



**Service Priorities and Programmes**  
**Electronic Presentations**

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**A multifactorial Occupational Therapy Program for outpatients with mild cognitive impairment and early dementia**

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**Introduction**

In Hong Kong, we have 719,600 of people over the age of 70 in 2012, around 10% of them have different degrees of cognitive impairment, such that around 70,000 elderly with cognitive impairment, and will grow up to 25% in 2031. Occupational Therapy outpatients with mild cognitive impairment and early dementia are rapidly increasing too; the referral numbers has increased from 365 referrals in 2009 to more than 1000 referrals in 2013. Besides early detection by effective screening, early intervention is also important to delay the onset of dementia. Multifactorial intervention with different intervention modalities are thought to be effective in preventing decline in cognitive function.

**Objectives**

The objective in this pilot study is to evaluate the outcome of a multifactorial intervention program for patients with mild cognitive impairment (MCI) or early dementia, its overall impact on cognition and the patients applying the different strategies for a long term self-management of the cognitive impairment.

**Methodology**

Convenient sampling method is used for collecting data from patients referred for cognitive assessment and rehabilitation from GOPC and SOPD. A triage system was set up, according to the scores of MMSE, MoCA and other observation and assessment done by the Occupational Therapist, the patient will be triage according to their functional abilities and their needs. Different intervention modalities include: home based cognitive training, computer cognitive training, cognitive training group and health qigong class, will be provided as indicated by needs of the patients.

**Result**

With the implementation of the new triage system, the number of patients can be seen in the same period of time increase from 245 to 328, 34% improved in efficiency. The weekly computer assisted cognitive training program that covers a broad range of cognitive capacities including attention, memory, perception, executive function and

calculation etc. Patients were assessed with MMSE and or MoCA before and after the computer assisted training program, paired t-test was used to analyse the pre and post cognitive score, a significant improvement in MMSE score was seen, best improvement made in delayed recall and attention sub-score. In the health qigong class, 75% of the participants has increased the exercise frequency from no exercise habit to 1 to 2 times per week, and 25% has increased from no exercise habit to daily practice habit. For the cognitive training group, over 88% of the patients have positive overall rating for the group and said they will recommend others to join the group. In learning the different kinds of knowledge, more participants showed better understanding in nutritional management, relaxation techniques, and regular physical activities for improving brain health. Moderate understanding on memory strategies by the participants was noted, and the application of the strategies in real life situation is perceived as the most difficult part. Almost 95% of the participants have high rating for support and sharing they can get from the group, and they feel happy with the group interaction. In conclusion, a bigger sample size and a longer intervention period may allow for a better understanding of the impact of multi-factorial program on cognitive improvement; further follow up study would be required.