



Service Priorities and Programmes
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Pilot study on Tele-Physiotherapy Home-based Program for Geriatric Hip Fracture Patients

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Introduction

The steady increase in the incidence of geriatric hip fracture places an increasing burden on health care service in Hong Kong. Post fracture limitations are prominent and restrain many of the elderly from returning to community, rehabilitation is therefore important for reducing their long-term disability.

However, current community service is inadequate to facilitate continuity of rehabilitation after discharge. Sixty percent of post hip fracture elderly did not receive any rehabilitation services due to different access barriers such as mobility impairment and lack of transportation.

Tele-physiotherapy, which employs information and telecommunication technologies, is a potential strategy to bridge the service gap by facilitating patients' rehabilitation at homes.

Objectives

The main objective is to test the feasibility of tele-physiotherapy program in improving the access of rehabilitation to geriatric hip fracture patients immediately after discharge. The secondary objectives are to examine its effectiveness on functional recovery and evaluate participants' satisfaction with the care received.

Methodology

Geriatric hip fracture patients fulfilled preset criteria were invited to join the program. Enrolled participants were prescribed with video-guided exercises during their inpatient stay for familiarization and a briefing session on tele-physiotherapy program was conducted together with their carers before discharge.

The tele-physiotherapy program last for 4 weeks on a daily basis after discharge. In each 30 to 45 minutes session, patients were required to perform the exercise under the guidance of video via prescribed link using internet accessible devices available at

home (e.g. tablets, notebook or desktop) with assistance from carers. The exercise program involve a circuit of exercises focus on training the strength, coordination and functional movements of hip fracture patients with 3 levels of difficulty.

A once-a-week teleconference session using commercially available applications (e.g. Skype) was provided. It allowed adjustment on exercise program depending on therapists' evaluation on patients' exercise performance.

Lower Extremity Functional Scale (LEFS), Time Up and Go (TUG) test were used to evaluate participants' functional status while a questionnaire was established to assess patients' and/or carers' satisfaction on the received service.

Result

This is an ongoing research started since October 2017 with preliminary findings showed high acceptance and satisfaction with improved functional status among the participants. Provision of technological support along with clear instructions and adequate training for both therapists and patients would further enhance the ease on service delivery.