ORAL PRESENTATIONS

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The Feasibility and Potential Effectiveness of Modified Constraint-Induced Movement Therapy on Post-Stroke Upper Limb Function

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ABSTRACT

Background and Objectives: Upper limb is one of the most commonly affected body parts, with slow recovery following a stroke. As such there is a need for effective therapy intervention. Modified Constrain-Induced Movement Therapy (mCIMT) is a usual method of upper limb training. Its benefits for the Malaysian post-stroke community are still unknown. This study aims to determine the feasibility and potential effect of a 4-week mCIMT in improving upper limb function among post stroke individuals in a Malaysian community setting. **Methods:** This pilot study involved eight subjects (male n= 7, female n =1) who were community-dwelling stroke survivors at late subacute (4 to 6 months) and chronic (more than 6 months) stage post-onset. All subjects completed a four-week mCIMT intervention consisting of 6 exercise tasks, at 3 times per week and 45-60 minutes per session. A feasibility questionnaire was used to assess feasibility and outcome of the intervention was measured using Wolf Motor Test, The Upper Limb Self-Efficacy Test (UPSET) and Fugl-Meyer Test by an independent assessor at week 5. The SPSS version 27 was used to analyse the data. **Results:** The Wolf Motor Test Score significantly increased (median 2.29 to 2.82, $p<0.05$) after the intervention. The UPSET score also significantly increased from median 2.81 to 4.00 ($p<0.05$), after the intervention. However post-intervention, the Fugl-Meyer Test score did not significantly increase (median score 44.25 to 48.25, $p>0.05$). All subjects (n=8, 100%) accept the intervention well and no adverse effect was reported among all the subjects. **Conclusion:** While the effect of mCIMT on sensory motor function remains unclear, the intervention appears feasible and effective in improving upper limb motor activity and the patient's confidence when using the upper limb.

Keywords: Modified Constraint-Induced Movement Therapy; Upper limb function; Post stroke; Physiotherapy

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