

Physiotherapists' perceptions regarding the patient adherence to prescribed self-management strategies: A cross-sectional survey

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Abstract

Objective: To evaluate physiotherapists' perceptions regarding importance of patient's adherence to physiotherapist prescribed self-management strategies in improving patients outcomes as well as to identify perceived barriers by physiotherapists in employing methods to aid adherence.

Materials and Methods: A cross-sectional survey was conducted on 120 physiotherapists using non-probability purposive sampling technique. Only those physiotherapists who worked clinically more than 15 hours per week and had an experience of treating adult patients with average patient load of 80% or greater were included in the study. The questionnaires were self-administered by researcher. The data was analyzed using descriptive statistics (frequency and percentage) by SPSS version 22.

Results: Most of the physiotherapists' .i.e. 90.8% perceived that individualizing the self-management techniques to the patients as the most important method to improve patient adherence to self- management techniques in positively influencing outcomes. However major barriers that prevent physiotherapists from employing methods to improve patients' adherence were lack of time 38.3% and lack of resources 44.2%.

Conclusion: This survey concluded that physiotherapists perceive that patients adherence to self-care techniques can significantly affect treatment outcomes. However lack of time and limited asses to resources were the barriers that mostly prevent physiotherapists from employing methods to aid adherence. Therefore physiotherapists should be focused to apply evidence-based methods to maintain patients' adherence.

Keywords: Adherence, Compliance, Physiotherapist perceptions, Self-care techniques, Self-management strategies.

Introduction

Adherence is defined as "the extent to which a person's behaviors correspond with agreed recommendations from a healthcare provider" (WHO, 2003). It is also defined as "the extent to which a patient acts in accordance with the prescribed duration and dose of a regimen."¹

Self-management strategies are the strategies prescribed by physiotherapist (PT), specifically for the patient to achieve complete independence at home. It goes beyond simply supplying patients with information. It includes a commitment to patient-centered care, helping patients set goals and make exercise plans to live a healthier life.²

Adherence is influenced by a wide variety of factors that includes patients' demographics, costs of intervention, the type of intervention, and the nature of the medical condition, as well as by other psychological and social factors.³ Study reported that maintaining exercise benefit requires adherence.

Studies showed that those patients who adhere to their prescribed exercises are significantly better at achieving their goals. Unfortunately, it has also been shown in various researches that generally patients adhere poorly to their prescribed home program.⁴ Non-adherence to a home exercise program has been shown to be as high as 50-65% for general MSK conditions.⁵ Non-adherence can also result in the PT believing that their current treatment is not effective and proceeding to unnecessarily modify their program.

Furthermore, patients who are non-adherent to treatment are more likely to experience worsening medical conditions, unnecessary complications, and overall higher rates of morbidity and mortality. Systematic examinations by

Lonsdale et al., (2017) showed that only 35-45% of patients were fully committed to their physiotherapy programs at home and this non-adherence led to poor outcomes.⁶⁻⁸

Barriers to adherence can be prevented by focusing to meeting the psychological, coping and recovery needs of patients.⁹ This study will help us to identify that patient adherence to self-management is important; that the rates of adherence can be improved with a number of methods that physiotherapists can employ to positively influence patient adherence.

This cross-sectional survey evaluates physiotherapists' perceptions regarding importance of patients' adherence to physiotherapist prescribed self-management strategies in improving patients' outcome and to explore rate of patients' adherence to prescribed self-management also to identify barriers in employing methods to aid adherence.

Materials and Methods

A cross-sectional survey was conducted on 120 physiotherapists from different hospitals and physiotherapy clinics of Karachi, Hyderabad and Mirpurkhas in January 2018 using non-probability purposive sampling technique.

Approval for this cross-sectional survey was sought from the Institutional Review Board (IRB), JPMC (Ref No.F.2-81-IRB/2017-GENL /1533/JPMC) prior to conducting the study. Participating PTs were volunteers and those who met the inclusion criteria were enrolled in the study.

Only those PTs who worked clinically more than 15 hours during an average week and those who had an experience of treating adult patients with average patient load of 80% or greater were included in the study.

The questionnaire used in this study was developed by the electronic survey by Peek et al.¹¹ The tool was then pilot tested for acceptability and feasibility using an expert panel of health behavior researchers and physiotherapists before the final questionnaire was administered by the researcher. The survey questionnaire also includes socio-demographic questions.

After taking the informed consent, the questionnaires were handover to PTs by researcher so that the inclusion criteria can be described. All responses were anonymous.

PTs were asked to indicate the extent to which they agreed or disagreed with statements about the perceived importance of patient self-management strategies (including exercise, self-taping, removable bracing and advice). Physiotherapists responded using a four-point Likert scale (strongly agree, agree, disagree, strongly disagree). For patient adherence PTs were asked to consider the last 10 patients to whom they prescribed exercise, self-taping, removable bracing and advice. These 10 patients, they believed, had adhered to more than 80% of this strategy (response options included; 0 to 10; or "have never prescribed this strategy"). PTs were then asked to rank these factors in order of importance (1 as most important and 5 as least important).

The data was analyzed using descriptive statistics (frequency and percentage) with SPSS (version 22. IBM Corp.)

Results

The first two questions of the questionnaire were screening questions to exclude those PTs who did not meet the study's inclusion criteria: 7 physiotherapists were excluded, because they did not work clinically more than 15 hour per week and 10 PTs were excluded because adult patients did not represent more than 80% of their clinical case load. 13 questionnaires were cancelled due to over writing. However 120 PTs (Males = 42, Females= 78) completed the survey and hence were included in the data analysis (Fig. 1).

Perceived importance of patients commitment to PT prescribed self-care techniques and the perceived rate of adherence

Most of the PTs agreed or strongly agreed that adhering to PT prescribed self-management techniques is essential in positively influencing patient outcomes. When PTs were asked about perceived rate of adherence for independent exercise program, 73.3% agreed to independent self-taping 62.5%. However only 25.8% strongly agreed to the use of removable bracing. When asked about verbal or written advice (for exercise), 25.8% strongly agreed. (Table 1)

Majority of the PTs (53.3%) reported that PTs characteristics including communication skills, use of reminders, monitoring of adherence and knowledge of PT as important factors in determining patient adherence to prescribed self-management strategies. However most of the PTs reported that patient characteristics including modifiable factors (41.7%) and non-modifiable factors (54.2%), social factors (41.7%), characteristics of the self-management

strategy (46.7%) as fairly important in determining patient adherence.

Perceived importance of methods employed to increase patient adherence to a physiotherapist-prescribed self-management strategy

Most of the PTs i.e. 90.8% perceived that individualizing the self-management techniques to the patient as the most important method to improve patient adherence to self-care techniques and in turn positively influencing patient outcomes. However 88.3% PTs reported providing patient education as most important. 85 PTs reported practicing the strategy during the consultation, providing professional support to the patient, monitoring patient adherence including use of reminders, use of exercise diaries, exercising along with the patient and PT communication skills were also important in positively influencing patient outcomes, (Table 2).

Barriers to adherence

Physiotherapists reported various barriers that prevent them from employing methods to improve patient adherence to a self-management strategy. Most of the PTs i.e. 38.3 % agreed that they do not have enough time to provide adherence aiding strategies. Whereas 12.5% agreed that they were uncomfortable discussing adherence with patients, 25% of the PTs agreed that they had limited knowledge in providing adherence strategies. However most of the therapist 44.2% agreed that they had limited access to resources such as patient educational materials. 31.7% reported lack of continuity of care of patients. 8.3% strongly agreed that adherence was not a problem with their patients. Furthermore 23.3% PTs did not believe that improving patient adherence is relevant to physiotherapy practice.

Discussion

One of the important finding of this study was that 90.8% of the PTs perceived that individualizing the self-management techniques to the patient as the most important method to improve patient adherence to self-management techniques in turn positively influencing outcomes which were comparable to another study findings in which 89% of physiotherapist strongly agreed regarding self-management techniques enhancing treatment outcome.¹¹ Similarly another study by Thomas SP et al. reported that self-management programs that emphasize the patients as "central role" in managing their illness greatly enhance treatment results.¹²

This study supports the idea that compliance to PTs prescribed self-management techniques greatly impacts the outcome. Another study by Campbell R et al.¹³ in 2001 suggests that it is important that health professionals need to understand reasons for non-compliance of patients and brings evidence into practice so that the results could be improved. Myers LB et al. in his study also identified some factors associated with adherence.¹⁴ However Room J et al. suggested that there is need for quality reporting, use of effective interventions in the field to enhance exercise adherence.¹⁵

In this survey PTs reported various characteristics like communication skills of PT, use of reminders, monitoring of adherence and knowledge of PTs as important factors in determining patient adherence to prescribed strategies. Similarly another study reported that exercise adherence requires the use of relevant and appropriate measures guidance.¹⁶

Willett M et al. also highlighted important factors and stated that adherence could be enhanced by increasing the attractiveness of exercise programs, according to new advancements like visual and dynamic to make exercise exciting and which include feedback on their execution.¹⁷ Similarly another study reported the use of Instagram with the home exercise program as a motivation to reinforce adherence.¹⁸

In this survey PTs reported various barriers that prevent them from employing methods to improve patient adherence to self-management strategy. Most of the PT agreed that they did not have enough time to provide adherence aiding strategies. However Essery R et al. reported other factors that influence adherence to self-management exercises which includes patients self-inspiration, self-viability and past adherence to work.¹⁹ Tinubu BM et al. reported improvements in the patient progress by providing evidence-based self-management advices.²⁰ Therefore, PTs need to know a wide range of options that can facilitate patients compliance.

Table 1: Percentage distribution of clinical physiotherapists agreement about positive treatment outcomes due to patient adherence to PT prescribed self-management techniques.

	Strongly Agree %	Agree %	Disagree %	Strongly disagree %
Independent exercise programs	25.0	73.3	1.7	0
Independent self-taping	7.5	62.5	27.5	2.5
Use of removable bracing	25.8	65.0	6.7	2.5
Verbal or written advice	25.8	67.5	4.2	2.5

Table 2: Perceived importance of PT and patient characteristics of patient adherence to PT prescribed self-management strategies

	Most Important %	Important %	Least Important %
Individualizing the self-management strategy to the patient	90.8	7.5	1.7
Providing patient education	88.3	10.8	.8
Practicing the strategy within the consultation	85.0	14.2	.8
Providing professional support to the patient	84.2	10.8	5.0
Monitoring of patient adherence	76.7	21.7	1.7
Addressing the general health of the patient	81.7	15.0	3.3
Involvement of the patient's support person	79.2	17.5	3.3
Physiotherapist communication skills	83.3	11.7	5.0

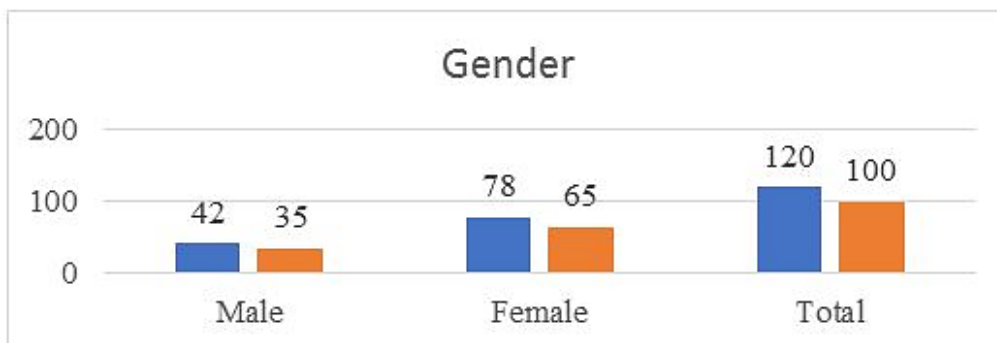


Fig. 1: Percentage and frequency of male and female participants of study

Conclusion

This survey concluded that PTs perceived patients adherence to self-care techniques significantly impacted patients outcomes and that the rate of patients commitment to self-management could be improved. Therefore PTs should be focused to explore the understanding of adherence and apply evidence-based methods to help maintain adherence in daily clinical practice. However lack of time and limited asses to resources were the barriers that mostly prevent PTs from employing methods to improve patient adherence.

This study was limited in that it was a cross-sectional survey and sample size was not enough to develop definitive findings. However, the current study is a worthy initiative to be the foundation for future research.

Conflict of interest

The authors declared no conflicting interests regarding publication or authorship of this study.

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Ethical clearance

Ethical approval was sought from Institutional Review Board, JPMC (Ref No.F.2-81-IRB/2017-GENL/1533/JPMC) prior conducting of this study.

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