

# Effects of Community-Based Exercises on Selected Outcome Measures of Chronic Stroke Patients

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## Abstract

Community-based rehabilitation (CBR) is often the main approach to provide access for community-dwelling individuals who lack access in rehabilitation services especially in low-income and middle-income countries. However, there is little known study in the Philippines in proving the effects of community-based exercises in persons with chronic stroke. Provision of access will offer good functional outcome in performing activities of daily living inside the community by contributing improvements in physical function, cardiorespiratory endurance, balance and mobility which are beneficial for motor recovery and decreasing risk of secondary complications following a stroke. The purpose of this study was to determine the effectiveness and safe community-based exercises in chronic stroke patients anchoring on Schenkman Integrated Framework for Decision-making in Neurologic Physical Therapist Practice emphasizing plan of care under patient management model that focuses in goal-directed therapy improving the patient's motor function. A random sampling was used in the study and was utilized in 30 chronic stroke patients of CBR in the province of Rizal and were divided into experimental group and control group. The participants of both groups were assessed for pretest using selected outcome measuring tools such as Functional Independence Measure (FIM) for physical function, Modified Borg Rating of Perceived Exertion Scale for cardiorespiratory endurance, Berg Balance Scale for balance, and Stroke Rehabilitation Assessment of Movement (STREAM) for mobility. After the pre- assessment, the experimental group underwent community-based exercise intervention for eight (8) weeks and the control group was provided health education lecture for 1 day before the pretest. Post-assessment test was executed for both groups after eight (8) weeks. The participants were given the right to refuse to participate in the study. The result revealed that both community-based exercises and home education have positive results after post-test of physical function, cardiorespiratory endurance, balance, and mobility for each group with more explicit better findings on the experimental group with large clinical effect. However, there is no significant difference occurred after pre- and post-tests between the groups. Nonetheless, community-based exercise is still vital for both patient and physical therapist as this serves as a monumental relationship in acquiring the effective quality of life for the patients and to also foster their social participation in the community. It is recommended that future studies may investigate on bigger population size of chronic stroke patients with no prior physical rehabilitation intervention to prevent certain bias and false negative results.

**Keywords:** *cerebrovascular accident, motor function, rehabilitation*

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