



## Service Priorities and Programmes Electronic Presentations

**Convention ID:** 1133

**Submitting author:** Mr Chak Wing NG

**Post title:** Occupational Therapist II, Kowloon Hospital

### **Effectiveness of an Attention Training Program for Patients with Acquired Brain Injury in an Outpatient Setting**

NG CW(1), CHAN KL(1), CHEUNG TYD(1), CHEUNG P(1), CHAN YL(1), NG SWS(1)

(1)Occupational Therapy Department, Kowloon Hospital

#### **Keywords:**

Attention Process Training

Acquired Brain Injury

Stroke

Cognitive Rehabilitation

Occupational Therapy

#### **Introduction**

Cognitive impairments are commonly seen in acquired brain injury (ABI) survivors. An analysis of stroke registry conducted between 1995-2010 revealed an overall prevalence of cognitive impairments of 22% after stroke. Attention deficit is one of the most common cognitive impairments in ABI survivors which results in poorer functional outcome. Clinical model of attention, considers attention a multidimensional cognitive capacity which include focused, sustained, selective, alternating and divided attention. Attention Process Training Program (APT), originated and developed by Sohlberg and Mateer, assumes attentional abilities can be improved by providing opportunities for stimulating a particular aspect of attention.

#### **Objectives**

In view of lacking published studies evaluating effectiveness of attention training program with use of APT in local clinical practice for Chinese population, this study serves to evaluate the effectiveness of an attention training program, which adopts concepts and training tasks from APT version II and clinical model of attention, for patients with ABI in a local outpatient setting.

#### **Methodology**

Participants were all assigned to one single intervention group. Subjects were divided into subacute and chronic ABI group in data analysis. The group was composed of three 1.5 hour sessions weekly for 5 weeks. Outcome was measured by assessments which covered (1) specific attention domains; (2) general cognitive function; (3) everyday attention function; (4) functional attention goal and (5) rehabilitation outcome.

## **Result**

Eight local Chinese ABI survivors completed the study. Statistical significant improvement was found in all five areas of outcome measures. Result showed the training program not only leads to improvements in attention-related functions, but also in broader rehabilitation outcome, i.e. level of independence in self care and performance in instrumental activities of daily living. It also leads to positive effect on achievement of functional attention goal. The improvement was consistently found in all participants. The goals set were all daily tasks related to attention and daily function. Furthermore, subacute ABI group, i.e. post ABI less than 12 months, showed a faster and more significant improvement gained from the program than chronic group. This may shed light on future attention rehabilitation planning and intensity of training among patients with ABI according to post-injury time. To conclude, the positive findings indicated the attention training program may have potential beneficial effect among patients with ABI in local Chinese population. In future, a large scale RCT could be considered to further evaluate and its efficacy.