World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:8, No:09, 2014

## A Questionnaire-Based Survey: Therapists Response towards Upper Limb Disorder Learning Tool

Authors: Noor Ayuni Che Zakaria, Takashi Komeda, Cheng Yee Low, Kaoru Inoue, Fazah Akhtar Hanapiah

**Abstract :** Previous studies have shown that there are arguments regarding the reliability and validity of the Ashworth and Modified Ashworth Scale towards evaluating patients diagnosed with upper limb disorders. These evaluations depended on the raters' experiences. This initiated us to develop an upper limb disorder part-task trainer that is able to simulate consistent upper limb disorders, such as spasticity and rigidity signs, based on the Modified Ashworth Scale to improve the variability occurring between raters and intra-raters themselves. By providing consistent signs, novice therapists would be able to increase training frequency and exposure towards various levels of signs. A total of 22 physiotherapists and occupational therapists participated in the study. The majority of the therapists agreed that with current therapy education, they still face problems with inter-raters and intra-raters variability (strongly agree 54%; n = 12/22, agree 27%; n = 6/22) in evaluating patients' conditions. The therapists strongly agreed (72%; n = 16/22) that therapy trainees needed to increase their frequency of training; therefore believe that our initiative to develop an upper limb disorder training tool will help in improving the clinical education field (strongly agree and agree 63%; n = 14/22).

Keywords: upper limb disorder, clinical education tool, inter/intra-raters variability, spasticity, modified Ashworth scale

Conference Title: ICCB 2014: International Conference on Computational Biomechanics

Conference Location: Istanbul, Türkiye Conference Dates: September 29-30, 2014