

## Cognitive impairment and memory dysfunction after a stroke diagnosis: a post-stroke memory assessment

### ABSTRACT

Cognitive impairment and memory dysfunction following stroke diagnosis are common symptoms that significantly affect the survivors' quality of life. Stroke patients have a high potential to develop dementia within the first year of stroke onset. Currently, efforts are being exerted to assess stroke effects on the brain, particularly in the early stages. Numerous neuropsychological assessments are being used to evaluate and differentiate cognitive impairment and dementia following stroke. This article focuses on the role of available neuropsychological assessments in detection of dementia and memory loss after stroke. This review starts with stroke types and risk factors associated with dementia development, followed by a brief description of stroke diagnosis criteria and the effects of stroke on the brain that lead to cognitive impairment and end with memory loss. This review aims to combine available neuropsychological assessments to develop a post-stroke memory assessment (PSMA) scheme based on the most recognized and available studies. The proposed PSMA is expected to assess different types of memory functionalities that are related to different parts of the brain according to stroke location. An optimal therapeutic program that would help stroke patients enjoy additional years with higher quality of life is presented.

**Keyword:** Dementia; Vascular dementia; Memory; Neuropsychological assessment