

Facilitators and Barriers for Using Outcome Measuring Tools in Physical Therapy Practice

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ABSTRACT

Objective: The study was conducted to ascertain the percentage of physiotherapist who were utilizing the outcome measures during the treatment of patients and to find the factors which were potentiating the physiotherapists in implementing the outcome measuring tools in the treatment of their patients. On the other hand, such factors were also looked into which were considered as obstacles by the physiotherapists in the use of the tools.

Methodology: The estimated study population size was 242. Data was collected through e-mail as well as through one-on-one meeting with the physiotherapists by using a standard questionnaire (appendix I) and was analyzed through SPSS version 20.

Results: It was found that 78 percent of the study participants were using the outcome measures in the assessments of the patients and for finding the progression in their condition. The feeling of the patient about the keen involvement of the physiotherapist in his treatment, enhanced communication between two of them and increased efficiency of examination were the major facilitators which urged the physiotherapists to use outcome measures in their practice. The most frequent barriers seen were the duration required by physiotherapist to analyze the score and duration of patient to complete it.

Conclusion: The main facilitators are increased communication between physiotherapist and patient and enhanced the efficacy of assessment. Alternatively, the main barriers restricting the usage of outcome measures are reported to be the inability to complete the various assessment tools due to the lack of time on the part of the patient as well as the physical therapist.

Key words: Outcome measures, Outcomes measuring tools, Facilitators, Barriers, Physical therapist, Physiotherapist

INTRODUCTION

For a diseased person, there are several scales questionnaires are available to assess the difference in the current disease status and improvement in condition after therapy. These are also helpful to have an understanding of the patient and better interpretation of his condition and improvement. These scales and questionnaires are known in literature as “disability measures,” “outcome measures,” “outcome measuring tools “quality-of-life measures” and “assessment outcomes”.¹

The use of few outcome measures have a significant role in the assessment of success of therapy, especially physiotherapy, and also it can help with accountability and confirms the quality provision.² In order to show their professional obligation, physiotherapists need to determine the outcome measures of physiotherapy. In order for patients to be happy with their care, it is important to give them an indication of the prognosis. The need to incorporate outcome indicators is welcomed not only to assess the changes made, but also to consider the expectations and satisfaction of patients.³

Guidelines for clinical practice developed by several countries require the use of common measurement instruments to ensure the provision of quality care to patients by continuously measuring the variables initially evaluated. But, regarding use of indicators to standardize the outcome, there is a lack of adherence among the physiotherapists. The need for physiotherapists to use standardized outcome indicators is the ultimate necessity of time to secure the patient's right to be measured by standardized methods.¹

The suggested benefits of using the outcome measures are building the recommendations on the cost-effective treatment of particular conditions, predicting the success of physiotherapist and helping to classify patients with bad prognosis, despite the fact that no clinical study has been performed on the direct effects of using outcome measures. As the debate for evidence-based therapy has grown, health-care providers have now become more responsible for the effects of their treatment.⁴

Time to assess the outcome measure is the main barriers to implement the outcome measure tools. In addition, clinicians do not consider recorded outcome measures to be accurate for patients. Limited work has been done in literature to identify obstacles and facilitators to the use of outcome measures.⁵ The purpose of the study is to collect data on the use of outcome measures and to identify benefits and barriers to their use as there is a lack of knowledge among physical therapists in Pakistan on the use of outcome measures.

METHODOLOGY

This cross sectional study was conducted at different government and private clinics providing service of physical therapy in Lahore for 6 months. About 242 physiotherapist were selected by simple random sampling. Physical therapists working in clinical setup since 1 year or more were included in the study. Data was collected by using a questionnaire. Barriers were considered as the factors that cause hindrances in therapy in using outcome measures. These hindrances are faced while assessing the improvement through the application of “outcome

measuring tools". Data was analyzed using IBM-SPSS version 20.

RESULTS

Out of 242 physiotherapists, 101 were males and 141 were females. About 46% had tDPT, M.S. or M.Phil degree while 36% were DPT, 46.7% had tDPT, M.S. or M. Phil degree in any domain of physiotherapy. Alternatively, only 0.4% had completed the PhD degree, 36.8% had DPT degree and 16.1% had only BSc Hons Physiotherapy. About 53.3% were working in their private clinics, 31.4% were working in government sector health care facilities while 15.3% were providing the services at home.

26.9 of the physiotherapists had an experience of 1 year, 37.6 percent were having 2-5 years of practice experience whereas, 28.1 percent of the participants had an experience comprising 6-8 years. While, participants with experience of more than 10 years comprised only 7.1 percent of the total study population.

Interest in orthopedics was held by 38.4 percent of the study population. 16.1 percent of the population had interest in sports physiotherapy. Cardiopulmonary physiotherapy was the favorite of the 15.7 percent of the population. Neurological physiotherapy lovers were 14.6 percent and 14 percent of the population had interest in pediatrics.

Of the 242 participants, 189 (78%) said that they were using the outcome measuring tools. Mostly (91.5%) feels that using outcome measuring tools helps to make patients feel that physiotherapist has a deep interest in their treatment, it enhance communication between therapist and patient (85%) and 75% through it increase the efficiency of examination. The most common barrier of using outcome measuring tool is duration required by physiotherapist to analyze the score (88.4%) and also the duration required by patient to fill it (81.5%).

Many major uses of outcome measures were the determination of treatment efficacy given (82%) and communication with other medical personnel (86.2%). The recurrent causes for adopting the outcome measuring tools is that it's easy for patients to understand (89.9%) and could be complete easily (86.2%). There were 22% non-users of outcome measuring tools. The main reason for not using this tool is thought that it requires higher knowledge (90.6%), English language (88.7%), non-availability of plan direction (83%) and incomplete outcome measures at the time of discharge. According to this, 78percent of the physiotherapists are using the outcome measuring tools

whereas, 22 percent of the study population is not using the outcome measuring tools.

Table 1: Demographics of candidates

n	242
Gender	
Male	101
Female	141
Highest degree	
B.Sc. Hons Physiotherapy	161%
DPT	36.8%
tDPT/M/phil/MS	46%
PhD	0.4%
Doing treatment sessions daily (hours)	
2-3	19.01%
4-6	52.07%
6-8	28.93%
Clinical Settings	
Privately owned OPD clinic	129 (53.3%)
Government based OPD clinic	76 (31.4%)
Home Care	37 (15.3%)
Number of years practiced	
1 year	26.9
2-5 years	37.6
6-10 years	28.1
>10 years	7.1
Area of interest	
None	1.2
CVS & Pulmonary	15.7
Neurology	14.6
Orthopedic	38.4
Pediatric	14
Sports	16.1
Type of patients treated	
Musculoskeletal	22.3
Neurological	23.1
CVS & pulmonary	10
Women's health condition	12
Other	32.6

Figure 1: Use of the health status questionnaires by physiotherapists

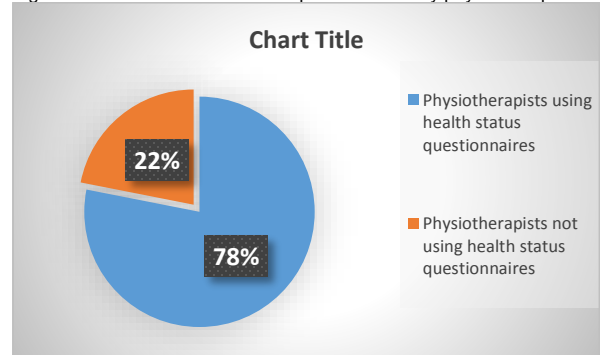


Table 2: Data provided by the physiotherapists who were not using the health status questionnaires

Reasons behind not using the outcome measuring tools	Yes	No
Are confusing to patients	32	21
Are difficult for patients to complete independently	21	32
Require too high a reading level	48	5
Are in English, a language in which many of my patients are not fluent	47	6
Make patients anxious	3	5
Require more effort than they are worth	10	43
Don't contain information that helps to direct the plan of care	44	9
Are difficult to interpret (e.g., don't know what norms are, or how score relates to severity or what clinically important change might be)	1	52
Don't contain the types of items or questions that are relevant for the type of patients I see	3	50
Often don't get completed at discharge, so cannot give information about patient's response to treatment	45	8
Require training that I do not have	9	44
Cost too much	1	52
Require a support structure that I don't have	6	47
Are really only useful for research purposes	44	9
Are not relevant because my practice involves consultation, case management or discharge planning only	19	34

Table 3: Data provided by the physiotherapists who were using the health status questionnaires

Benefits of using outcome measuring tools	Definitely agree	Agree	Somewhat Disagree
Helping to direct the plan of care	74	96	19
Enhancing communication between therapist and patient	152	26	11
Helping patients feel that therapists are thorough in their examination	173	11	5
Increasing the efficiency of examinations	142	39	8
Helping to focus choice of interventions	95	74	20
Attaining better patient outcome	86	69	34
Helping to motivate and encourage patients	117	61	11
Enhanced marketing of my practice or services	66	92	31
Problems reported by the physiotherapists in using the outcome measuring tools			
Are confusing to patients	70	98	21
Are difficult for patients to complete independently	107	83	0
Require too high a reading level	136	48	5
Are in English, a language in which many of my patients are not fluent	87	76	26
Require more effort than they are worth	79	86	24
Don't contain information that helps to direct the plan of care	87	92	10
Are difficult to interpret	97	80	12
Make patients anxious	31	103	55
Take too much time for patients to complete	154	26	9
Take too much of clinicians' time to analyze/calculate/score	167	18	4
Don't contain the types of items or questions that are relevant for the type of patients I see	52	93	44
Often don't get completed at discharge, so cannot give information about patients' response to treatment	48	79	62

Table 4: Reasons for using outcome measuring tools by the physiotherapists

Uses	Yes routinely,	Yes sometimes	No
Answering clinical questions through a traditional research approach	15	62	112
Quality improvement/assurance activities	37	140	12
Determining the complexity of patients	27	152	10
comparing performance across therapists in terms of average patient outcomes	10	20	159
Comparing one's clinical performance to that of other clinics	7	26	156
Comparing average outcomes of patients with different conditions within a practice	20	74	95
Examining the average change in patients' health status over their episodes of care to determine a practice's effectiveness	155	32	2
Examining the average change in patients; health status over their episodes of care to determine individual therapists' effectiveness	124	65	0
Examining and documenting the status, progress and/or outcomes of individual patients by individual therapists	65	120	4
Communicating with other health care providers and referral resources	163	14	12

Table 5: Criterion used for selecting the outcome measuring tools

Criteria	Yes	No
Can be completed easily	163	26
Easy for patient to understand	170	19
Easy for clinicians to understand/interpret meaning of scores and change in scores	136	53
Shown to be valid and reliable	175	14
Seem to be most common ones used in physical therapy practice	9	180
useful for a variety of purposes such as research, quality assurance, patient evaluation	119	70
Can be analyzed electronically	0	189
Most appropriate for the types of conditions seen in my practice settings	11	178

DISCUSSION

In order to find the proportion of physical therapists using the outcome steps, the analysis was carried out. In addition, significant facilitators and inhibitors were also found in the physiotherapists' use of outcome measurement methods. The key results were the trust of the patient in the therapist as the key facilitator and the

long period taken to complete the outcome steps. Other major facilitators were the confidence of patient in skills of his physiotherapist, better communication between physiotherapist and patients and high proficiency of examining the patient. Jatte et al., also reported improved communication as the plus point of using the outcome measuring tools.⁶

The most common barriers are prolonged time of completing and analyzing the outcome measuring tools by patients and by physiotherapist, respectively and high level of reading it. Old researches have explored that short time duration to complete the outcome measure tool was the major barrier.⁷

In order to assess the effectiveness of the care offered and to interact with other health providers, outcome measurement instruments were used. It has been proposed that the in order to determine the progress of practice and treatment, the outcome measuring tools were used. The main factors leading to its successful use were accuracy, reliability, short duration for completion and easy understanding.⁸

While regarding the non-use of outcome measuring tools, it has been proposed that requirement of high level of knowledge and difficulty in completing it due to English language were the barrier for patients were the most common reasons for not using them. Burton et al., explored the opinions of physiotherapists regarding barriers and facilitators for using outcome measures tool. They proposed that short time duration, less training and inadequate knowledge about tool and its benefits were the significant barriers. While the most probable facilitators were the efficiency in providing the knowledge regarding improvement of patients' condition and also the working therapy method.⁹

Furthermore, it has been suggested that high qualification, more information and more experience about using outcome measures had a positive effect on the use of outcome measures. Management of the assistance form and support from colleagues was also the facilitator for the implementation of outcome steps. While, lack of funds and time, inappropriate knowledge about accuracy and predictability as well as inappropriate precision about importance of outcome measures had a negative impact of using outcome measures.¹⁰

Francis et al., piloted a study to know that which factors are most common that affect the practice of using the outcome measures among physiotherapists. The most responsible factors were the knowledge of physiotherapist regarding outcome measures, availability of several facilities and professional attitude of physiotherapist regarding use of outcome measures.² Diane et al., also conducted study to observe the facilitators and barriers for outcome measures use. The response rate was around 50%. Several barriers were observed to be related significantly to use of outcome measures. These are short time, lack of funds and inappropriate knowledge on patient's side and also the physiotherapist about the outcome measures.¹

Roland et al., conducted a study on physiotherapist working for stroke patients and explored a positive relationship between outcome measures and understanding of these outcome measures, which was the most motivating factor for their use in routine. However, the short time duration and limited resources were also the hindrances which were hindering the use of outcome measures.¹¹

Copeland et al., conducted a study to determine the use of outcomes measures among physiotherapist who were working on patients of low back pain. They suggested that the higher qualification and more appropriate information about outcome measures had significant impact on use of outcome measures while the short time was the main cause of not using them.¹²

CONCLUSION

The main facilitators are increased communication between physiotherapist and patient and enhanced the efficacy of assessment. Alternatively, the main barriers restricting the usage of outcome measures are reported to be the inability

to complete the various assessment tools due to the lack of time on the part of the patient as well as the physical therapist.

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