Physiotherapists' Perception of Patient Compliance to Home Exercises in Chronic Musculoskeletal Physiotherapy

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Abstracts: **Background:** Disorders of the musculoskeletal system are common, are responsible for a considerable amount of disability, impairment, and handicap, and are associated with high economic costs. Rehabilitation of chronic musculoskeletal conditions necessitates long-term home-based exercise programs. Exercises have been shown to alleviate pain, improve joint mobility and stability, allow faster return to work and prevent progression of chronic conditions. Non-adherence of patients to unsupervised long-term exercise is a major problem that affects treatment outcome. This study explores Indian physiotherapists' perception of exercise adherence and their interventions to tackle it in clinical practice. Methods: A convenience sample of fifteen experienced physiotherapists from Saurashtra region of Gujarat was interviewed. Interviews were recorded and analysed. Results: The identified themes revolved around issues of patient-therapist collaboration in chronic rehabilitation. The subordinate themes were: negotiating ownership and self management, education and pain, patient attitudes and communication. Conclusion: Experienced physiotherapists recognised barriers and often critically viewed their practice. They undertook necessary interventions in their practice but persisting non-adherence made them question the patient's role in the partnership.[Buddhadev N. NJIRM 2012; 3(2): 162-165]

Key Words: Rehabilitation, Chronic Musculoskeletal Conditions, Home Based Exercise

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Introduction: Musculoskeletal Disorders or diseases are those that affect the bones, muscles and joints. The most common and significant musculoskeletal disorders of adults are osteoporosis and associated fractures, low back pain, and the arthritic disorders. The majority of musculoskeletal conditions develops slowly due to repeated minor injuries, poor posture or stress on particular muscles. They are characterized by chronic pain and limited mobility. Depending on the type and severity of the disorder or disease, treatment can range from simple rest to surgical intervention.

Chronic musculoskeletal pain (CMP) is generally identified as a musculoskeletal pain condition that has no identifiable underlying serious or specific disorder and has not resolved in less than 3 to 6 months. Musculoskeletal pain is very likely in an individual's lifetime affecting 1 in 4 adults, and is a common source of serious long-term pain and physical disability. People with regional musculoskeletal pain should be regarded as equal and active partners in their healthcare; need good information; and be empowered to take responsibility for their musculoskeletal health.

Long-term exercises and self-management are strongly recommended compared to passive treatments for such conditions allowing faster return to work. Prescription of exercise can vary in technique and intensity, from specific exercises enhancing strength and flexibility to general aerobic fitness programs

Adherence is 'the extent to which a person's behaviour corresponds with agreed recommendations from a healthcare provider'.[1] Adherence is multi-factorial; components related to patients, healthcare professionals and healthcare organisations are believed to affect patient's exercise adherence[2]. Patients who adhere are identified to have better treatment outcomes than non-adherent patients; thus making non-adherence a burden on the economy.[1,3,4] Failure to exercise regularly is recognised as the most common non-adherent behaviour among patients with chronic conditions.[5] Long-term adherence with exercise is more difficult to achieve especially when immediate benefits are unlikely to be noticed, as is often the case with exercise.[5,6] This qualitative study aims to investigate physiotherapists' perceptions regarding adherence

to home-based exercises among patients with chronic conditions, their experiences and interventions in clinical practice.

Material and Methods: Qualitative research aims to explore the diverse understanding of adherence behaviour and allows the participant's views to be analysed within their personal, professional and social context An In-depth interview of a 15 physiotherapist of Saurashtra region were conducted after taking consent and explaining the purpose of the study. Most interviews lasted for an hour. A semi-structured checklist was prepared to guide the flow of information.

Study tools: The qualitative study was carried out using semi-structured in-depth interview technique facilitated by the guidelines & checklist after pre-testing of the questionnaire.

Analysis of qualitative data: After the interview the notes were expanded on a same day, translated in English where needed, coded and entered in computer for grouping and classification of the information according to domains of inquiry. This facilitated understanding the emerging patterns. It was also useful to locate the 'verbatim' relevant to each of the domains or area of inquiry.

Ethical Issues: Physiotherapists who gave their consent were selected for the interviews. In addition, to ensure confidentiality, names used in the text are not the real names of the Physiotherapist. Privacy and comfort were ensured as they had opted to be interviewed in their homes/Clinic. They were absolutely free to withdraw from the interview at any stage or had the freedom to refuse to answer any of the specific questions at any stage of the interview.

Result: Poor awareness of physiotherapy and poor infrastructure: Poor awareness of physiotherapy was identified as a barrier to patient's attendance by most participants. Many people are not aware of physiotherapy centres in their locality. Participants perceived that the Government and doctors, who play an important role in patient education, may also have an important role in creating awareness about the availability and benefits of physiotherapy. Patient information should be accessible and comprehensible to the population with low literacy.

Inadequate public transport, lack of disabled-friendly infrastructure and low prioritisation for improved infrastructure by Government: It was identified as hindering access to physiotherapy and other medical amenities. Many unauthorised residential colonies with narrow lanes cause difficulty for vehicle access creating potential problems for accessing physiotherapy clinics

Time: Participants agreed that physiotherapy is time consuming and that patients need to alter their daily routine or take time from work, family or social obligations to attend the department for treatment which may be difficult for many patients. It was suggested that domiciliary physiotherapy might ease some of these issues, though it was agreed that this would be an excessive financial burden on the health sector. The addition of more home-based programs could allow patients to reduce some of the time required for attending treatment.

Economic factors: Participants identified that since much of India is below the poverty level, economic factors may act as a barrier to attending physiotherapy. For most patients physiotherapy treatment is not covered by insurance and cheaper alternatives are often sought. The participants suggested that increasing awareness about Government schemes and introducing home-based exercise, domiciliary physiotherapy or physiotherapy assistants might help to tackle issues of cost.

Social and cultural factors: Family obligations were identified as another barrier to treatment. One example was that because of love and concern, help is available within the family, which may prevent a patient from doing even simple tasks for themselves. This may encourage dependency and maintain disability. Many cultural barriers were also identified.

Another cultural barrier identified was the 'stigma' attached to disability by society and the popular belief that a person suffers from disabilities because of past 'karma'. Patients often admit to

visiting "saints" and 'babas' who promise them cure to help them get back to normal quickly. One participant suggested that this was due to 'lack of patience in patients'. Such deep-seated cultural beliefs are beyond the scope of a single profession such as physiotherapy.

Poor communication: Poor communication was identified by all participants as a barrier to adherence with communication gaps or poor relationships sometimes existing between therapist and patient or between therapist and referring doctor. This may arise in part due to language, social or intellectual differences. Most participants identified that many GPs do not acknowledge physiotherapy. Those GPs that do may enforce their own treatment plans. Consequently therapists may be unwilling or unable to change doctors' recommendations and continue the treatment programme without regard for treatment outcome. This may influence patients who may then be unwilling to deviate from the GP recommended protocol thus creating strains on the patient-therapist relationship. Some participants suggested that this scenario may be changing and that therapists are getting better at communicating with doctors and supporting changes in treatment with evidence.

Discussion: This study examined the perceptions of Physiotherapists about factors influencing adherence of patients to physiotherapy treatment. Some barriers were identified which may be common to patients of all nationalities. Forgetfulness, time and treatment cost were identified in this study as barriers to poor adherence with physiotherapy treatment. Cost of treatment was also identified as a reason for non-adherence in patients attending private physiotherapy practices in Holland[6] and the USA[7] though it is likely to be a variable barrier depending on how physiotherapy is funded in different countries. Time issues associated with work or family commitments and forgetfulness have also been identified by Dutch[6], American[7], Spanish[8], and British patients.[9] Physiotherapist in this study identified a variety of issues which as far as we are aware have not previously been identified as barriers to adherence. Various social and cultural factors, such as the familial obligations of many Indian women, bonds within the family, the stigma of disability, a belief in other forms of alternative treatment may be unique to certain Asian cultures. Physiotherapists also identified that inter-professional communication was a potential threat to adherence. Poor inter-professional communication may lead to poor inter-professional working, poor understanding of the capabilities of other groups of health professionals and consequently ineffective delivery of healthcare programmes such as physiotherapy.[10]

Low levels of physical activity, low in- treatment adherence with exercise, low self-efficacy, depression, anxiety, helplessness, poor social support, greater number of perceived barriers to exercise and increased pain levels during exercise are all barriers to treatment adherence (Jack et al 2010). The credibility and effectiveness of advice/treatment/exercise have been identified as important issues which may influence whether patients adhere to treatment recommendations.[6,8,9] Being aware of all the possible reasons why patients may not adhere to treatment recommendations may help therapists to carefully enquire about the kinds of problems patients are experiencing, help patients to resolve their difficulties and facilitate greater treatment adherence.[11]

Conclusion: This study has identified various factors which appear to be common to all nations e.g. forgetfulness, time and cost of treatment. Factors were identified which may be unique to India and to date have not been identified in western cultures e.g. the familial obligations of many Indian women, bonds within the family, the stigma of disability, a belief in other forms of alternative treatment unique to Indian culture. However many psychological and socio demographic factors e.g. anxiety or low levels of activity, were not identified indicating that physiotherapists may not be aware of all the potential barriers which may prevent patients from adhering with treatment recommendations.

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