THE UTILITY OF 'THE PRELIMINARY NEUROPSYCHOLOGICAL BATTERY', AS A GLOBAL COGNITIVE SCREENING INSTRUMENT, IN STROKE SURVIVORS WITH APHASIA

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Introduction: Stroke survivors with significant speech and language and severe motor deficits are often excluded from formal neuropsychological assessment, because of a lack of reliable and validated instruments. We have previously shown that The Preliminary Neuropsychological Battery (PNB), a short non-verbal and non-motor cognitive assessment, had satisfactory internal, external, reliability and validity to detect significant cognitive impairment in non-aphasic stroke survivors.

Aims: The purpose of this investigation was to determine the utility of the PNB as a global non-verbal cognitive screen in stroke survivors with aphasia.

Methods: The PNB and a battery of non-verbal assessments were administered to a sample of stroke survivors with significant speech and language dysfunction.

Results: In total 24 stroke survivors aged 38 - 92 years with aphasia were screened with the PNB. Employing a cut-off point of 55/60 on the PNB, and applying the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, as the ‘gold standard’ for dementia, the PNB was found to have a sensitivity of 87% and specificity of 89% to detect dementia, and a positive predicative value of around 93%.

Conclusions: As a brief bedside non-verbal test of cognitive function in stroke survivors with aphasia the PNB was found to have satisfactory sensitivity and specificity. The PNB was however, was vulnerable to ceiling effects. The results here indicate that further research is needed to determine the utility of the PNB in a longitudinal cohort of aphasic stroke survivors to determine its sensitivity to change over time.