Prevalence of cognitive impairment and dementia in a multi-ethnic elderly cohort: the Singapore Epidemiology of Eye Diseases study (SEED)

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Background
• Singapore is a multi-racial country (74.3% Chinese, 13.3% Malay, 9.1% Indian). The various risks of dementia by ethnicity lead to an urgent need to update the prevalence of dementia by different ethnic groups.
• A comprehensive dementia network of Singapore was started (2012), there is reason to believe that awareness of dementia among older adults has improved significantly compared to a decade ago.

Objective
• To estimate the prevalence of cognitive impairment (CI) and dementia based on a set of brief screening tools;
• To validate whether the previously established AMT cut-off scores using gold standard assessments.

Methods

Cognitive outcomes:
• CIND-Mild: ≤2 cognitive domains were impaired
• CIND-Moderate: impairment of >2 cognitive domains
• Dementia: DSM-IV criteria

Study design and participants (Figure 1)

Statistical analyses:
• One-way ANOVA & Chi-square tests
• Receiver Operating Characteristic (ROC) Curve analysis
• Standardized adjustment for prevalence.

Results

Figure 1 Study recruitment

1. Compared to 20 years ago (SPPED study), the prevalence of dementia remains high, suggesting the importance of long-term dementia monitoring and intervention.
2. The optimal cut-off of AMT in detecting CI is higher than the SPEED criteria.