Application of the International Classification of Functioning, Disability and Health (ICF) for Persons with Spinal Cord Injury

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**Introduction**  
The International Classification of Functioning, Disability and Health (ICF) has been widely adopted worldwide as the conceptual framework in spinal cord injury (SCI) rehabilitation and researches but local use is scarce. The development and validation are largely done in Western societies. Cultural adaptation is essential before it can be appropriately used to reflect the real needs of the local SCI population.

**Objectives**  
The objective of the study is to develop and validate ICF Comprehensive Core Set (CCS) for persons with SCI in the long term context specifically for Chinese people in Hong Kong.

**Methodology**  
The relevant and representative ICF categories was determined by 12 expert panel members in order to develop a culturally adapted ICF-CCS for persons with SCI in the long term context. The 12 panel members were experienced in working in a multidisciplinary team, representing 6 professions from 3 designated SCI centres in Hong Kong. Ten ex-SCI patients from the community were recruited to establish test-retest reliability of the local ICF-CCS. The local ICF-CCS was also preliminarily used in thirty-one persons with SCI from the community.

**Result**  
Mean year of SCI experience in expert panel was 11.7 years. Kappa coefficient for agreement of 0.5 determines the ICF categories to be included in the local ICF-CCS. The final local ICF-CCS contains 106 categories, of which 23 categories in Body Functions (BF), 8 categories in Body Structures (BS), 42 categories in Activities and Participation (A&P) and 33 categories in Environmental Factors (EF). The local ICF-CCS was pilot-tested on ten ex-SCI patients who were now living in the community. Test-retest reliability of the local ICF-CCS was good in most categories except for “sensory functions relating to temperature and other stimuli” t(9)=3.28,
“pain in back” t(9)=2.24, “pain in joints” t(9)=2.71 and “lying down” t(9)=-2.45; p>.05. The ratings for each ICF component (BF & BS, A&P, EF) was also correlated with their corresponding SCI measures (ASIA, FIM, CIQ and CHIEF). Full psychometric testing of the local ICF-CSS for SCI in the long term context facilitates the application of ICF in clinical practice and future SCI researches in Hong Kong. The culturally adapted ICF-CSS could be used to provide useful information to enhance social participation and community integration of the local SCI population.