



Service Priorities and Programmes Electronic Presentations

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Use of Videotaped Exercise Instructions to Improve Performance and Confidence of Patients in Rehabilitation Gym

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Introduction

Exercise prescription has been a key role for physiotherapists to facilitate patients' recovery. Proper techniques in performing exercises help to train the desired muscle groups and prevent unnecessary injuries. Even though physiotherapists have provided live instructions and demonstrated exercises to patients initially, a certain amount of supervision is often required to ensure proper techniques can be maintained throughout all sessions. In a crowded and busy rehabilitation gym, staff availability for individual patients is limited. Therefore, any instruments that provide clear exercise guidance to patients would assist physiotherapists to a great extent by reducing the need of supervision, especially when the patients are assigned to a circuit training with different exercises included. These might also improve patients' confidence in performing exercises and thus lead to a better exercise adherence. Use of videotaped exercise instructions has been studied and they were found to be more effective than static illustrations to facilitate correct form of exercises, as well as to improve confidence and motivation of patients. (Weeks et al., 2002)

Objectives

This project intends to improve (1) performance and (2) confidence of hip fracture patients in performing weight-bearing exercises with the use of videotaped exercise instructions.

Methodology

Hip fracture patients who performed weight-bearing exercises in rehabilitation gym were randomly assigned into two groups: (1) routine group and (2) videotaped group. Live instructions were provided by a physiotherapist in both groups during the first session only. After the first session, patients in both groups perform the instructed exercise without therapist's supervision, whilst videotaped exercise instructions were provided via a smart tablet in front of patients in the videotaped group only. Patient's performance would be assessed in the first and second session, which is based on a checklist of correct techniques in performing the specific exercises. At the

end of the third session, patients are required to complete a self-reported questionnaire, so as to measure and compare their confidence level in performing those exercises between the two groups.

Result

Common weight-bearing exercises for improving functional strength were videotaped and edited. Exercises were shown at different angles in a close-up view to aid understanding of the correct techniques. Besides, text and verbal instructions were included in the videos to provide guidance to patients.

The outcome will be available after completion of the project. This project could further develop into application of videotaped exercise instructions in tele-rehabilitation, where patients receive home-based treatments after discharged from hospital.