**ABSTRACT**

**Topic: Effect of reaction time training on motor recovery in acute stroke patients**

**OBJECTIVE:** The aim of the pilot study was to determine the effect of reaction time (RT) training on acute stroke recovery. **METHOD:** 11 acute stroke subjects were randomly assigned to experimental (six subjects) and control group (five subjects). Both the groups underwent conventional therapy. In addition the experimental group participated in activity based reaction time training with the ipsilateral upper limb. The outcome measures were reaction time (RT) of ipsilateral upper limb, sitting balance, voluntary control of arm and hand of hemiplegic side. **RESULTS:** There was significant (P<0.05) improvement in RT of the experimental group and there was significant difference (P<0.05) between the post-test RT of the study groups. Improvement in simple RT showed a significant correlation with voluntary control recovery of affected arm (R = -0.845, P = 0.034). **CONCLUSION**: Reaction time improves with training following stroke. As an adjunct to conventional therapy, activity based reaction time training with the ipsilateral upper limb, may facilitate recovery of the contralateral (hemiplegic) arm in acute stroke patients. Further research is recommended to investigate its potential to facilitate motor recovery following stroke.