A 12-MONTH PATTERN AND INTER-RELATIONSHIPS OF MOTOR PERFORMANCE, FUNCTIONAL ACTIVITY, SOCIETAL PARTICIPATION AND HEALTH-RELATED QUALITY OF LIFE OF STROKE SURVIVORS

BY

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ABSTRACT

Stroke is a major cause of disability affecting human functioning and health attributes such as Motor Performance (MP), Functional Activity (FA), Societal Participation (SP) and Health-Related Quality of Life (HRQoL). Recovery from stroke may begin immediately after the incident and continues for several years. Lack of information on long-term post-admission follow-up of functioning and health attributes of stroke survivors in Nigeria is a shortcoming that may impact on rehabilitation. Therefore, pattern and inter-relationships among MP, FA, SP and HRQoL of stroke survivors during a 12-month period were studied.

This longitudinal study involved 83 consecutive patients with first-incidence stroke admitted within four weeks of the incident into the University of Maiduguri Teaching Hospital. Stroke severity, MP and FA were assessed using Stroke Levity Scale (SLS), Simplified Fugyl Meyer (S-FM) scale and Functional Independence Measure (FIM) respectively at baseline. Patients were followed up monthly at their respective places of abode for assessment of MP and FA for 12 consecutive months while HRQoL and SP were assessed at 1st, 3rd, 6th, 9th and 12th months using Health-Related Quality of Life in Stroke Patients (HRQoLISP-40) questionnaire and London Handicap Scale (LHS) respectively. Data were analysed using descriptive statistics, Friedman'sANOVA and Spearman rank correlation at $p = 0.05$.

Fifty-five patients completed the study. Mean age was 58.0 ± 12.8 years; majority (60.0%) were males; ischemic stroke sub-type (70.9%) was more common and most (60.0%) presented with left hemiplegia. The S-FM score significantly increased linearly from baseline (29.0) to 7th month (92.0) and FIM score increased from 47.0 at baseline to 88.0 at 10th month and thereafter stabilised. The median LHS score increased from baseline (57.0) through 3rd (60.0), 6th (63.0) and 9th (70.0) months likewise HRQoLISP score increased from 58.0 at baseline to 3rd (59.5), 6th (62.3), 9th (67.0) and 12th (67.0) months. Significant correlations were

obtained between S-FM and FIM scores at 1st (r = 0.8), 3rd (r = 0.8), 6th (r = 0.9), 9th (r = 0.8) and 12th (r = 0.9) months; between S-FM and LHS scores at 1st (r = 0.7),6th (r = 0.7), 9th (r = 0.7) and 12th (r = 0.7) months between S-FM and HRQoLISP scores at 6th (r = 0.7), 9th (r = 0.7) and 12th (r = 0.7) months. Significant correlations were also observed between FIM and LHS scores at 1st (r = 0.9), 3rd (r = 0.8), 6th (r = 0.8), 9th (r = 0.8) and 12th (r = 0.8) months; between FIM and HRQoLISP scores at 1st (r = 0.7), 3rd (r = 0.7), 6th(r = 0.7), 9th (r = 0.7) and 12th (r = 0.8) months. The LHS and HRQoLISP scores significantly correlated at 1st (r = 0.8), 3rd (r = 0.8), 6th (r = 0.8), 9th (r = 0.8) and 12th (r = 0.9) months.

Functioning and health attributes of the stroke survivors improved over 12 months. Linear inter-relationships as observed among their functioning and health attributes imply the need for stroke rehabilitation to be all-inclusive over extended period.

Keywords: Cerebrovascular accident, Functional activity, Societal participation, Health-Related Quality of Life

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CERTIFICATION

We hereby certify that Mrs. Grace Oluwatitofunmi VINCENT-ONABAJO (nee PETERS) carried out this PhD (Neurological Physiotherapy)research work in the Department of Physiotherapy, College of Medicine, University of Ibadan, under our supervision.

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