Evaluation on the effectiveness of a Cognitive Screening Service - Mobile Cognitive Assessment Clinic

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Introduction
Mobile Cognitive Assessment Clinic (MCAC) service is a pioneer regional project since 2003. It aims to promote early detection and early intervention of cognitive problems for the elders in the community. On-site screening assessment in the community will be conducted by Occupational Therapist (OT) within 14 calendar days after receiving the referral. Studies showed that early screening and diagnosis promote early intervention, effectively delay disease progression, facilitate comprehensive disease management as well as improve the quality of life for the patient and the caregiver and ultimately reduce total care expenditures (Relkin, 2000; Borson et al, 2013).

Objectives
This study aims to evaluate the effectiveness of this OT-led cognitive screening service, in terms of the sensitivity for screening the elderly with cognitive impairment.

Methodology
In the MCAC service, OT would conduct on-site screening assessment in cognitive, mood and functional domains. With reference to the screening results, OT would make corresponding recommendation: 1) referring to memory clinic for psychogeriatric consultation if significant cognitive impairment was detected; 2) referring to SOPC if other mental illness suspected; 3) termination from the service if no abnormal detected.

This study used a retrospective cohort design. All referred cases who accepted the screening service between 2003-2016 and agreed to refer to memory clinic for psychogeriatric consultation were included. Their diagnosis upon the first memory clinic appointment were reviewed and evaluated if it was consistent with the screening
results conducted by OT.

Result
From 2003-2016, 1253 referrals were received, aged between 60 to 103 (mean age 81) and 60.9% were female. 86.0% (1078) were successfully screened by OT for the cognitive impairment. 96.5% (1040) of them demonstrated significant cognitive impairment and 98.9% (1029) agreed to refer to memory clinic for further investigation. After reviewing the diagnosis, 92.7% (954) of the suspected cases were confirmed to have mild cognitive impairment or major cognitive disorder (dementia) and received intervention.

The MCAC service showed a significantly high sensitivity in screening the individuals with cognitive impairment. This OT-led screening service is an effective service to promote early detection and early intervention of the disease.