

# The Psychometric Characteristics of the Assessment Tools Used for Stroke Patients at Physical Therapy Departments in Medical Centers

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**Background and Purpose:** Using the measures with solid psychometric characteristics (e.g. reliability, validity, responsiveness) is the foundation to achieve objective and scientific evaluations in both clinical and research settings. The purpose of this study was to survey the psychometric characteristics of the assessment tools routinely used for stroke patients in physical therapy departments of medical and quasi-medical centers in Taiwan. **Methods:** Fifteen physical therapy departments of the medical and quasi-medical centers were surveyed. Assessment tools used in evaluation of motor function, gait, muscle tone, postural control, sensory function, mentality and activities of daily living for stroke patients in physical therapy departments were provided by chiefs of the physical therapy departments. The psychometric characteristics of the assessment tools were investigated through searching

the medicine-related databases. **Results:** The results showed that the assessment tools routinely used in Taiwan were mostly established in abroad, such as Fugl-Meyer motor assessment, and Functional Independence Measure. These measures are lack of Chinese manuals, although their psychometric properties have been well established. The psychometric details of some scales (e.g. Brunnstrom Recovery Scale and Karnofsky index) had been rarely examined. The other scales were constructed by the staffs of those departments. However, the psychometric characteristics of these assessment tools had not been established. **Conclusion:** In order to assess patients' functions scientifically and accurately, examining the psychometric characteristics of the assessment tools is urgently needed. (FJPT 2000;25(4): 215-222)

**Key words:** Reliability, Validity, Responsiveness, Physical therapy, Stroke

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