



## Service Priorities and Programmes Electronic Presentations

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### **Impact of pre-work stretching exercises on healthcare workers – a pilot study**

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#### **Introduction**

Sprains and strains related to material or patient handlings was the main reason for work disability in the health-care setting in Hong Kong. A pre-work stretching exercise campaign had been launched since 2006 in the New Territories East Cluster, NTEC, of the Hospital Authority. The campaign was well received by the staff. A pilot study was conducted to examine the effects of pre-work stretching exercises on the physical parameters and quality of life of the participants.

#### **Objectives**

A pilot study was initiated to examine the effect of pre-work stretching exercises on the physical performance of healthcare workers followed at half year period.

#### **Methodology**

Healthcare workers were invited to participate in the study through their workplace occupational safety and health coordinators in NTEC. Individual consent was obtained. Workers with operation in the past 12 months, suffered from acute inflammation, fractures or defined psychiatric illnesses were excluded. The pilot study was conducted from April to October 2015. Participants were asked to document their exercise frequency in a log book. Comorbidities were recorded. Pre- and post-exercise data on sit-to-reach distance, lung function tests, forward lunge distance, single leg balance time and sway (with eyes open and closed), and health-related quality of life scores were compared by Wilcoxon Signed Rank test (SPSS, 20.0).

#### **Result**

13 volunteers participated in the study and were followed up for 6 months (11 female and 2 male). Mean age was 48.9. Apart from lung function tests, general improvement was shown for all other variables. Significant changes were observed in sit-to-reach, forward lunge and single leg balance parameters,  $p < 0.05$ . All participants commented that they would continue practicing the exercises and recommend them to their

colleagues. The preliminary results support the effectiveness of the exercise program for healthcare workers on the aforementioned physical parameters. A study on long term effects and of larger scale is warranted. The results have further implication on exercise effects on fall prevention which is another hot topic for work injuries in the healthcare setting in Hong Kong.