



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Physiotherapy regime with community exercise enhancement for lower-extremity diseases**

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**Introduction**

Exercise adherence is an important element for a successful rehabilitation program. Clinically, the outcomes of rehabilitation can be improved by engaging the patients to participate in the therapeutic exercises regularly. The program is to motivate the patients to use the different community resources, like fitness room in the Leisure and Cultural Service Department (LCSD), private gymnastics room and swimming pool to continue their therapeutic exercises. This program aims to speed up their recovery, as well as nurture their active exercise habit by providing training and corresponding information to facilitate them to get access the community resources and integrate into their daily life.

**Objectives**

To compare the effects and number of physiotherapy sessions required between community exercise enhancement (CEH) group and control group.

**Methodology**

Patients with diagnosis of lower-extremity disease such as osteoarthritis knee, soft tissue injury, sport injury or fracture were recruited. They were reinforced to continue the prescribed exercise in community by providing them with enhancement package which included information about application of fitness room in LCSD, exercise sheet with prescribed frequency, intensity, time and types of exercise, as well as exercise record sheet. Outcome measures including numeric pain rating scale (NPRS), Knee injury and Osteoarthritis scale (KOOS) with three subscales and numeric global rating of change scale (NGRCS) were recorded at baseline and upon discharge. Besides, the total number of physiotherapy sessions was measured. The result was compared with the control group who received verbal advise and home exercise sheet only and analyzed by using SPSS. The data of control group was taken retrospectively with matched condition as CEH group

**Result**

48 patients (CEH group n=24, control group n=24) were recruited. Both groups

showed no difference in baseline characteristics. There was significant improvement shown upon discharge for both groups but no significant difference was found in between group comparison except for quality of life subscale in KOOS (higher score for CEH with  $p = 0.02$ ) Moreover, CEH group required fewer total number of treatment sessions (9.9) than control group (13.8) with nearly significant difference ( $p = 0.056$ ). In the CEH group, patients charted 91.3% of exercise adherence during the course of treatment.

Conclusion:

From the preliminary result, exercise enhancement in community showed some positive results in engaging patients to continue the therapeutic exercises by using community resources. Further study of the cost-effectiveness with larger scale of randomized trial is suggested.