Comprehensive Osteoarthritis ManagEment (COME) Programme: Applying activity pacing strategies to enhance fatigue management

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Introduction
Fatigue and pain were the strongest predictors of reduced activity participation in osteoarthritis (OA) (Murphy et al 2013). A multidisciplinary day-rehabilitation program (COME) has been launched in 2015 aiming to enhance patients’ self-management of OA knee. Occupational Therapists (OT) have the core role in implementing fatigue and pain management in daily activities to prevent development of sedentary life-style. OT has been advising patients on activity pacing according to patients’ life-style and symptom profile. Compared to conventional general pacing (GP), tailored activity pacing (TAP) required therapists’ skills to facilitate self-reflection and goal setting with patients.

Objectives
The aim of this study was to compare the effectiveness of general pacing strategy education with tailored pacing strategic planning on pain and fatigue management of patients with OA knee.

Methodology
Patients referred to COME attended a series of education conducted in day rehabilitation hospital by Nurse, OT, Physiotherapist, followed by 12 Physiotherapy training sessions and 4 Occupational Therapy individual sessions. OT assessed patient’s activity patterns with commercial accelerometers and activity logbooks. Patient’s confidence to accomplish activity despite of pain and fatigue were assessed by Pain Self-Efficacy Scale (PSES) and Functional Assessment of Chronic Illness Therapy – Fatigue Score (FACIT-Fatigue). The patients were divided into two groups by convenient sampling. TAP group received advices basing on their life-style and
symptoms, with advices on rests, home-making, leisure, work postural change or activity prioritization. A guidebook was used to decide the choice of activity to pace and the time-based activity pacing plan. The GP group received advices on the principle of taking breaks and prioritization only. The changes in PSES, FACIT and activity minutes were assessed after completing the whole program. Wilcoxon signed ranks test was used to analyze the outcome difference within two groups.

**Result**
A total of 46 participants were recruited, with 31 in TAP group and 12 subjects in GP group. Results showed that both PSES (Z=-3.21, p=0.001) and FACIT (Z=-3.88, p=0.000) had significant improvement in TAP group whereas no significant improvement in GP group.

**Conclusion:**
OT guided activity pacing strategies showed effectiveness to empower patients to manage the fatigue and pain symptom. The tailored approach confirmed the need of OT input for actualizing beneficial changes in lifestyle in OA knee patients under conservative treatment.