



**Service Priorities and Programmes**  
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**Effectiveness of a Cognitive Rehabilitation Program for Patients with Mild Cognitive Impairment(MCI) and Dementia**

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**Introduction**

The new referral from medical Special Out-Patient Department and General Out-Patient Clinics to Occupational Therapy Department(OT) for cognitive assessment increased 97% from 373 cases in 2010 to 733 cases in 2015. Effectiveness of cognitive rehabilitation in local settings is one of important parameter for encounter aging, better resources allocation and service planning.

**Objectives**

To evaluate the effectiveness of OT intensive cognitive rehabilitation program for patients with MCI and dementia.

**Methodology**

Referred patients with dementia for cognitive rehabilitation were triaged according to their Montreal Cognitive Assessment Hong Kong Version(HK-MoCA) score. Patient with HK-MoCA score  $\geq 2$ nd and  $\leq 7$ th percentile will be group into MCI group. Patient with HK-MoCA score  $\leq 2$ nd percentile will be group into Dementia group. MCI group patient will conduct HK-MoCA, Modified Barthel Index (MBI), Lawton IADL-27 (IADL), Digit span test and Hong Kong List Learning Test (HKLLT). Dementia group patient will conduct HK-MoCA, MBI, IADL, Digit span test and Mattis Chines Dementia Rating Scale (CDRS)

Assessments were conducted at beginning and post 24 sessions training. The content of MCI and dementia group included tailored-made Virtual Reality daily tasks, cognitive training software, self-care activity, home living skills training, physical training and home program.

**Result**

From January 2016 to June 2017, total 19 patients completed the dementia program and 9 patients completed MCI program. In MCI group, there were 6 males and 3 females, with mean age 67.6 and mean education level 10.1 years. In dementia group, there were 7 males and 12 females, with mean age 75.7 and mean education level 5.6 years.

In Dementia group, significant improvement was found in HK-MoCA, IADL and CDRS.

The mean score of HK-MoCA improved by 1.79 ( $p < 0.05$ ) and the mean score of CDRS improved by 8.42 ( $p < 0.05$ ). Among the cognitive domains, more significant improvement was found in initiation/preservation and construction. In functional aspect, the IADL score improved by 3.1 ( $p < 0.05$ ).

In MCI group, significant improvement was noted on HKLLT 30 minutes delayed recall. The mean score improved by 1.66 ( $p < 0.05$ ).

All patients completed program were referred to HKEC community partners for maintenance training.

#### CONCLUSION

The present OT intensive cognitive rehab program had shown evidence that early multi-domain intervention are beneficial to cognitive and IADL function of patients with dementia and MCI. Early diagnosis, evidence based cognitive and functional training, early support and bridging with community partners are essential key to the successful coping of aging population.