Classifying psychosocial risks for non-specific chronic low back pain patients
by STarTBack Screening Tool
Lau SYJ(1), Yeung KCA(1), Wong I(1)

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Introduction
Clinical practice guidelines for non-specific chronic low back pain (NSCLBP) patients recommend evaluation of psychosocial risk factors and psychological therapy for management as indicated. The 9-item STarTBack Screening Tool (SBST) was developed to classify patients into subgroups of low (LRG), medium (MRG) and high risk (HRG) of psychosocial factors, hence matched treatment can be facilitated. There is no information whether this tool can be applied in Hong Kong for subgrouping back pain patients.

Objectives
To explore the feasibility of using SBST to classify NSCLBP patients into subgroups of psychosocial risks and the different group's response to physiotherapy treatment.

Methodology
All NSCLBP who received treatment in the physiotherapy out-patient clinic in Prince of Wales Hospital completed a questionnaire before evaluation. It included SBST, outcome measures of pain (Numeric Pain Rating Scale [NPRS]), disability (Roland Morris Disability Questionnaire [RMDQ]), Patient Specific Functional Score [PSFS] and Pain Self-efficacy Questionnaire [PSEQ] for the mediating process. Physiotherapy treatment was delivered to these patients. They completed another set of questionnaire upon discharge, but SBST was replaced by Global Improvement Score. The baseline outcome characteristics of the three subgroups were compared for trends of difference. Paired sample t-test was done for pre- post-intervention mean difference of the three subgroups and one-way ANOVA test to compare means between groups. The process measure of PSEQ was correlated with the other outcomes.

Result
A total of 413 patients were screened by SBST, mean age 58.5 (SD 15.07) with HRG 61.1, 65.1% female with HRG 73.7%. LRG of patients was 19.9%, MRG 30.5% and HRG 49.6%. At baseline, increasing trend was observed across the three groups in
pain and disability, highest in HRG, with decreasing trend in patient-specific functional ability and self-efficacy, lowest in HRG. For pre- and post- intervention analysis, no significance was observed for the mean difference of all outcomes and global improvement between risk groups (p>0.05) but significant difference (p=.000) was found on the number of sessions: LRG 4.0(3.5), MRG 4.6(3.7) and HRG 6.0(4.0). Moderate correlation was shown between RMDQ and self-confidence as measured by PSEQ (r=-.434, p=.000). This provides insights for the unfavourable results in the HRG analysis. Early classifying risk groups of back pain patients with SBST and additional psychosocial strategies to enhance self-efficacy in HRG are supported.