Reliability and Construct Validity of the Early Dementia Questionnaire (EDQ)

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Abstract : Early Dementia Questionnaire (EDQ) was developed as a screening tool to detect patients with early dementia in primary care. It was developed based on 20 symptoms of dementia. From a preliminary study, EDQ had been shown to be a promising alternative for screening of early dementia. This study was done to further test on EDQ's reliability and validity. Using a systematic random sampling, 200 elderly patients attending primary health care centers in Kuching, Sarawak had consented to participate in the study and were administered the EDQ. Geriatric Depression Scale (GDS) was used to exclude patients with depression. Those who scored >21 MMSE, were retested using the EDQ. Reliability was determined by Cronbach's alpha for internal consistency and construct validity was assessed using confirmatory factor analysis (principle component with varimax rotation). The result showed that the overall Cronbach's alpha coefficient was good which was 0.874. Confirmatory factor analysis on 4 factors indicated that the Cronbach's alpha for each domain were acceptable with memory (0.741), concentration (0.764), emotional and physical symptoms (0.754) and lastly sleep and environment (0.720). Pearson correlation coefficient between the first EDQ score and the retest EDQ score among those with MMSE of >21 showed a very strong, positive correlation between the two variables, $r = 0.992$, N=160, $P < 0.001$. The results of the validation study showed that Early Dementia Questionnaire (EDQ) is a valid and reliable tool to be used as a screening tool to detect early dementia in primary care.