



## Service Priorities and Programmes Electronic Presentations

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### **Move Back To Active – an active exercise and self-management programme with pedometer for elderly with back pain**

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#### **Keywords:**

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#### **Introduction**

Back related pains are common in elderly population. Using STarT Back Screening Tool, the proportion of elderly back patients with high psychosocial risks was previously identified to be over 60%. Their function, confidence and physical ability are affected. To reduce disability and improve psychological functioning, a program – "Move Back to Active" or "æ,é½jæ",â" was launched to tackle these problems. Apart from the emphasis on active back and leg exercises, the elders were also empowered to use a pedometer to monitor their self-walking exercise regime. Therapists also employed motivational skills and conduct discussion on pacing activities, pain management and problem solving.

#### **Objectives**

To evaluate the effectiveness of an integrated program of active exercise and self-management, enhanced with a pedometer to promote walking, in reducing disability in elders with back pain

#### **Methodology**

Patients aged over 60 with non-specific back pain were stratified by the STarT Back Screening Tool and assessed individually. Those with high or medium psychosocial risks were invited to join the program. The program includes four sessions of rehabilitation training with group discussion, exercise training and self-exercise program setting with pedometer. The following measurements are used as outcome measures, self-reported pedometer reading to measure daily walking exercise progress, Roland-Morris Disability Questionnaire (RMDQ) to measure disability, Timed Up and Go (TUG) test to assess risk of fall, Pain Self-Efficacy Questionnaire

(PSEQ) to measure self-confidence, Patient-Specific Functional Scale (PSFS) to measure functional outcome, Numerical Pain Rating Scale (NPRS) for subjective pain level.

### **Result**

46 elders, 78% female and average age 72, finished the program from July to Dec 2016. The pedometer data showed that 82% of the participants reached 1500 steps and 52% reached 3000 steps, equivalent to 15-minute 30-minute walking, in their daily exercise regime. TUG improved from 15.2 to 13.5 seconds ( $P=0.002$ ). 70% of the participants finished the test within 15 seconds, which is the cut-off score for fall risk. There were also significant improvements in RMDQ (13.4 to 10.9,  $P=0.0015$ ), PSEQ (30.0 to 37.6,  $P=0.0005$ ), PSFS (3.7 to 5.5,  $P=0.0001$ ) and NPRS (6.2 to 4.9,  $P=0.0035$ ).

### **Conclusion**

Rehabilitation training program to enhance energetic lifestyle will benefit elderly with back pain in improving their physical and psychological functioning and adding fun with a pedometer.