

## **ABSTRACT**

### **Background and purpose of the research**

The magnitude of disability observed in stroke survivors is believed to be dependent, in part, on the severity of neurological deficits incurred. As important, but less well understood, is the contribution of physical and environmental factors. The objectives of this study were to establish the degree of functional independence of patients who have had a stroke and to establish factors that influence functional independence post stroke.

### **Research methods and procedures employed**

This was a quantitative research using a descriptive cross sectional study design. A sample of convenience was derived from patients who had a stroke more than six weeks previously from clinics and a hospital in Johannesburg. The Barthel Index was used to establish the degree of functional independence, and a self-designed questionnaire was used to establish factors that influence functional independence of patients who have had a stroke. Intra and inter rater reliability tests were done to validate the questionnaire. The questionnaire was interviewer administered. Caregivers were interviewed in cases where patients had receptive aphasia.

**Results:** Ninety three percent of the patients were functionally independent post discharge. Younger patients had the highest likelihood of improved functional independence than the older age group ( $p = 0.003$ ); married patients recovered functional independence faster than those who were single ( $p = 0.05$ ). The following factors also improved chances of being functionally independent: having bowel continence ( $p = 0.003$ ); staying in hospital for less than two weeks and more than six weeks; and participating in community ( $p = 0.02$ ) and household activities ( $p = 0.01$ ). Having a caregiver decreased the chances of regaining functional independence ( $p = 0.04$ ). Factors which were found to have no influence on functional independence post stroke were: gender ( $p = 0.99$ ); education level ( $p = 0.78$ ); duration of stroke ( $p = 0.58$ ); side of stroke ( $p = 0.12$ ); shoulder pain ( $p = 0.90$ ); leg pain ( $p = 0.22$ ); urinary incontinence ( $p = 0.53$ ); financial role ( $p = 0.156$ ); monthly income ( $p = 0.73$ ); and depression ( $p = 0.30$ ).

**Conclusion:** Age, marital status, duration of hospital stay and the presence of a caregiver, as well as bowel continence are the factors that influence functional independence post stroke.