Home Exercise Program Adherence in Upper Extremity Tendonitis

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Purpose

This study investigates variations in adherence rates between paper-based and video-based home exercise programs (HEPs) amongst clients with upper extremity tendonitis. Adherence variances will be configured using the ATEMPT questionnaire, to determine which delivery methodology promotes greater compliance and overall occupational participation in daily activities.











Research Questions

RQ1: How does the format of home exercise programs influence client-reported confidence and self-efficacy amongst clients with upper extremity tendonitis?

RQ2: How do clients perceive their personal satisfaction and usability of their prescribed home exercise program format?

Literature Review

Upper extremity tendonitis is commonly managed through conservative treatment methods, including home exercise programs (HEPs), to reduce pain and improve functionality (Karabinov & Georgiev, 2022). HEPs can be delivered through paper-based or video-based formats. However, adherence to prescribed HEPs can be influenced by a multitude of factors, including forgetfulness and health literacy (Argent et al., 2018). Evidence suggests that video-based HEPs have greater adherence rates than paper-based HEPs, as 73% of clients do not adhere nor comply to paper-based HEPs due to unclear instruction (Medbridge, 2017). This study will utilize the ATEMPT questionnaire to determine the adherence variances between clients receiving paper-based or video-based HEPs at Baxter Occupational and Physical Therapy outpatient clinic located in Augusta, Maine.

Video-Based vs. Paper-Based HEPs

	Video-Based HEP	Paper-Based HEP
Pro	• Reinforces proper technique to promote client outcomes • Can be reapplied multiple times for accurate visual learning	• No required financial burden for technology or internet access
Con	• Requires accessibility to technology and internet • Requires technological literacy and fluency that may be difficult for older population	• Clients may have difficulty interpreting movements of static pictures • Proper positioning for exercise may be imprecise due to misinterpretation

Methodology

This is a proposed study that will collect data for the next 12 months. To be considered for this study, participants must meet the following inclusion criteria:

- Deemed to be an appropriate candidate for a HEP by their practitioner
- Diagnosis of an upper extremity tendonitis condition

Given input from their practitioner, participants will be given a paper-based or video-based HEP. Following completion of their provided HEP, practitioners will administer the ATEMPT questionnaire to determine adherence rates and behaviors. Results from the ATEMPT questionnaire will be analyzed using an ANOVA statistical analysis to determine variances between the three HEPs identified, including written paper-based, picture paper-based, and video-based methodologies.

Discussion

This research study contributes to the occupational therapy profession by helping practitioners determined which HEP will yield the greatest adherence rates. This research study will calculate adherence variances to determine which HEP produced the greatest adherence rates amongst clients with upper extremity tendonitis.

ATEMPT

References



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