

3<sup>rd</sup> International Conference and Expo on

# Physiotherapy

October 13-15, 2016 Kuala Lumpur, Malaysia

## Effect of motor imagery of truncal exercises on trunk function and balance in early stroke: A randomized controlled trial

**Reethu Elsa**

Manipal University, India

**Background:** Studies in the past focused on benefits of motor imagery in improving upper and lower limb functions when administered along with conventional therapy. Nevertheless, there is a paucity of literature proving the effects of motor imagery of truncal exercise in improving trunk function in patients with stroke.

**Aims:** To study the effect of motor imagery of truncal exercises on trunk function and balance in early stroke.

**Methods:** A total of 24 patients were included in the study. Trunk function was measured using trunk control test (TCT), trunk impairment scale Verheyden (TIS Verheyden) and trunk impairment scale Fujiwara (TIS Fujiwara). Balance was assessed using Brunel balance assessment (BBA) and Tinetti POMA. The MI intervention included a 3-week practice of trunk exercises after observing the video while the control group practiced the trunk exercises alone. Measurements were taken before, after and 4 weeks after intervention.

**Results:** MI group showed improvement after 3 weeks' intervention on values of TIS (Verheyden), BBA, Tinetti balance and gait with a large effect size of 1.69, 1.06, 1.63 and 0.97 respectively. Moderate effect size on TIS Fujiwara (0.58) and small effect size on TCT (0.12) was observed. When measured after 4 weeks, large effect size was seen on TIS Verheyden (1.59) and Tinetti balance (1.24). Moderate effect size was observed on BBA (0.62) and Tinetti gait (0.72).

**Conclusion:** Trunk motor imagery is effective in improving trunk function and balance in patients with stroke and has a carryover effect in the aspects of mobility. The therapy gain that was observed during the time of discharge was seen to be maintained at the follow up levels.

reethuelsa@yahoo.com

## A retrospective analysis of a functional restoration service for patients with persistent low back pain

**David Rogers**

Royal Orthopedic Hospital, UK

Back pain is of considerable interest in society today and is a source of ongoing disability and days lost from work in the adult population. Historically, the recommended management has encompassed conservative methods, from physiotherapy and a range of other manipulative techniques to surgical interventions in various forms. There is now agreement that adults with persistent low back pain who have failed physiotherapy and have high levels of disability and psychological distress are best managed through a combined physical and psychological approach, which should be up to 100 hours in length. This combined approach has been modified by authors in several forms, of varying duration, with good results, supporting the idea that benefit can be gained from interventions of a lesser duration. The present paper reports on the results, as measured using the Oswestry disability index (ODI) and pain self-efficacy questionnaire (PSEQ), of a 4-week functional restoration program (FRP) treatment intervention, run in a tertiary spinal center, which used a combined physical and psychological approach.

david.rogers4@nhs.net