

Perception of Patient Family Education Among Physiotherapist, Patient, and Caregiver – A Pilot Study

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ABSTRACT

Patient-family education is essential for effective patient care. It leads to shorter hospital stays, reduced readmission rates, and improved self-care management as per evidence. Traditionally, patient education has seen patients and families as passive recipients, with clinicians owning the process. However, a patient-centered approach positively affects motivation, information retention, health outcomes, and treatment adherence. Only a few studies in India have explored perceptions of patient education by therapists, patients, and families. A survey was designed to capture perceptions of patient family education among physiotherapists, patients, and caregivers. Participants included physiotherapists with over three years of experience, hospitalized patients, and their caregivers. Data was collected from Sri Ramachandra Institute of Higher Education and Research, Multispecialty Clinics, and Small Clinics between April and July 2021, with written informed consent from all subjects. The survey revealed that physiotherapists lacked awareness of various teaching methods for effective patient education. Patients and caregivers indicated that physiotherapists must enhance their communication skills and stay updated on barriers to patient and family education and innovative teaching methods. Physical therapists view patient education as an important component of patient care. This study examined the interaction between the physiotherapist, the patient, and the caregiver. The findings can improve the rehabilitation process and provide qualitative updates on the patient family education.

1. Introduction

Patient family education is crucial to effective patient care across healthcare settings. It enables health professionals to communicate essential information, enhance patient self-efficacy and self-management skills, and improve clinical outcomes, including pain, disability, and function within physiotherapy settings (Forbes, 2017). This process includes the purposeful delivery of health-related information to promote behavior changes that optimize health practices and assist individuals in attaining new skills for living.

Quality education can shorten hospital stays, reduce readmission rates, and improve self-care management skills. When patients or families perceive the education encounter as positive, it can prevent complications associated with the physiologic stress response, decrease anxiety, and increase satisfaction. Patient family education promotes patient-centered care, encourages active involvement in care plans, and increases adherence to treatment regimens, leading to a more efficient and cost-effective healthcare delivery system (Dreeben, 2010).

Traditionally, physiotherapists have included the patient's family in obtaining information and involving them in rehabilitation, before discharge to ensure effective home assistance. However, modern family theory suggests that both the family and patient benefit optimally when they are equal, integral parts of the rehabilitation program throughout the entire period (Forbes, 2017).

The importance of patient education is widely acknowledged in the medical community. Understanding information communicated by healthcare providers can enhance patient satisfaction, and compliance with treatment instructions, and outcomes, and reduce treatment times and costs. Patient education is also a requirement for the accreditation of healthcare facilities. Legal and ethical mandates require that patients be informed of their health status and options to actively participate in developing and implementing treatment plans (Forbes, 2017).

Patient education has improved patients' hospitalization experiences, including reducing pain and anxiety. Improved communication can enhance self-care and result in fewer medical interventions in the future (Behar-

Horenstein et al., 2005). However, not all patient education is successful. Communication is often partially understood, misunderstood, or misinterpreted, leading to adverse events or poor outcomes. Poor communication was the cause of 10% of sentinel events(Hall et al., 2010). Health literacy is seeking, comprehending, and acting upon health-related information. This competency is essential for effectively navigating healthcare systems and making informed health decisions. Low health literacy can lead to misunderstandings in physician communication, resulting in inadequate self-health management and improper healthcare utilization. Physicians have a responsibility to facilitate accessible interactions that promote health and well-being. (Pinto et al., 2012).

Few articles have quantitatively measured the effectiveness of patient-family education. Studies have focused on qualitative perceptions of effectiveness and satisfaction but lack quantitative measures of comprehension and retention before and after interventions (Wills, 2009).

Research suggests health professionals may be reluctant to use patient education due to a perceived lack of training or low self-efficacy. Developing skills in patient education is essential, and recent research indicates physiotherapists find direct patient experience and professional in-service training more beneficial than pre-professional training(Hall et al., 2010; Svavarsdóttir et al., 2015).

Historically, patient education has centered on a mechanistic model, with the patient as a passive receiver. Recent literature advocates for a patient-centered approach, where the patient is central role in knowledge sharing. This approach positively affects motivation, information retention, health outcomes, and treatment adherence. Concerns remain about how patient education is provided within physiotherapy settings, often lacking individualization and patient-centered approaches (Curtis et al., 1993; Forbes, 2017; Pinto et al., 2012).

Several factors influence patient-family education, including cognitive status, trust, emotional status, attitude, knowledge, experience, family participation, literacy, and time(Hyrkas & Wiggins, 2014). Training in patient education skills should be emphasized in clinical practice and curricula to improve professional efficiency(Dreeben, 2010).

Few studies in India have explored the perception of patient education by therapists, patients, and families, often relying on studies from Western countries. Understanding these perceptions can improve the quality of patient education and professional competencies. This survey aims to identify whether patient-family education meets the needs of patients and caregivers and whether therapists modify education based on patient needs or adhere to standard protocols.

Patient-family education is vital for effective healthcare in improving patient health behavior, self-efficacy, and potentially reducing costs. Additionally, patient education strategies in physiotherapy have been shown to enhance therapeutic outcomes by reducing pain-related disabilities and improving overall function. Fewer studies were carried out in India to understand the perception of patient education among physiotherapists, patients, and families. Hence there is a need for the study to identify whether patient-family education meets the needs of patients and caregivers and whether therapists understand the need of the patient and modify the patient-family education.

2. Methodology

The data was collected from different setups in Sri Ramachandra Institute of Higher Education And Research, Multispecialty Clinics, and Small Clinics. The data collection was started in April 2021 and completed by July 2021. A written informed consent was obtained from all the subjects. The information was collected from 29 sets consisting of physiotherapists, patients, and caregivers.

Physiotherapists with more than 3 years' experience were included in the study, the inclusion criteria for patients were over 16 years of age, sound level of understanding to self-administer questions, capable of understanding and reading either English or Tamil, and psychological stability is needed.

Inclusion criteria for the caregiver were, voluntary participation, immediate relatives/family of patients, capable of understanding and reading either English or Tamil,

Exclusion criteria were lack of cooperation by the caregiver or the patient.

2.1 Procedure

A cross sectional, survey was designed, to understand how physiotherapist, patient and caregiver acknowledge patient family education. The participants were categorized into three which includes- experienced

physiotherapists (>3 years), hospitalized patients, and their caregivers. Subsequent items in this survey design regarding physiotherapy context and patient education practice were taken from a recent survey. This survey was formed according to the existing knowledge of an experienced physiotherapist and patient and caregiver expectation regarding patient education. A set of 4 questions highlighting following components were formed and questionnaire survey was conducted on 29 participants’ responses in each of the categories, in order to obtain results statistical analysis was performed.

Components of the survey:

- Importance of patient family education
- Role of Communication
- Barriers encountered
- Understanding of PFE

2.2 Patient Family Education (PFE) Questionnaire

Physiotherapist

1. Do you think the education of family members is important for effective rehabilitation?
2. Do you think the barriers such as communication, literacy, and language play a major role in PFE?
3. Do you incorporate home exercise and self-management strategies and education according to the individual needs?
4. Do you have any barriers or difficulties in conveying the PFE?

Patient

1. Do you think the information and education about your disease condition is important or necessary?
2. Do you think the physiotherapist has a good communication/rapport with you
3. Can you able to summarize the exercise and educational information provided by the therapist?
4. Do you have barriers in understanding the PFE?

Family/caregiver

1. Do you think the PFE is important and necessary?
2. Do you think physiotherapist is able to communicate necessary aspects of patient education?
3. Can you able to summarize the exercise and educational information provided by the therapist?
4. Do you have barriers in understanding the PFE?

3. Results

3.1 Perception of Physiotherapist

The total number of samples collected is 29 sets. The majority of the physiotherapist is with 3 to 6 years of experience followed by less than 3 years of experience.

Table 1: Perception of PT in PFE

Physiotherapist	Frequency	Percent	Valid Percent	Cumulative Percent
Education of family members important?	29	100.0	100.0	100.0
Barriers (communication, literacy, language) play a major role?	27	93.1	93.1	93.1
	2	6.9	6.9	100.0
		100.0	100.0	
Incorporate home exercise and self-management strategies in patient education?	21	72.4	72.4	72.4
	8	27.6	27.6	100.0
	29	100.0	100.0	

Physiotherapist	Frequency	Percent	Valid Percent	Cumulative Percent
Use various teaching methods for effective patient education?	14	48.3	48.3	48.3
	15	51.7	51.7	100.0
	29	100.0	100.0	

PT- Physiotherapist, PFE- Patient Family Education

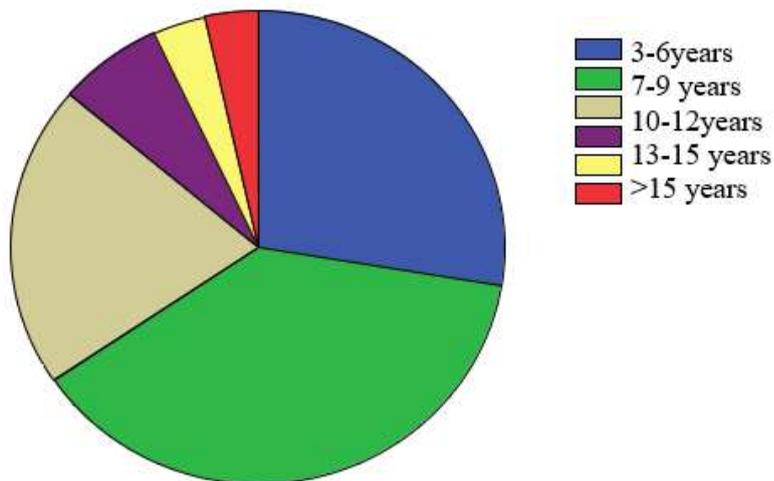


Figure 1: PT Practitioners Included in the Study

- ✓ 100% of the physiotherapist agrees that the patient education for the family members is important and necessary (table 1).
- ✓ About 93% of the respondents reported that communication, language, and literacy are the common barriers in patient education (table 1).
- ✓ About 72% of the physiotherapist incorporates home exercise program and self-management strategies as a part of the patient education (table 1).
- ✓ Only about 48% of the physiotherapist reported using various teaching methods for effective patient education.

The results suggest that the physiotherapists have lack of awareness about various types of teaching methods for effective patient education (table 1).

Perception of Patient

The total number of participants is 29 with female participants 68% and male 31%. The majority of the patients (51%) were under one week or less than one week treatment duration.

Table 2: Perception of Patient on PFE

Patient	Frequency	Percent	Valid Percent	Cumulative Percent
Information about your disease is necessary?	28	96.6	96.6	96.6
	1	3.4	3.4	100.0
	29	100.0	100.0	
Are you able to summarise the education provided by physiotherapist?	17	58.6	58.6	58.6
	12	41.4	41.4	100.0
	29	100.0	100.0	
Physiotherapist struggle in communication?	18	62.1	62.1	62.1
	11	37.9	37.9	100.0
	29	100.0	100.0	
Therapist recognised the barriers to education	15	51.7	51.7	51.7

Patient	Frequency	Percent	Valid Percent	Cumulative Percent
provided?	14	48.3	48.3	100.0
	29	100.0	100.0	

PFE – Patient Family Education

- ✓ About 96% of the patients consider the information about the disease is necessary (table 2)
- ✓ About 2/3rds of the patient reports that the physiotherapist struggle in communication (table 2)
- ✓ About 58 % of the patients were confident to summarize the education provided by the physiotherapist (table 2)
- ✓ About 51% of the patients believe their physiotherapists could recognize the barrier to patient education (table 2)

The results suggest that majority of the physiotherapist need to improve on communication skills and also should update on the barriers that influence the PFE and new teaching methods.

Perception of the Caregiver

Table 3: Perception of CG on PFE

Caregiver	Frequency	Percent	Valid Percent	Cumulative Percent
Information about your disease is helpful?	29	100.0	100.0	100.0
Able to use it for precaution, prevention and home management?	29	100.0	100.0	100.0
Do you think communication plays a major role in patient education?	28	96.6	96.6	96.6
	1	3.4	3.4	100.0
	29	100.0	100.0	
Do you think PFE is important and necessary?	27	93.1	93.1	93.1
	2	6.9	6.9	100.0
	29	100.0	100.0	

CG-Caregiver, PFE-Patient Family Education

- ✓ The total number of caregivers is 29. About 100 % of the family members reported that the information about the disease was helpful and also could use it for precaution, prevention, and home management.
- ✓ About 96% of the caregivers report that communication plays a major role and also agreed to support the patient feedback system.
- ✓ 93% of the participants report that the PFE is very important and necessary and also the physiotherapist is skillful, knowledgeable, and experienced to provide patient-family education.

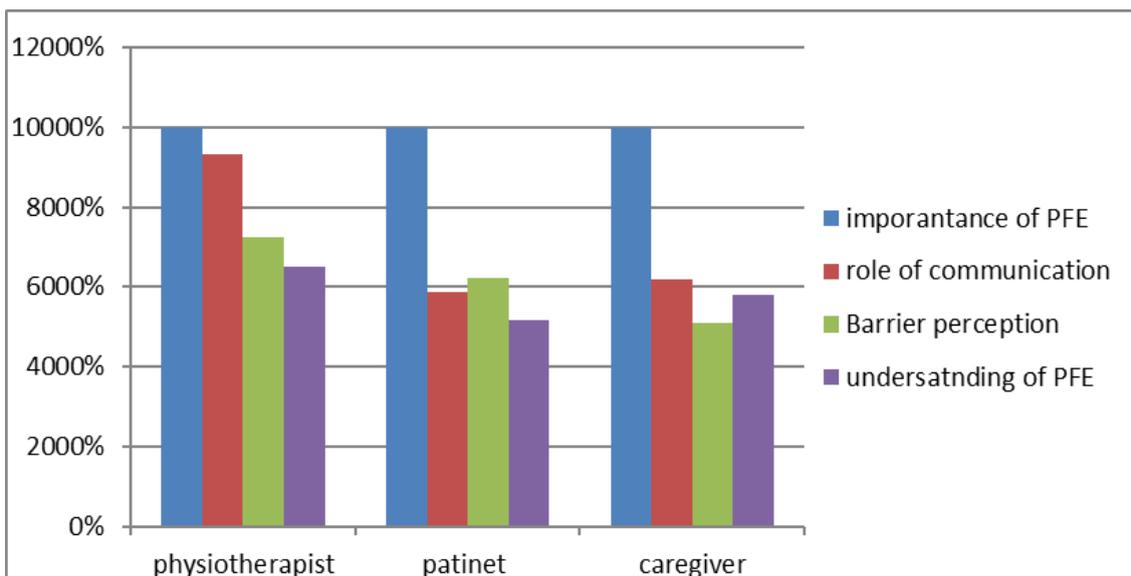


Figure 2: Summary Graph Showing Cummulative Responses from PT, Patient & Caregiver on PFE
PFE – Patient Family Education

The results of this study shows that the PT, Patient and the caregiver were able to analyze the importance of PFE, whereas the role of communication, language and literacy are reported as the common barriers which hinders the effective interaction between the therapist and the patient's family during PFE session.

4. Discussion

This study explored the self-reported use of patient family education among practicing physiotherapists. It also sought to understand the perception of physiotherapists, caregivers and patients towards educational activities and factors contributing to their development of patient education skills. The results demonstrate that physiotherapists from various hospital ranging from multi-specialty areas to a small clinics set ups engage in a variety of patient family education activities, and furthermore, consider a wide range of educational activities as important.

4.1 Physiotherapist:

A novel finding is that patients, family caregivers and Physiotherapists all three categories valued the objective of patient family education. Generally, the most frequent constructs reported by physiotherapists were diagnosis, education about exercise, home program, precautions were perceived as being the most important. Similarly, the items reported to be least important, most notably advice on social support, handling emotional instability of the patient were used least frequently.

Additionally, the results suggested physiotherapists are aware of the evidence based education but do not have sufficient training or the skills to use this in practice. These findings indicate that although most physiotherapists recognize the need to address these needs, most priorities was given to addressing the presenting physical problems. (Louw et al., 2016)

Communication plays a major role in patient education, even a skillful physical therapist will find difficult in handling the patients effectively if unable to communicate in appropriate manner. Lack of training or confidence in psychosocial areas of patient education may result in inadequate preparation to engage in such interventions despite awareness of its importance (Sanders et al., 2013).

The finding of this study was similar to our results which suggests that more importance can be given to improve the communication of the physical therapist.

The barriers encountered by the physiotherapist are language, health care literacy, understanding ability of the patient, caregivers, motivation and ability of the care givers to understand the patient family education. (Wittink & Oosterhaven, 2018). There was no obvious difference on perception of needs of family members with age of the physiotherapist, professional qualification and experience.

4.2 Caregivers:

Care giver is a family member, friend who provides care to an individual who has an acute or chronic condition and needs assistance to manage a variety of tasks, from bathing, dressing, and taking medications to tube feeding and doing exercises. Caregivers spend a substantial amount of time interacting with their care recipients, while providing care in a wide range of activities. The knowledge regarding health literacy rate did have an impact on understanding ability of the need of exercise, home program and patient family education. Subjects with basic degree as a qualification seem to be more motivated and participated and contributed very effectively in the program the subjects with poor literacy rate. (Danzl, 2013)

The primary caregiver played a major role in patient education, they participated more actively in enabling the patient to come out of the disease condition. Caregivers found that greatest challenges for family caregivers were interacting with the professionals in the hospital setting. The caregivers often felt unprepared to provide care, exercise due to inadequate knowledge to deliver proper care, and felt that the guidance from the physiotherapist was not sufficient. The barriers encountered by the caregivers were they suffer from severe fluctuations in sleep patterns, undue strain, financial burden and physical environment. (Scorrano et al., 2018)

Duration of hospital stay did have impact on patient family education, the care givers who had a longer hospital stay participated more actively in the patient family education than subjects on a day care or a short stay, rapport and the familiarity with each other may be one of the reasons for this participation.

4.3 Patients:

Patient education is ineffective if the patient fails to understand what is being taught. However, higher mental functions impaired patients may not even be aware that they do not understand what is being taught to them. Majority of the patients found that they wanted to receive concrete information about their disease and treatment, such as diagnosis, prognosis, treatment side-effects, possible complications, exercise, contraindication and other practical information. (Physiotherapy in Rheumatoid Arthritis, n.d.).

The method of teaching was satisfactory for majority of the patients, but they wanted more clarified way or improved way of teaching methods in the form of videos, pamphlets regarding the exercises and home program and they also identified this home program to be very useful for them (Baeten et al., 2008) & only the experienced physiotherapist will be able to efficiently handle patient and family by fulfilling the demands satisfactorily by addressing the patient concern, correct posture or movements, teach self-management strategies, explore patient perception, teach problem-solving strategies, etc (Forbes et al., 2017).

4.4 Limitations

- The study was measured only by self-reported perceptions of the physiotherapist, patient, and caregiver.
- The sample size was small.
- Duration of the study is limited.
- Standard outcome measures were not used.

5. Conclusion

Physical therapist involving in patient education is a very important aspect of patient care. In this study, the interaction between the physiotherapist, the patient and the caregiver is done on functional basis and it was found that the importance of PFE is known among the PT, patient and CG but the role of communication, language and literacy are found to be the barriers between the therapist and the patient family. The study outcomes can be used to enhance the rehabilitation process and qualitative updates in the PFE.

Conflict of Interests: The authors declare no conflict of interest.

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