

DETERMINING RELIABLE AND ACCEPTABLE COGNITIVE ASSESSMENTS FOR ABORIGINAL AUSTRALIANS TO MEASURE CHANGE IN A THIAMINE TREATMENT TRIAL

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Introduction and Aims: Cognitive assessments (CAs) are traditionally based on Western concepts and norms; often requiring familiarity with the English language and formal education. Differences in language and culture mean that the psychometric properties of CAs should be assessed prior to use in other populations, including Aboriginal Australians. The aim of this study was to examine the acceptability and reliability of four CAs for use in a randomised controlled trial investigating the optimum thiamine dose for treating and preventing Wernicke-Korsakoff Syndrome (WKS).

Design and Methods: Medical staff at Alice Springs Hospital referred Aboriginal patients meeting the study's inclusion and exclusion criteria. Four CAs were examined – Rowland Universal Dementia Assessment Screen (RUDAS) (n=19), PEBL Corsi Blocks (CORSI) (n=19), Story Memory Recall Test (SMRT) (n=17) and CogState (n=18). Participants performed one to three CAs with repeated assessment to determine test-retest reliability. Qualitative interviews were conducted and thematically analysed to explore perceived acceptability of the tests. An Indigenous Reference Group was consulted to provide feedback on the CAs and study findings.

Results: Reliabilities ranged from 0.605 (CogState One Back accuracy) to 0.863 (RUDAS). Several themes emerged across the four CAs relating to language, process and format of test delivery and engagement with testing for Aboriginal participants.

Discussion and Conclusions: All four tests demonstrated acceptable test-retest reliability. RUDAS, Story Recall and the CogState choice reaction time task showed the highest reliability. Reliability and acceptability may be improved by providing instructions in Aboriginal language for those whose first language is not English.