

## Psychological, lifestyle and physiological factors affecting health-related quality of life among stroke patients in selected teaching hospitals in Western Province, Sri Lanka

H. M. C. R. Herath<sup>1</sup>, A. S. Mahadanarachchi<sup>1</sup>, S. B. H. Sudeshika<sup>1</sup>, L. D. R. Perera<sup>1</sup>,  
E. A. H. U. Dharmarathne<sup>1</sup>, K. A. I. L. Kuruppu<sup>1</sup>, U. G. N. P. Uyanwaththa<sup>1</sup>,  
R. A. N. D. Ranaweera<sup>2</sup>, T. A. Asurakkody<sup>2</sup>

<sup>1</sup>*Faculty of Nursing, University of Colombo, Sri Lanka*

<sup>2</sup>*Department of Fundamentals Nursing, Faculty of Nursing, University of Colombo, Sri Lanka*

Stroke remains a significant global health burden, representing the second leading cause of death and a key contributor to long-term disability. Health-related quality of life (HR-QoL) is a crucial indicator of post-stroke outcomes. The objective of this study was to identify psychological factors, lifestyle and physiological factors that affect Health-Related Quality of Life (QoL) among stroke patients in selected teaching hospitals in the Western Province of Sri Lanka. A descriptive cross-sectional design was utilized for 206 conveniently selected stroke patients from stroke units and neurology clinics in the National Hospital of Sri Lanka and Colombo North Teaching Hospital. Content-validated and interviewer-administered questionnaire with Modified Rankin Scale (mRS; $\alpha=0.85-0.95$ ), Life style assessing tool, Barthel Index (BI; $\alpha=0.89-0.95$ ), DASS-21, demographic screening tool and HR-QoL were used. Data were analyzed using SPSS version 27 with descriptive and inferential statistics. Ethical approval was obtained from the Ethics Review Committee, Faculty of Medicine, University of Colombo. The mean age of the sample was 60.34 ( $\pm 10.95$ ). Individuals with severe or extremely severe depression, a history of stroke, or moderate-to-severe disability tend to have lower QoL. Depression, anxiety, and stress levels were strongly associated with lower QoL ( $p < 0.001$ ), with severe cases showing significantly worse QoL outcomes. Those with Obesity Class 2 are absent from the high QoL group. Significant associations with QoL were found for family history ( $p = 0.021$ ), Modified Rankin Scale ( $p < 0.001$ ), and Barthel Index ( $p < 0.001$ ). The study highlights the significant impact of psychological factors such as depression, anxiety, and stress on the health-related QoL of stroke survivors in Sri Lanka. Disability level, functional dependence, and family history of stroke were found to be key determinants of QoL outcomes. Strengthening rehabilitation, mental health support, and post-stroke follow-up services are crucial for improving outcomes.

**Keywords:** *Anxiety, Depression, Health-related Quality of Life, Stress, Stroke*