



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 573

**Submitting author:** Mr Aaron Hung Ching WAN

**Post title:** Physiotherapist II, Prince of Wales Hospital

### **Association between Hong Kong Chinese Örebro Musculoskeletal Pain Screening Questionnaire Short Form (CÖMPSQ-HK10) and STarT Back Screening Tool (SBST)**

*WAN HCA(1), LAU SYJ(1), WONG I(1)*

*(1) Physiotherapy Department, Prince of Wales Hospital*

#### **Keywords:**

Hong Kong Chinese Örebro Musculoskeletal Pain Screening Questionnaire Short Form

STarT Back Screening Tool

Örebro

Risk categorization

STarT Back

Risk of chronicity

#### **Introduction**

Low back pain (LBP) ranked highest in disability in the Global Burden of Disease 2010 study. Chronic LBP often has strong psychosocial overlay. CÖMPSQ-HK10 and SBST are frequently used to identify LBP patients with psychosocial overlay in order that pertinent interventions are timely provided to reduce risk of chronicity.

Concordance between the results of both instruments will improve the reliability of the process.

#### **Objectives**

The objectives of the study are (1) to verify the correlation and agreement between the two instruments and (2) to investigate the relationship of the two instruments with the Roland-Morris Disability Questionnaire (RMDQ).

#### **Methodology**

New patients attending the Physiotherapy OPD of the Prince of Wales Hospital for treatment of LBP were invited to the study. The inclusion criteria were as follows: age between 17 and 65, ability to read Chinese, and currently working. The exclusion criterion was illiterate.

Twenty-two subjects completed CÖMPSQ-HK10, SBST, and RMDQ. Spearman's rho was used for correlation analysis. Cross-tabulation and Cohen's kappa were used to analyze the agreement between CÖMPSQ-HK10 and SBST for risk categorization which was dichotomized into low and high. The respective scores >55 and >3 were high risk.

#### **Result**

The mean age of the subjects was 47.55 (SD=13.61). Fifty-nine percent of the

subjects were female. The mean total scores were 58.77 (SD=11.66) in CÖMPSQ-HK10 (0-100, highest) , 5.71 (SD=1.98) in SBST (0-9, highest) , and 11.57 (SD=4.62) in RMDQ (0-24, highest) . The correlation between the total scores of CÖMPSQ-HK10 and SBST was moderate with  $r_s = 0.50$  ( $p < 0.05$ ). The psychosocial subscale of SBST was moderately correlated with the constructs of distress, return to work expectancy, and fear avoidance beliefs of CÖMPSQ-HK10 with  $r_s = 0.43$  ( $p < 0.05$ ),  $r_s = 0.43$  ( $p < 0.05$ ), and  $r_s = 0.46$  ( $p < 0.05$ ) respectively. The risk categorizations by CÖMPSQ-HK10 and SBST were in fair agreement with  $\kappa = 0.39$ . Eighty-one percent of the subjects were classified the same by both instruments while 19% were classified differently. RMDQ was moderately correlated with CÖMPSQ-HK10 and SBST with  $r_s = 0.46$  ( $p < 0.05$ ) and  $r_s = 0.56$  ( $p < 0.01$ ) respectively. In sum, CÖMPSQ-HK10 and SBST are concordant over patient categorization of risk of chronicity. CÖMPSQ-HK10 has potential on identifying high risk patients with musculoskeletal pain other than LBP. Both instruments facilitate timely provision of psychologically informed physiotherapy.