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## ORIGINAL ARTICLE

**EFFECT OF RHYTHMIC AUDITORY CUEING OVER CONVENTIONAL PHYSICAL THERAPY AMONG HEMIPARETIC STROKE PATIENTS ON FUNCTIONAL IMPROVEMENT OF UPPER EXTREMITY**

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Chitra K<sup>1</sup> and Dr.Jibi Paul<sup>2</sup>

**Correspondent author:** Corresponding Author: <sup>1</sup> Physiotherapist, Charne Hospital, Bangalore, Karnataka, India, E mail: [chitra@gmail.com](mailto:chitra@gmail.com)

<sup>2</sup>Department of Physiotherapy, Faculty of Health Sciences, KPJ Healthcare University college, Nilai, Malaysia, E- Mail: [jibipaul74@gmail.com](mailto:jibipaul74@gmail.com)

### **Abstract**

**Background and Objective:** Functional recovery and motor control is one of the major concerns in stroke patients with performing activities of daily living. Major objective of the study was to investigate the effectiveness of the BATRAC Technique over the conventional physical therapy alone for functional improvement of upper extremity in hemiparetic stroke patient. **Methods:** A random sampling method was used to select patients with Right MCA (Middle Cerebral Artery) stroke. Thirty patients were included and randomly divided into two groups by using lottery method, with fifteen in each group A and B. Group A underwent BATRAC Technique and group B underwent conventional physical therapy. The outcomes were measured by the MAS, STREAM and FMS to find out the functional recovery of the upper limb in stroke patients. **Results:** Intra group analysis was done by Wilcoxon rank test and the inter group analysis done by Mann-Whitney test. In intra group analysis, group A, got significant reduction in spasticity and significant improvement in voluntary control & functional activities ( $P < 0.005$ ). Group B who underwent conventional physical therapy also showed significant reduction in spasticity & improvement in voluntary control & functional activities. In Comparison between the groups, group A had more significant improvement in voluntary control and functional activities than group B. **Conclusion:** This study concluded that physiotherapy with the use of BATRAC Technique is more effective than conventional physical therapy. Statistically BATRAC Technique was highly significant in enhancing the functional improvement of upper limb in hemiparetic stroke patients with right MCA infarction.

**Keywords:** Stroke, Middle Cerebral Artery, BATRAC Technique, FMS, STREAM, MAS