regions, which include musculoskeletal, neurological, orthopaedic and cardiac of both in and out-patient departments receiving physical therapy services.

Other studies concerning the satisfaction, regardless of any health sector, its population and instrument used showed high satisfaction to the interviewee for the care received (11, 17, 24, 26). The literature supports this result by stating that satisfaction is a measure that has a

ceiling effect, which makes it diffcult to identify the key aspects that could decide between the different levels of satisfaction and to subside this effect, the questionnaires are distributed, which have lesser ability to specify the satisfaction with detailed questions (39).

Limitations of the study were related to the questionnaire. Mails were done to get the PDF version of MRPS questionnaire but unfortunately none were responded, so we had to type the questionnaire besides the questionnaire was slightly moderated by the research team to make it applicable for all the areas as the original MRPS only tends to cover the outpatient department. The other limitation to the study was illiteracy, majority of the patients were uneducated and the team members had to explain and verbally describe the questionnaire to the recruited participants.

Nonetheless many patients were irritable due to the pain and did not want to fill the questionnaire by themselves, so the member of team had to fill it by questioning the patients. As this study aimed to cover all the patients receiving the services by the physical therapy department but unluckily, we were unable to gather the satisfaction rate of the patients receiving the domiciliary physical therapy services provided by Rehman Medical Institute because of the non-availability of the patients in the given time frame of this research. Language barrier was meant to be the restraint but this gap was fulfilled by the translators present in every respected department. As compared to the other regions, more data was met by the patient receiving physical therapy services post-CABG; which illustrate, the particular hospital has more flow of cardiac patients in comparison to others kinds of patients.

#### **CONCLUSION**

The level of patients' satisfaction, receiving physical therapy services at RMI can be considered high as the results showed almost the maximum mean. However, the patient education by the therapist needs more emphasis and concentration for improvement.

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