

RESEARCH ARTICLE

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Early Dementia Questionnaire (EDQ): A new screening instrument for early dementia in primary care practice

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Abstract

Background: Worldwide, the population is ageing, resulting in an associated increase in dementia prevalence. Forgetfulness in elderly people is often perceived as normal in some local cultures and thus, the early detection of dementia in primary care requires detection of symptoms other than memory complaints. This study was conducted to screen elderly patients for early dementia in primary care using a newly developed Early Dementia Questionnaire (EDQ) and comparing it with a standard assessment tool, the Mini Mental State Examination (MMSE).

Methods: A cross-sectional study was conducted on a group of elderly patients using convenience sampling of consecutive patients. Elderly depression was excluded using the Geriatric Depression Scale (GDS). Exclusion criteria also included known cases of dementia. Inclusion criteria included a score of 5 or less in GDS and the presence of a reliable informant. A face-to-face interview was done using the EDQ with the patient and informant to elicit symptoms of early dementia. If the informant was not present, a telephone interview was used instead. The patient was then assessed with the Mini Mental State Examination (MMSE) using a cut-off point of 21.

Results: Prevalence of dementia among 155 subjects was 52.3% by EDQ and 15.5% by MMSE. The EDQ demonstrated a sensitivity of 79.2% with specificity of 52.7%. Positive predictive value (PPV) of EDQ was 23.5% with the negative predictive value (NPV) of 93.2%. The strongest predictor of possible early dementia was complaints of memory problems (OR 26.22; 95% CI 2.03–338.14) followed by complaints of concentration problems (OR 14.33; 95% CI 5.53–37.12), emotional problems (OR 4.75; 95% CI 1.64–13.81) and sleep disturbances (OR 3.14; 95% CI 1.15–8.56). Socio-demographic factors, medical problems and smoking status were not associated with possible dementia ($p > 0.05$), despite that 60–70% of the elderly had chronic illnesses.

Conclusion: The EDQ is a promising alternative to MMSE for screening of early dementia in primary care.

Keywords: Dementia, Early dementia questionnaire, Mini mental state examination

Background

Worldwide, there is an increase in the number of ageing population. By the year 2050, the global population of 60 and above is expected to increase to 2 billion in 2050 [1]. In Malaysia, the definition of elderly follows the standard document published in the 'Policy for the Elderly in Malaysia' which defined elderly population as those over

60 years of age, adopting the criteria set at the World Assembly on Aging in Vienna in 1982 [2].

One of the common conditions associated with ageing is dementia. It is defined as a progressive and largely irreversible clinical syndrome that is characterized by a widespread impairment of mental function [3]. As the population ages, the number of patients with dementia will continue to increase. According to the Global Burden of Disease from WHO document, (2003), it was estimated that 24.3 million people were living with dementia, and this condition contributed 11.2% of years lived with disability in people aged 60 and older [4].

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